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Private Lands Conservation in Latin America: The Need for Enhanced Legal Tools and Incentives

INTRODUCTION

Although most countries lack an adequate legal framework for private lands conservation, there has been growing momentum to protect private lands in Latin America over the last decade. This Article describes the legal tools available for the conservation of private lands in Latin America and assesses their implementation record. It reviews both the mandatory provisions imposed by government and the use of voluntary instruments such as easements and private reserves that have grown in use since the early 1990s. It ends with recommendations for an improved legal framework that would enhance landowners' ability to protect the natural values of their land.

This Article summarizes a continent-wide survey carried out by eight partner organizations from throughout the region.¹ It found that

¹ This report is adapted from ENVIRONMENTAL LAW INSTITUTE (ELI), LEGAL TOOLS AND INCENTIVES FOR PRIVATE LANDS CONSERVATION IN LATIN AMERICA: BUILDING MODELS FOR SUCCESS (September, 2003) [hereinafter BUILDING MODELS FOR SUCCESS]. This report was authored by Byron Swift, senior attorney at ELI in partnership with non-profit organizations in seven countries: Protection del Medio Ambient Tarija (Bolivia), Fundação O Boticário de Proteção a Natureza (Brazil), Comité Nacional pro Defensa de la Flora y de la Fauna (Chile), Centro de Derecho Ambiental y de los Recursos Naturales (Costa Rica), Centro Ecuatoriano de Derecho Ambiental (Ecuador), Pronatura, A.C. (Mexico), and Sociedad Peruana de Derecho Ambiental (Peru). In addition, contributions were made by Shelia Abed, Anita Akella, Luis Castelli, Elisa Corcuera, Federico Fahsen, Dan Janzen, Tony Langholz, Ximena de la Macorra, and Sylvia Sanchez. Funding for this

new laws recognizing the creation of private reserves have been passed in a number of countries, beginning with Brazil in 1990.² Although no country has a national law authorizing conservation easements at this time, non-governmental organizations (NGOs) have been creatively using traditional laws for appurtenant easements to protect natural habitat. This process began with Costa Rica in 1992 and has now spread to at least six countries.³ In a few countries, limited financial incentives, such as an exemption from property taxes or payments for environmental services, are offered to landowners who protect their lands.⁴ Finally, organized networks of conservation landowners have been established in most countries.⁵

A number of barriers, however, hinder the potential success of private lands conservation efforts in Latin America. Possibly the most important is the lack of a comprehensive set of legal instruments, including conservation easements and private reserves, to support an effective private lands conservation program. Other barriers include land tenure laws that discourage conservation practices, and the lack of institutional capacity in the government agencies and private organizations that support private lands conservation efforts.

Major efforts to improve the legal framework are under way in most countries. In Chile, Costa Rica, and Ecuador, legislation has been proposed that would provide a comprehensive and flexible set of legal instruments for private lands conservation.⁶ In addition, actions are being taken in a number of countries to establish economic incentives, to improve institutional capacity, and to increase public-private collaboration to integrate private conservation actions with the

study was generously provided by The Tinker Foundation, W. Alton Jones Foundation, Overbrook Foundation, John and Ginger Sall, Marshall Field, Peter Bross, Sally Davidson, Ivan Gayler, and Lisa Rarick.

² Brazil adopted Decree No. 98.914, 31 January 1990, allowing areas to be designated as Private Reserves of Natural Patrimony (RPPNs); today, Decree No. 1922, 5 June 1996, regulates RPPNs. Subsequently, a number of other countries have adopted legislation authorizing private reserves. *See infra* Part IV.B.2, Fig. 3.

³ *See infra* Part IV.C.2, Fig. 4.

⁴ *See infra* Part VI.

⁵ *See infra* Part IV.B.2, Fig. 3.

⁶ Special Law for the Conservation and Sustainable Use of the Biodiversity (Ecuador); Proposed Law to Foment the Creation of Protected Areas on Private Property (Chile); Proposed Law No. 14.924, Promotion of the Conservation on Private lands, Expediente (2002) (Costa Rica).

conservation of public protected areas and large landscapes.⁷ Finally, there is a pressing need for substantially greater resources to support efforts to put in place adequate legislation and incentives and to carry out private lands conservation projects in areas of importance for biodiversity.

I

THE NEED FOR PRIVATE LAND CONSERVATION

The conservation of privately held lands is an important component of a national strategy to conserve biological diversity and to promote the sustainable use of natural resources. To date, the protection of biodiversity in Latin America has been primarily accomplished through the creation of government protected area systems, which now conserve about 8 percent of the region's land area.⁸ Although important additions to these public systems are still needed, the changing landscape and loss of large wilderness areas increasingly limit the opportunities for governments to create large new public protected areas. For conservation efforts to fully succeed, the public parks system must be complemented by private conservation initiatives on the remaining land that is privately owned, which is over 80 percent of land in most countries.⁹

Private lands protection can contribute meaningfully to conservation goals (often in ways not achievable by government efforts) by protecting critical sites and threatened ecosystems, supporting public-private partnerships to conserve large landscapes through protection of buffer zones and conservation corridors, and promoting the sustainable use of natural resources on productive lands, as described below. A private lands conservation strategy is also attractive for cash-strapped governments because funds are not required for large scale land purchases and in many cases private

⁷ See *infra* Part I.B.

⁸ See WORLD CONSERVATION MONITORING CENTRE AND IUCN WORLD COMMISSION ON PROTECTED AREAS, 1997 UNITED NATIONS LIST OF PROTECTED AREAS (1998), available at http://www.unep-wcmc.org/protected_areas/data/un_97_list.html (last visited June 21, 2004).

⁹ See INEGI, VII Censo Agrícola-Ganadero y Ejidal y Programa de Titulación y Certificación de Parcelas y Solares (1994) (Mexico) (establishing that 88 percent of land in Mexico is private). Most other countries are reported to be approximately 80 percent private lands, except for Peru which has only 20 percent private lands. See BUILDING MODELS FOR SUCCESS, *supra* note 1.

landowners contribute their own resources for the implementation of conservation practices.

A. Conserving Critical Sites for Biodiversity in Threatened Ecosystems

One of the most important private initiatives concerns the protection of critical sites within ecoregions of global priority, which extends the coverage of a national system of protected areas. Private efforts are particularly important in four of the seven endangered ecosystems identified by Conservation International as the most endangered biodiversity hotspots in the Americas—the coastal forests of Ecuador and Colombia, the Atlantic Forest of Brazil, the Mediterranean ecosystems of Central Chile, and many parts of Meso-America.¹⁰ These ecosystems are endangered precisely because they are composed almost exclusively of private lands, and development efforts have reduced native vegetation to a small fraction — typically less than 10 percent—of its former extent.¹¹ We will lose an entire suite of species if we fail to protect the last key sites in these regions. Adequate protection of these critical ecosystems will depend largely on a strategy that combines the consolidation of any public protected areas with private lands conservation initiatives.

One of the most effective means of conserving such key sites is through land purchase and management by conservation NGOs, some of which have conducted gap analyses to identify the most important sites for biodiversity conservation. This approach has been demonstrated best in Ecuador, where several NGOs have each begun to create a system of private reserves to protect endangered species and ecosystems that are not adequately covered by the state protected area system.¹²

¹⁰ See CONSERVATION INTERNATIONAL, HOTSPOTS: EARTH'S BIOLOGICALLY RICHEST AND MOST ENDANGERED ECOSYSTEMS (1999), available at <http://www.biodiversityhotspots.org> (last visited Mar. 10, 2004).

¹¹ *Id.*

¹² These organizations include Fundación Jatun Sacha, Natura y Cultura Internacional, and Fundación Jocotoco. See generally <http://www.jatunsacha.org>; <http://www.natureandcultureinternational.org>; <http://www.jocotoco.com> (last visited Mar. 10, 2004).

B. Public-Private Partnerships to Conserve Large Landscapes through Buffer Zones and Conservation Corridors

Private conservation actions not only directly conserve key sites of biological importance, but can also strengthen the protection of large landscapes and public protected areas. Such public-private partnerships can combine the comparative advantages of both public and private sectors to enable conservation efforts to be more effective. These partnerships take a variety of forms and can include collaboration in the political, regulatory, and fundraising aspects of land conservation.

Private lands conservation efforts can complement government actions to conserve public protected areas in numerous ways. These include:

1. *Protecting buffer zones.* Private reserves play a number of important roles when located within buffer zones of public parks. First, they directly protect habitat outside the park, expanding the area protected. Second, they help protect park boundaries by establishing a conservation presence at key access points, which can be especially important in less developed countries that may lack adequate funding for protection of national parks. Third, by establishing non-consumptive uses relating to the park, such as ecotourism, private conservation efforts help to build a constituency and critical political support for the public protected areas.

2. *Linking parks through conservation corridors.* Private land conservation efforts may be essential to conserve natural corridors that help unite two or more protected areas.

3. *Protecting private lands within public protected areas.* Public protected areas often include private lands within their boundaries. Within national parks and similar areas, private lands are considered inholdings that should ultimately be purchased by government. However, there are categories of public protected areas that regulate private lands within them, without expropriating them. Applying conservation tools to the private lands will reinforce the management objectives of these “mixed” public protected areas and help to protect large landscapes.

4. *Leveraging resources.* Governments can leverage resources by working in partnership with private actors such as conservation NGOs. Such private organizations can act in a more rapid and flexible manner than government bureaucracies and can contribute to

fundraising, outreach, lobbying, and education activities that are difficult for governments to undertake.

Overall, government support is critical to effective public-private conservation partnerships. Such support includes formal support in recognizing private reserves or providing financial incentives, as well as informal support in providing technical assistance and diplomacy to promote private conservation initiatives. Of the countries studied, the government of Costa Rica has been the most actively engaged in supporting such public-private partnerships, and its involvement has resulted in significant conservation benefits for that country.¹³

C. Promoting the Sustainable Use of Natural Resources

Private land conservation efforts can also be used to conserve natural resources on a wide variety of lands, including productive lands, that are unsuitable for strict protection but nevertheless have resources important for sustainable development. Private land conservation tools may be used to balance conservation with extractive uses, to ensure the sustainability and permanence of practices such as forestry, grazing, watershed protection, and recreation, and to ensure their compatibility with conservation objectives.

Because such practices require flexibility, private lands conservation tools, such as easements, may be more relevant for this purpose than stricter methods such as private reserves. Also, because they are voluntary, such flexible tools may appeal to property owners who might otherwise resist direct government regulation. Integration of conservation efforts within productive lands can also help the private sector adopt a more conservation-oriented approach towards land stewardship.

¹³ Several instances of such partnerships are described in BUILDING MODELS FOR SUCCESS, *supra* note 1. Particularly important ones are: the creation of the 153,000 ha. Guanacaste Conservation Area that involved the private purchase of 70,000 ha. that were later incorporated into the park; the private conservation purchase of land at the Monteverde Cloud Forest reserve, now the largest in Central America, that led to the creation of the even larger public Arenal reserved area; and the extension of the Braulio Carillo National Park to reach the La Selva biological station.

D. Limitations of Private Lands Conservation

Private lands conservation actions are an important complement to government protection of natural areas, but they have certain limitations, including:

1. *Limitations in size.* Private protected areas tend to be smaller in size than public protected areas such as national parks. Although private protected areas occasionally exceed 50,000 acres, their average size in many countries is around 1,000 acres. In Chile, for example, the average size of most private areas is 1450 acres, whereas public areas average 375,000 acres.¹⁴ In Costa Rica private areas average 700 acres, compared to 27,500 acres for public areas.¹⁵ Government initiatives are typically needed for the conservation of large tracts where social legitimacy, greater potential for financial resources, and state enforcement capacity may be required.

2. *Ad hoc in nature.* Some instances of private lands conservation will be ad hoc in nature, as they depend on the motivation of individual landowners, who may or may not be located in the most important sites for conservation of biodiversity or other natural resources.¹⁶ However, the actions of conservation NGOs, as well as international funding agencies, tend to focus on priority sites. Government incentives can also be limited to areas of conservation importance.

3. *Dependence on judicial enforcement.* Many private lands conservation mechanisms such as private reserves and easements depend on adequate judicial enforcement, which can be difficult to secure in Latin American countries. Providing a stronger legislative framework for these tools, including specific enforcement provisions, are ways to address this problem.

¹⁴ Elisa Corcuera et al., *Conserving Land Privately: Spontaneous Market for Land Conservation in Chile*, in SELLING FOREST ENVIRONMENTAL SERVICES, 129-49 (Stefano Pagiola et al eds., 2002). In Chile, for example, the ninety-four areas in the public natural protected areas system in 2002 protect 35 million acres (14,123,571 ha.), for an average size of 375,000 acres (150,000 ha.), whereas the 132 private protected areas, aside from the 300,000 ha. Pumlin area, average approximately 1450 acres (580 ha.). *Id.*

¹⁵ In Costa Rica, the forty-nine privately initiated wildlife refuges that have been created cover approximately 35,000 acres (14,000 ha.), or 700 acres (280 ha.) each; on the other hand, the other 112 areas in the public protected areas system cover 3,225,000 acres (1,290,000 ha.), or roughly 27,500 acres (11,000 ha.) each. COSTA RICAN MINISTRY OF ENVIRONMENT (MINAE), NATIONAL INFORMATION ON THE SYSTEM OF PROTECTED WILD AREAS (2003). *See generally*, BUILDING MODELS FOR SUCCESS, *supra* note 1, at 106, 108.

¹⁶ *See, e.g.*, Corcuera, *supra* note 14.

4. *Lack of subsurface rights.* Private conservation efforts cannot protect the subsurface rights to the land, which are owned by the state throughout Latin America.¹⁷ In some areas, this may make private efforts to conserve the surface more difficult.

5. *Need for long-term stewardship.* Long-term stewardship is a challenge for many private land efforts because current and future landowners may lack the necessary financial resources for the long-term conservation and management of the land.

Some of these disadvantages, such as weak enforcement and limited budgets, also apply to public protected areas. However, if well-managed, private protected areas may be better protected than public parks as they tend to be smaller areas with greater management presence.

II

AN OVERVIEW OF PRIVATE LANDS CONSERVATION IN LATIN AMERICA

There has been growing momentum in efforts to protect private lands in Latin America. As described below, conservation NGOs, private landowners, and governments have been experimenting with various legal mechanisms to achieve private land conservation. To date, however, conservation activity has been largely carried out by NGOs, both as landowners in their own right, and as catalysts in initiating private landowner conservation. This has resulted in a greater focus on the strict conservation of lands important for biodiversity, a priority of the NGO community, and less on the use of private lands conservation tools for other forms of land management and sustainable use.

The principal methods for private land conservation approaches in use in Latin America are:

1. *Mandatory land use restrictions.* All of the countries studied have laws imposing mandatory land use restrictions on private lands

¹⁷ Almost all Latin American governments have reserved rights to minerals and other subsurface resources to the state. In many countries this is stated in the country's constitution. See Ecuador Constitution Art. 247; Mexican Constitution Art. 27, or in the framework laws relating to mining and hydrocarbons, see, e.g., Venezuela Law Regulating Hydrocarbons, Decree Law No. 1510, published in the Official Gazette of 13 November 2001 at 321.163, art. 3: "All hydrocarbons existing in the National Territory, of whatever nature. . . pertain to the Republic and are public goods of inalienable character."

for conservation purposes, principally to assure sound land use planning and erosion control.¹⁸

2. *Private Reserves.* Brazil,¹⁹ Costa Rica,²⁰ Guatemala,²¹ and Ecuador²² all have a number of formally authorized private reserves. Brazil's private reserve law, enacted in 1990,²³ is probably the best in the region, providing for the creation of strict conservation reserves that last in perpetuity. There are now over 500 private reserves in Brazil that together protect almost 500,000 hectares (ha.).²⁴

3. *Easements.* Even though no country studied has a national law authorizing independent conservation easements, NGOs in six countries have used traditional appurtenant easements for conservation purposes, as shown below in figure 3. Costa Rica is the leader in this practice, establishing the first conservation easement in 1992. Today, the country has over fifty easements.²⁵ Three states in Mexico now have laws that authorize independent conservation easements that can be held by third parties.²⁶

4. *Land purchase.* NGOs have purchased lands for conservation purposes in virtually all countries.²⁷ The most systematic effort is in Ecuador, where three NGOs are purchasing lands to create private

¹⁸ See *infra* Part V.

¹⁹ In 1990, the Federal Government published Decree No. 98.914, 31 Jan. 1990, designating such areas, set forth in Article 6 of the Forest Code, as RPPNs. Currently, Decree No. 1922, 5 June 1996, regulates RPPNs.

²⁰ Landowners in Costa Rica can establish Private National Wildlife Refuges under the Wildlife Conservation Law, No. 7317 of 1992 (Costa Rica), or private reserves under the Forestry Law No. 7575, 5 February 1996 (Costa Rica).

²¹ Law for the Guatemalan System of Protected Areas, Decree No. 4-89 (1989) and its reforms: Decree No. 18-89, Decree No. 110-96, and Decree No. 117-97 (Guatemala).

²² Landowners can obtain permanent designation of their lands as a private reserve through designation as a *Bosque Protector*. Title I, Chapter II of the Forestry Law for Conservation of Natural Areas and Wildlife Law, R.O. No. 64, 24 August 1981. The historical antecedent of this legal designation has its foundation in the Protective Forestry Law of 8 July 1964, which is published in the Official Registry No. 296 of 22 July 1964. The law is implemented through the Regulation of the Forestry Law, D.E. No. 1529, R.O. No. 965, 22 Feb. 1983.

²³ See Decree No. 1922, 5 June 1996.

²⁴ Federal reserves total 405,114 ha., and state reserves total 82,117 ha., according to unpublished information of Fundacao O Boticário, derived from data of IBAMA (December, 2002). See also <http://www.rppn.org.br>.

²⁵ Carlos Chacon, CEDARENA, presented at the Fifth Latin American Congress on Private Lands Conservation (Cancun, Mexico, Jan. 29, 2003).

²⁶ These three states are Nuevo Leon, Quintana Roo, and Veracruz.

²⁷ See *infra* Part II, Fig. 1; Part IV.

reserves to conserve critical sites of biodiversity not covered in the state-protected area system.²⁸

5. *Informal reserves.* Another common practice throughout the region is for conservation-minded landowners to informally describe their lands as a "reserve." This practice, however, creates no formal legal protection.

6. *Limited development projects.* Chile is the only country with many limited development projects, through which groups of friends or real estate companies buy land for both conservation and limited real estate development purposes.²⁹

7. *Conservation concessions.* Peru has recently established a comprehensive law for conservation concessions.³⁰ Such concessions may also be created in Chile³¹ and Bolivia.³²

8. *Community accords.* Communal lands may be protected through formal decisions taken by the community. In Mexico and Peru, NGOs are assisting communities in developing such mechanisms to protect community lands.³³

Figure 1 shows the principal private lands conservation tools being used and the degree to which they are being used in the countries listed.

FIGURE 1: USE OF PRIVATE LANDS CONSERVATION MECHANISMS IN THE AMERICAS

	MANDATORY LAND USE RESTRICTIONS	FORMAL PRIVATE RESERVE	INDEP. CONSERV. EASEMENT	APPURTENANT EASEMENT	CONSERV. CONCESSION	NGO OWNERSHIP	ECONOMIC INCENTIVES
CANADA			++	+		++	++
USA			+++	+		+++	+++
MEXICO	+		+	+		++	+

²⁸ See CONSERVATION INTERNATIONAL, *supra* note 10.

²⁹ See BUILDING MODELS FOR SUCCESS, *supra* note 1, at 91-93 n.112.

³⁰ Decree No. 014-2001-AG, Forestry and Wildlife Law, ley 27308 (Peru).

³¹ Decree No. 1.939, Art. 57, 1977, *amended by* Decree No. 19.606, Art. 10, No. 3, 1999 (Chile).

³² National Service of Agrarian Reform Law (INRA Law), Decree No. 1715, Article 26(3), of 18 October 1996, published Diario Oficial of 21 December 1996 (Bolivia).

³³ See *infra* Part IV.G.

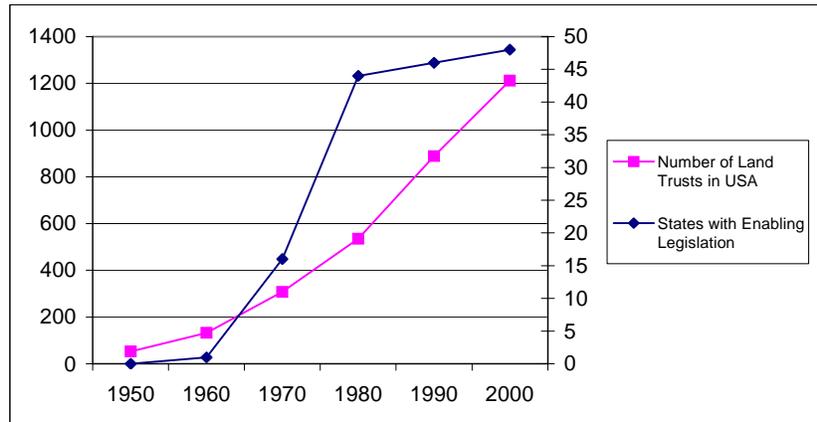
	MANDATORY LAND USE RESTRICTIONS	FORMAL PRIVATE RESERVE	INDEP. CONSERV. EASEMENT	APPURTENANT EASEMENT	CONSERV. CONCESSION	NGO OWNERSHIP	ECONOMIC INCENTIVES
GUATEMALA	+	++		+		++	+
COSTA RICA	+	++		++		+++	++
ECUADOR	+	++		+		+++	+
PERU	+	+			+	++	
BOLIVIA	+	+		+	+	++	+
BRAZIL	++	+++				+++	+
PARAGUAY	+			+		++	+
ARGENTINA	+	+		+		+++	+
CHILE	+	+			+	+++	

+ = WEAK OR BEGINNING; ++ = MODERATE; +++ = STRONG OR WELL ESTABLISHED.

A major challenge for the growth of private lands conservation is the creation of simple and easily applied legal tools so that private landowners can readily protect their lands. Experience in the United States has demonstrated that the passage of strong private lands conservation laws has led to an explosive growth in institutional capacity and the creation of private protected areas. As shown in Figure 2 below, the use of private lands conservation tools such as conservation easements was not widespread in the United States until the legal framework was developed during the 1970s and 1980s.³⁴

FIGURE 2: CREATION OF LEGISLATION ENABLING CONSERVATION EASEMENTS AND GROWTH OF LAND TRUSTS IN THE UNITED STATES (1950-2000)

³⁴ In the 1960s, only one state had a law authorizing conservation easements, the basic land conservation tool now used in the United States. By 1984, such laws had been passed in 44 of the 50 states. Early land trusts include the Trustees of Reservation, established in Massachusetts in 1892, the Sempervirens Fund in California in 1900, and the Society for the Protection of New Hampshire Forests in 1901. By 1980, there were only 400 or so land trusts, of which 50 percent had budgets of less than \$5,000 and most had no paid staff. Jean Hocker, *Formation of the Land Trust Alliance in the United States*, Presentation of the Land Trust Alliance, Washington, D.C. (2002); see also Land Trust Alliance, <http://www.landtrustalliance.org>.



Incentive mechanisms such as tax deductions have also encouraged the growth of private lands initiatives in the U.S. and other countries.³⁵ A few Latin American countries offer limited financial incentives to landowners who protect their lands, such as exemptions from property taxes and payments for environmental services.³⁶ However, only Costa Rica has created a reasonably attractive financial incentive, providing payments for environmental services of roughly fifty dollars per ha. to 220,652 ha. of private protected areas.³⁷

III

THE LEGAL CONTEXT FOR PRIVATE LANDS CONSERVATION IN LATIN AMERICA

The constitutions and civil codes of Latin American countries provide governments with considerable regulatory power over private land. Such power has been exercised in both negative and positive ways affecting conservation. This section discusses the general laws in Latin American nations that limit opportunities for private lands conservation, such as limitations on the extent of property rights and the requirement that private landowners make socio-economic use of

³⁵ Major financial incentives for land conservation in the United States include a property tax reduction in most jurisdictions and an income tax deduction if lands are permanently protected and donated to a qualifying non-profit organization or the government. I.R.C. §§ 170(f)(3)(B)(iii), 170(h)(5)(a) (2003).

³⁶ See *infra* Part VI.

³⁷ MINAE, INFORME NACIONAL SOBRE EL SISTEMA DE AREAS SILVESTRES PROTEGIDAS (Feb. 2003) (Costa Rica).

their land. Part VI discusses the laws that can affirmatively require conservation practices on private lands, especially in areas that have been designated by the state for protection. This legal context strongly affects the methods and opportunities for private lands conservation in Latin America.

A. Limitations on the Extent of Private Property

There are both formal and informal constraints on private property rights and holdings in Latin America. The only country to place an absolute limit on the amount of land that a person can own privately is Mexico. In Mexico, agricultural landowners cannot own more than 800 ha., and all others are permitted to own only the amount of land needed to raise 500 head of cattle—an amount that varies from 500 ha. in rich soils to over 20,000 ha. in the desert.³⁸ Other countries do not limit personal property ownership as much, although Venezuela is also considering stricter limits.³⁹ Historically, however, many countries have taken action against the accumulation of large private landholdings, formerly known as “latifundios.” In some cases, countries have expropriated and redistributed these lands as part of agrarian reform movements.⁴⁰ Today, this social legacy restrains purely private accumulation of large landholdings and leads to a greater emphasis on a private-public partnership for land conservation in Latin America.

A common property limitation concerns ownership of subsurface property rights. In virtually all Latin American countries, the government has retained the rights to any minerals under the land and can lease these rights without authorization of the private landowner.⁴¹ A mining company can then exploit the minerals, even

³⁸ Pronatura, A.C., *LEGAL TOOLS FOR THE CONSERVATION OF PRIVATE AND SOCIAL LANDS IN MEXICO*, at 5 (Mexico 2002); also *BUILDING MODELS FOR SUCCESS*, *supra* note 1, at 144. The determination of the carrying capacity of the land for the purposes of calculating maximum property holdings is made by the Technical Consultative Comisión for the Coefficient of Agostadero, part of the Secretary of Agriculture, Cattle-raising, Fishing and Food.

³⁹ Land reform laws proposed by the Chavez government could limit private holdings to around 5000 ha. *See* Law of Land and Agrarian Development, Decree Law No. 1.546, published in the Official Gazette of 13 November 2001.

⁴⁰ *See* Food & Agriculture Organization, *Latin America's Agrarian Reform: Lights and Shadows*, available at <http://www.fao.org/docrep/x1372t/x1372t02.htm> (last visited Aug. 22, 2004).

⁴¹ *See, e.g.*, the first paragraph of Article 27 of the Mexican Constitution, which states: “In the Nation is vested the direct ownership of all natural resources of the continental

if doing so destroys the productive use of the surface, without paying any compensation to the owner. These policies apply even if lands are placed under conservation status by a private landowner.

Latin American countries typically do not limit foreign ownership of land, except in certain instances, such as an ownership of land within fifty to one hundred kilometers of the nation's border for security reasons.⁴² Interestingly, several Canadian provinces have recently passed laws that restrict foreign (and in some provinces, domestic) ownership of land to forty acres or less.⁴³ Thus there are few limits to the potential acquisition and ownership of land for conservation purposes by foreign entities or NGOs in Latin America, although in Mexico, foreigners would be subject to the general limitations placed on all landowners.

B. The Requirement to Make Socio-Economic Use of Land and Land Invasion

An important element of property rights in Latin America is that traditionally, the land tenancy laws of most countries have required landowners to make adequate socio-economic use of their land, by engaging in activities such as ranching or farming.⁴⁴ Failure to make adequate socio-economic use of the land could result in government expropriation of the land or its invasion by colonists. These colonists would then clear vegetation and begin to "use" the land by farming or ranching, allowing them the opportunity to assert superior title to the property.

shelf and the submarine shelf of the islands; of all minerals or substances; petroleum and all solid, liquid, and gaseous hydrocarbons; and the space above the national territory. . . ."

⁴² For example, the Mexican Constitution establishes a restricted zone (100 kilometers from a border and 50 kilometers from a coast) in which direct foreign ownership is prohibited, Mexican Constitution Art. 27(I); Ecuador prohibits any foreigner from owning land within 50 kilometers of the border. *See* Ecuador Constitution, Art. 15.

⁴³ Restrictions on foreign ownership of farmland and other lands include Alberta (20 acres); Saskatchewan (10 acres); Manitoba (40 acres); and Quebec (10 acres). *See, e.g.,* Alberta, *Agricultural and Recreational Land Ownership Act; Foreign Ownership of Land Regulations* (Alta. Reg. 160/79, s.1) (*see* <http://laws.justice.gc.ca/en/C-29/SOR-79-416/75434.html>) (last visited May 22, 2004); *see generally*, <http://www.prairiecentre.com/pdf/2003/farmland.pdf> (last visited May 22, 2004).

⁴⁴ *See, e.g.,* Bolivian Constitution Art. 169, which establishes that any property must fulfill the socioeconomic function, which is further defined in Article 2 of the Agrarian Reform (INRA) Law as "the use of the land in the development of farming and forestry activities and others of productive character, as well as those of conservation and protection of the biodiversity, research and ecotourism, according to the land's capacity of greater use, in benefit of society, the collective interest and the interest of its owner."

Another aspect of land tenancy laws is that ownership rights are defined according to the category of land owned.⁴⁵ For example, in some countries, if the property falls within the cattle-raising category, the extent of land that may be owned is determined according to the number of cattle on it, taking into account the carrying capacity of the land. If more land is owned than is needed, the state has a right to expropriate the excess land.⁴⁶

By encouraging the clearing of land to establish good title, these laws have driven extensive deforestation throughout Latin America. Although such laws have been repealed in some countries,⁴⁷ and downplayed in others, they are still in effect in some countries.⁴⁸ Even if repealed, the laws have established an important tradition that colors social perceptions about land use and appropriate procedures for conservation.

In an important victory for private lands conservation, some countries have added a land use category that specifically authorizes conservation as an appropriate use of the land.⁴⁹ This ends the risk to landowners that protected land will be considered “vacant” and subject to expropriation. However, many landowners report that it is difficult to obtain a certification of conservation use for their land, principally because local government bureaucracies are not yet accustomed to processing these designations, thereby delaying and complicating land title proceedings.

C. Implications for Private Lands Conservation

The legal limitations on the right to own land in Latin America have important implications for protecting private lands. In many countries, reform of land tenancy laws may be a critical component of a private lands conservation strategy. Creation of a category of

⁴⁵ Traditionally, rural lands are owned as small, medium, or large holdings in the farming or cattle-raising categories. In Mexico, there is a limit to the land that can be owned in either category, up to a maximum of 800 ha. for farming and enough land to raise 500 cattle for ranching. See LEGAL TOOLS IN MEXICO, *supra* note 38, at 5; BUILDING MODELS FOR SUCCESS, *supra* note 1, at 11.

⁴⁶ For example, the current general rule being implemented by the Bolivian government is that a private property owner classified as a cattle rancher can own only five ha. for each head of cattle owned.

⁴⁷ See, e.g., Agrarian Law at 117-23 (1996) (Mexico).

⁴⁸ See, e.g., Food & Agriculture Organization, *supra* note 40.

⁴⁹ Bolivia's Agrarian Reform (INRA) Law allows the justification of the socioeconomic function through conservation and biodiversity protection activities, as well as research and ecotourism. See Bolivian Constitution Art. 169.

conservation use for land would greatly enhance private land conservation. Even in countries where the law of vacant lands has been repealed or conservation use is allowed, landowners may still face informal constraints on the amount of land they can conserve in a purely natural state. For example, many conservation-minded landowners believe that they need to make some kind of economic use of the land, such as ecotourism or scientific activities, or even perform some grazing or ranching, in order to protect their land within the cultural context of Latin America.

A potential problem therefore arises with private land conservation initiatives that rely on purely private legal instruments such as easement contracts between two private parties. If such initiatives require land uses that are inconsistent with legal requirements for socio-economic use, they could subject the land to expropriation since, by definition, there would be no traditional socio-economic use being made of the land. To avoid this problem, most legislation dealing with private lands conservation in Latin America, such as laws authorizing private reserves or easements, requires state approval or involvement in the creation of private lands instruments.⁵⁰

IV

VOLUNTARY METHODS TO PROTECT PRIVATE LANDS IN LATIN AMERICA

Although initial efforts occurred in the 1970s, led chiefly by the scientific community, private lands conservation efforts in Latin America began to gain greater momentum in the mid-1980s. Today, conservation NGOs and landowners in the region have begun to experiment with a variety of legal tools and methods to promote the voluntary conservation of private lands, including:

1. Land ownership by NGOs;
2. Formally declared private reserves;
3. Ecological easements created under the civil code;
4. Independent or "in gross" conservation easements;
5. Use of the right of usufructo or comodato;
6. Land donations to government-protected area systems;

⁵⁰ By approving the conservation easement or other instrument, the state, in effect recognizes that a valid use is being made of the land, fulfilling the requirement of socioeconomic use.

7. Conditional gifts or bequests;
8. Land trusts and limited development efforts;
9. Transfer of urban development rights; and
10. Informal private reserves.

Each of these tools has different characteristics and advantages. A full suite of such tools is needed to address the different concerns of large versus small landowners, conservation NGOs, or corporate or community landowners. The desired land uses may also influence the need for and selection of a private land conservation method. The private reserve model, with its stringent conservation restrictions, may work well for strict biodiversity conservation. Conservation easements, however, which allow more flexibility in the use of the land, may work best for productive lands and working landscapes, where the objective is to integrate sustainable resource use with nature conservation.

These legal methods are described below, with reference to their implementation results. Particular attention is given to the development of legal tools that create real property rights that run with the land. Such tools, including NGO ownership of land, private nature reserves and easements, are durable even if the landownership changes.

However, the national legal framework for private lands conservation in most countries remains limited. Only a few countries have private reserve laws, and none have national conservation easement laws.⁵¹ As a consequence, private landowners and NGOs have had to be creative. An example of such creativity is adapting existing easement laws in the civil code for environmental purposes. However, many of the most effective approaches are not formally authorized by law, which limits the opportunity for private conservation.

A. Land Purchase and Ownership by a Conservation NGO

The most frequently used voluntary land conservation technique in Latin America has been ownership of property by a non-profit organization dedicated to land conservation.⁵² Some of the earliest

⁵¹ See *infra* Part II, Fig. 1.

⁵² Local NGOs have been active in buying land for conservation purposes in all countries. International funding sources have supported many such initiatives, but in almost all cases the funding is allocated to in-country NGOs that hold the title and assume management responsibility. See generally THE NATURE CONSERVANCY, available at

efforts began in the 1970s and were led by the scientific community, such as efforts to purchase land to establish the Monteverde and La Selva private protected areas in Costa Rica to safeguard the unique ecosystems and species found at these sites.⁵³ These early efforts gained international recognition and promoted initiatives for private action to protect lands throughout Latin America.

This form of ownership provides long-term conservation protection because NGOs are legally obligated to follow the objectives defined in their status, which may only be changed through a process involving judicial scrutiny.⁵⁴ Moreover, in most countries if a NGO dissolves, its assets must be transferred to another NGO with similar objectives, again with the supervision of a court. Together, these laws typically guarantee that the land will be subject to long-term conservation, provided that the NGO is able to raise adequate funds to manage and protect the area.

Another advantage of this method is that NGOs tend to protect lands of conservation importance, whereas decisions by private landowners tend to be more haphazard. NGO conservation action has proven valuable for the protection of endangered ecosystems and other priority lands, such as corridors and buffer zones. Also, because NGOs have greater social representativeness than individuals, they can play a significant role by working with governments in public-private partnerships for land and biodiversity conservation at both the local and national level.

Some notable NGO conservation successes in buying land include the 30,500 ha. cloud forest reserves in Monteverde, Costa Rica, the largest private reserve in Central America, which protects a number of endangered species of the cloud forest.⁵⁵ Another success is the

<http://nature.org/joinandadopt/adoptanacre> (last visited Mar. 3, 2004); WORLD PARKS, available at <http://www.worldparks.org> (last visited June 21, 2004).

⁵³ The history of the creation of the Monteverde (established 1972) and La Selva (1968) areas is summarized in BUILDING MODELS FOR SUCCESS, *supra* note 1, at 104-05. See sources cited *supra* note 55.

⁵⁴ See, e.g., CIVIL CODE ART. 99 (Peru) (regulating non-profit foundations); CIVIL CODE ART. 21-23 (1982) (Venezuela).

⁵⁵ The Monteverde Cloud Forest Reserve was started in the 1960s when the Quaker community at Monteverde initiated a forest reserve on the mountaintop to assure a continuous supply of water for its dairy herds. In 1972, the Tropical Science Center (TSC) acted to establish a private reserve to counter the growing threat of deforestation. The TSC purchased an initial 328 ha., and in 1975 integrated the 554 ha. community watershed reserve into the Reserve. The TSC has continued to expand and manage the Reserve, which is now 10,500 ha. Starting in 1988, the Monteverde Conservation League began to purchase additional lands, financed by donations from school children around the world.

initiative to conserve tropical dry forest in the large Guanacaste Conservation Area through a public-private partnership.⁵⁶ Another prominent example, and the largest private protected area in Latin America, is the vast 300,000 ha. Parque Pumalin in Chile created by the Conservation Land Trust, which is also creating a similar sized reserve in Corrientes, Argentina.⁵⁷

A few corporations have also been active in large-scale private lands conservation. The 22,000 ha. Linhares Nature Reserve is protected by the Companhia Vale do Rio Doce in Brazil,⁵⁸ and the 33,000 ha. Sierra del Carmen Reserve in Mexico is protected by CEMEX.⁵⁹ In Brazil, 19,000 ha. of Atlantic rainforest is protected in a collaborative arrangement by local NGOs and The Nature Conservancy, with funding from U.S. corporations to offset their carbon emissions.⁶⁰

A successful example of NGO conservation action has been undertaken in Ecuador by three foundations: Jatun Sacha, Jocotoco, and Natura y Cultura Internacional. Each foundation has set out to establish a series of private reserves designed to conserve endangered

This effort resulted in the creation of the neighboring 20,000 ha. reserve. See CHILDREN'S ETERNAL RAINFOREST, at http://www.barnens-regnskog.net/index_e.htm (last visited June 27, 2004). See generally TROPICAL SCIENCE CENTER, at <http://www.cct.or.cr> (last visited June 27, 2004); <http://www.monteverdeinfo.com> (last visited June 27, 2004).

⁵⁶ See generally AREA DE CONSERVACIÓN GUANACASTE, at <http://www.acguanacaste.ac.cr> (last modified Aug. 5, 1997); see also WILLIAM ALLEN, *THE GREEN PHOENIX: RESTORING THE TROPICAL FORESTS OF GUANACASTE, COSTA RICA* (Oxford University Press 2001).

⁵⁷ See CONSERVATION LAND TRUST, at http://www.theconservationlandtrust.org/LAND_English/introduction.htm (last visited June 27, 2004).

⁵⁸ See generally COMPANIA VALE DO RIO DOLE, LINHARES VALE DO RIO DOLE NATURAL RESERVE: MASTER PLAN (2001). The Vale do Rio Natural Reserve is one of the last and most significant remnants of the Atlantic Forest ecosystem in the state of Espírito Santo. *Id.* at 3.

⁵⁹ See *Cementing the Natural Heritage*, *ECONOMIST*, July 20, 2002, at 31; see also CEMEX's conservation model, available at http://www.cemex.com/qr/mc_pr_072701.asp (last visited June 27, 2004). Part of their strategy in Maderas del Carmen was to establish a Museum of Natural History as a joint venture with a local ejido, with the ejido lands placed in the museum trust. *Id.*

⁶⁰ See Sociedade de Pesquisa em Vida Selvagem e Educação Ambiental (SPVS), *Environmental Conservation and Carbon Sequestration* (Brazil 2002); see also Guaracqueçaba Environmental Protection Area, Brazil, THE NATURE CONSERVANCY, at <http://nature.org/initiatives/climatechange/work/art4254.html> (last visited Mar. 11, 2004). Funding of \$5.4 million was provided by American Electric Power for the Guaracqueçaba Climate Action Project of 7000 ha., and ten million dollars was provided by General Motors for the Atlantic Rainforest Restoration Project of 12,000 ha. In both cases, assistance was provided by the Nature Conservancy, which has worked for over a decade to protect the ecosystems within the APA of Guaracqueçaba.

ecosystems and species that lack protection in the state-protected area system.⁶¹ Each group has a different focus, ranging from endangered plant communities, to endangered bird species, to priority sites in the southwestern region. Although the reserves established by these groups tend to be relatively small (several thousand ha. each) they conserve unique ecosystems in critically endangered ecoregions dominated by private land ownership.

The principal limitations on the use of land purchase as a conservation tool are the high cost of acquisition and the ongoing responsibility of private entities to raise the necessary funds for stewardship and protection. For these reasons, land purchase is perhaps most important for the conservation of critically endangered ecosystems, where the need to protect and expand small areas is greatest. Land purchase by NGOs is not an attractive option for private landowners wishing to retain title to their property or make productive use of their lands. However, mixed NGO-corporate partnerships are feasible to conserve areas on productive lands, such as Hato Pinero in Venezuela, where a private foundation protects 17,000 ha. of woodlands within a 73,000 ha. working ranch.⁶²

The effective creation of private protected areas by NGOs through purchase of high-priority conservation indicates the tremendous opportunity for this tool if adequate funding were available. The Nature Conservancy's Adopt an Acre program, World Land Trust, and World Parks have each identified numerous private lands conservation projects that are relatively inexpensive, and which would be well managed by local groups and would protect critically endangered ecosystems. Such projects, however, are in need of funding.⁶³

⁶¹ See generally JATUN SACHA FOUNDATION, at <http://www.Jatunsacha.org> (last visited June 27, 2004); NATURE AND CULTURE INTERNATIONAL, at <http://www.natureandculture.org> (last visited June 27, 2004); FOUNDATION JOCOTOCO, at <http://www.jocotoco.com> (last visited June 27, 2004).

⁶² See HATO PINERO, at <http://www.hatopinero.com/english/about.html> (last visited June 27, 2004). Due to the vision of the Branger family, no hunting has been allowed on the 73,000 ha. Hato Pinero for fifty years. More recently, the Pinero Foundation, composed of family members and two independent directors, was established to own and conserve over 17,000 ha. of woodlands on the ranch. Information of Jaime Perez de Branger (2004) and Don Antonio Julio Branger (2002), President of Pinero Foundation.

⁶³ See generally THE NATURE CONSERVANCY, at <http://nature.org/joinanddonate/adoptanacre> (last visited June 27, 2004); WORLD LAND TRUST, at <http://www.worldlandtrust.org> (last visited June 27, 2004); WORLD PARKS, at <http://www.worldparks.org> (last visited June 27, 2004).

B. Formal Private Reserves

1. Legal Structure

Several Latin American countries, including Bolivia,⁶⁴ Brazil,⁶⁵ Costa Rica,⁶⁶ Ecuador,⁶⁷ Guatemala,⁶⁸ Paraguay,⁶⁹ and Peru,⁷⁰ have developed legislation authorizing creation of private reserves as a formal legal device to protect private lands. In this Article, we reserve the term private reserve for areas that have been formally designated under such laws.

The private reserve designation combines voluntary private initiative with a governmental approval process. A private landowner must request this status from a government agency, which then designates the land as a private reserve if it qualifies under criteria established by the law. The law then places a number of fairly stringent land use restrictions over the land and requires regular reporting by the landowner. Note that the government approval protects the landowner against the charge that by conserving their land they are not making adequate socioeconomic use of their land. Although using a private reserve designation provides less flexibility than an easement, it may be advantageous when a country's land tenure laws do not recognize conservation as an adequate use of the land.

A typical private reserve law contains the following elements:

1. *Designation Process.* A private landowner voluntarily makes a request for this designation to a government entity; if the area

⁶⁴ Art. 13 (V) of the Forestry Law 1700 (June 12, 1996) (Bolivia).

⁶⁵ In 1990, the Brazilian government published Decree No. 98.914, 31 January 1990, authorizing the designation of areas as Private Reserves of Natural Patrimony (RPPNs). Currently, Decree No. 1922, 5 June 1996 regulates RPPNs.

⁶⁶ Private reserves can be created under Costa Rica's Wildlife Conservation Law No. 7317 (1992).

⁶⁷ Art. 14, Regulation of the Forestry Law, D.E. No. 1529, R.O. No. 965 (February 22, 1983) (Ecuador).

⁶⁸ Private reserves can be created under Guatemala's Protected Areas Law, Decree 4-89 (1989).

⁶⁹ Law 352 of 1994, Chapter V; Resolution No. 79, Establishment of Procedures for the Legal Creation of Natural Protected Areas under Private Dominion in Paraguay, Dept. of National Parks and Wildlife (May 9, 2000) (Paraguay).

⁷⁰ Regulation of the Protected Natural Areas Law, Supreme Decree No. 038-2001-AG, art. 61 (pub. 26 June 2001), Chapter IX (Peru).

satisfies the qualification criteria, it is formally designated as a private reserve through a ministerial decree or similar official process.

2. *Qualification Criteria.* The government must find that the land is valuable because of its ecological, biological, or other scientific characteristics (in general, countries have not imposed rigid criteria for such a determination).⁷¹ The landowner must also satisfy technical requirements, such as providing proof of valid title, a detailed description of the property and its environmental values, and the development of a management plan.⁷²

3. *Land Use Restrictions.* Destructive land uses such as clearing natural vegetation, building structures, etc. are prohibited by law in some countries.⁷³ Other countries are less specific, and simply require compliance with an approved management plan.⁷⁴

4. *Ongoing Requirements.* The landowner must implement the management plan and must submit periodic (usually annual) reports to the government that describe implementation of the management plan. The state monitors compliance with the management plan and the reserve status.⁷⁵

5. *Duration.* The duration of a private reserve designation varies according to the country's law. Brazil requires that the private reserve be of perpetual duration.⁷⁶ Some countries allow reserves to be designated either for a term of years or in perpetuity,⁷⁷ whereas others such as Costa Rica require that the private reserve status last only a specific number of years.⁷⁸

⁷¹ See, e.g., Regulation of the Forestry Law, D.E. No. 1529, published in the *Registre Oficial* No. 965, Feb. 22, 1983 (Ecuador). In order to be a *Bosque Protector* in Ecuador, the government must conduct a number of studies, including location and boundaries, physiographic characteristics and ecological classification of the area, composition of the existing flora and fauna, and physical and morphologic aspects of the hydrographic basins of influence.

⁷² See, e.g., Law 352 of 1994, chapter V; Resolution No. 79, Establishment of Procedures for the Legal Creation of Natural Protected Areas under Private Dominion in Paraguay, Dept. of National Parks and Wildlife (May 9, 2000).

⁷³ See, for example, Brazil's law, art. 7, *supra* note 65. Permitted uses in RPPNs are only for scientific investigation and visitation for tourism, recreation, or education objectives.

⁷⁴ See, e.g., Peru, *supra* note 70.

⁷⁵ *Id.*

⁷⁶ See Decree No. 1922, 5 June 1996.

⁷⁷ Bolivia's law specifies that a private forestry reserve must last for at least ten years but does not specify a maximum period. Art. 13 (V) of the Forestry Law 1700 (June 12, 1996) (Bol.).

⁷⁸ See Wildlife Conservation Law, Ley No. 7317 (1992) (5-20 years, renewable).

2. Private Reserve Systems in Practice

The following chart quantifies the number and extent of formally established private reserves in each country listed, as well as private protected areas participating in established country networks of conservation landowners as of December 2002.

FIGURE 3: COUNTRY NETWORKS AND USE OF PRIVATE LANDS CONSERVATION TOOLS AS OF 2002⁷⁹

	PRIVATE PROTECTED AREA NETWORKS			FORMAL PRIVATE RESERVES ⁸⁰	
	NAME (NGO)	NUMBER	HECTARES	NUMBER	HECTARES
ARGENTINA	(NGO)			N/A	N/A
BOLIVIA	NONE			19	42,000
BRAZIL ⁸¹	NO FEDERAL			367 (RPPN)	405,114
BRAZIL	SOME STATES			192 (STATE)	82,117
CHILE ⁸²	RAPP	133	400,000	**	**
COLOMBIA ⁸³	RRNSC	172	35,000	N/A	N/A
COSTA RICA	RCRN	77	55,000	**	**
ECUADOR ⁸⁴	CNBPE	65	70,000	88	113,683
GUATEMALA ⁸⁵	ARNPG	51	21,637	51	21,637
MEXICO	INITIATING			1	13,500
PARAGUAY ⁸⁶	(NGO)			4	103,464

⁷⁹ Note that Argentina and Paraguay have no formal networks, but in Argentina the Fundación Vida Silvestre has created a landowner recognition program called Programa Refugios de Vida Silvestre. FVSA, Program of Wildlife Refuges: Promoting the Conservation of Private Lands in Argentina (Buenos Aires, December, 2001). In Paraguay, the Fundación Moisés Bertoni operates a Programa de Reservas Naturales Privadas.

⁸⁰ In Chile and Costa Rica, the land data for formally designated reserves combines data for state-declared reserves and those created through private initiative, and so cannot be quantified here; information is lacking on formal reserves in Argentina and Colombia.

⁸¹ See *infra* note 92.

⁸² Corcuera, *supra* note 14 at 127-49.

⁸³ NETWORK OF PRIVATE NATURAL RESERVES, GUIA DE RESERVAS NATURALES DE LA SOCIEDAD CIVIL (Cali., Colombia 1999).

⁸⁴ National Corporation of Private Forests of Ecuador; Inventory of Bosque Protectors at the national level, Environmental Ministry (2001).

⁸⁵ Association of Private Natural Reserves of Guatemala (2003).

⁸⁶ Fundación Moisés Bertoni & United States Agency for International Development USAID-Paraguay, *Programa de Apoyo a Iniciativas Privadas de Conservación—Una Revisión de 10 Años de Experiencias* (Program of Support to Private Conservation Initiatives—A Review of 10 Years of Experience) (Para., 2000).

	PRIVATE PROTECTED AREA NETWORKS			FORMAL PRIVATE RESERVES ⁸⁰	
	NAME	NUMBER	HECTARES	NUMBER	HECTARES
PERU	NONE			1	34,000

The nature and use of private reserve designation varies considerably among countries. Several countries, such as Brazil, Costa Rica, and Ecuador have fairly well-established legal systems for private reserves that have existed for more than a decade. In Brazil, the designation of a private reserve is perpetual and binding on all future owners, creating the strongest law in the region.⁸⁷ In contrast, in Costa Rica, the reserve may only be established for a term of years (five to twenty years) and the designation is extinguished when the property leaves the ownership of the party that established the reserve.⁸⁸ Chile and Mexico both have relatively old laws allowing for the creation of protected areas that are roughly equivalent to private reserves. However, the absence of effective regulations or incentives has limited use of these laws.⁸⁹ Other countries, such as Peru⁹⁰ and Bolivia,⁹¹ have passed legislation enabling the creation of private reserves only recently, and landowners there have just begun to establish private reserves. An

⁸⁷ See Decree No. 1922, 5 June 1996 (Brazil).

⁸⁸ See Wildlife Conservation Law, Ley No. 7317 (1992) (Costa Rica).

⁸⁹ In Chile, Article 35 of the 1994 Environmental Framework Law No. 19.300 authorizes the government to implement a system of private protected areas. Regulations implementing this law were not passed until 2003, and no areas have yet been designated. See generally, James Langman, *Chilean Agency OKs New Regulations To Protect Privately Held Ecosystems*, 26 INT'L ENVTL. REP. 578 (June 4, 2003). In Mexico, Article 59 of the General Law of Ecological Equilibrium and Environmental Protection establishes that property owners and communities can designate their lands to conservation use with government approval, as areas called "*Areas Productivas Dedicadas al Interés Público*." However, complex procedures and a lack of incentives have meant that to date only one such reserve has been created (of 13,500 ha. in Jalisco).

⁹⁰ Regulation of the Law of Natural Protected Areas, Supreme Decree No. 038-2001-AG, Chapter IX, published in Diario Oficial, 26 June 2001.

⁹¹ The Environmental Law [Environmental Law No. 1333 (1992)] authorizes the creation of private protected areas with a more general application than the existing ones under the Forestry Law. Pursuant to this law, the General Regulation of Protected Areas authorizes the creation of private protected areas: "private protected areas are those managed and financed voluntarily by individuals that without being part of the National Service of Protected Areas, will develop their activities within the framework of the system and of the assembly of norms that regulate the subject matter." General Regulation of Protected Areas, Supreme Decree No. 24716, Art. 18. Unfortunately, the specific regulation to implement this has not been issued. Hence, this mechanism for private conservation does not yet have practical application. BUILDING MODELS FOR SUCCESS, *supra* note 1, at 52.

improved legal framework could therefore significantly strengthen private reserve laws in most countries.

In Latin America, more private reserves have been created in Brazil than in any other country. As of 2002 there were 367 federal and almost 200 state Private Reserves of Natural Patrimony (RPPNs).⁹² The federal environmental agency (IBAMA) designates the federal reserves. The state environmental agency does so for state reserves.⁹³ Once officially designated, a federal reserve is permanent and restricts the majority of rights to develop the land.⁹⁴ The lands are also exempt from payment of rural property taxes. Additionally, federal reserve owners are expected to have access to the financial resources of the National Environmental Fund (FNMA) to promote research and environmental education programs.⁹⁵ Many of the most successful RPPNs are owned by, or under the management of, NGOs.

Since 1981, private landowners in Ecuador have been able to designate their lands as Protective Forests (Bosque Protectores).⁹⁶ The process for creating such reserves is relatively simple, and as of 2001, eighty-eight such reserves, covering 113,683 ha., have been created by private entities.⁹⁷ However, many of these designations have not resulted in effective protection of the site, although some, including several managed by conservation NGOs, are being adequately conserved. The practical effectiveness of the reserve designation in Ecuador appears to be principally a function of whether the landowner or management entity declaring the reserve has the

⁹² Fundação O Boticario de Proteção à Natureza (Dec. 2002) (unpublished, Curitiba, Brazil) (drawing on IBAMA data). *See also* www.rppn.org.br.

⁹³ Decree No. 7251, June 16, 1993, Mato Grosso do Sul; State Decree No. 4262, November 21, 1994, Paraná; Decree No. 19,815, June 2, 1997, Pernambuco; Decree No. 39,401 of January 22, 1998, Minas Gerais (Brazil).

⁹⁴ Decree No. 1922, 5 June 1996 (regulating RPPNs). *See generally* www.rppn.org.br.

⁹⁵ *Id.* Owners of RPPNs may obtain a rural property tax exemption from the National Institute of Colonization and Agrarian Reform (Instituto Nacional de Colonização e Reforma Agrária), as they become part of the National Protected Areas System of the Environment (SISNAMA).

⁹⁶ Decree No. R.O. 64, Aug. 24, 1981, Ley Forestal y De Conservacion De Areas Naturales y Vida Silvestre. The historical antecedent of this legal designation has its foundation in the Protective Forestry Law of July 8, 1964 and published in the Official Registry No. 296 of July 22 1964. The law is implemented through the Regulation of the Forestry Law, D.E. No. 1529, published in Official Registry No. 965, Feb. 22, 1983.

⁹⁷ *See* Regulation of the Forestry Law, *supra* note 71. An additional seventy Bosque Protectores covering 2,237,183 ha. also have been established by the government over private lands for such purposes as watershed protection. Although these use the same legal instrument, they represent government designations of managed resource use areas and not private reserves.

commitment and the financial resources needed to protect the area, as there has been little governmental support for these areas.

In Costa Rica, many private reserves have been created, but are not permanent as in other countries. The most commonly used designation, the Private National Wildlife Refuge, has a duration of only five to twenty years.⁹⁸ Such a designation can, however, provide the landowner with significant additional protection against land invasion and qualify the landowner to receive a financial incentive through payment for environmental services.⁹⁹ Another form of reserve is a forestry reserve, whereby a landowner commits to a conservation regimen for his lands.¹⁰⁰ However, in both cases, the law creates only personal obligations on the part of the landowner, rather than obligations that bind future owners of the land.

Bolivia and Peru have only recently passed laws authorizing private reserves. Peru adopted such a law in 2001,¹⁰¹ and the Chongoyape campesino community created the first private reserve of 34,000 ha.¹⁰² Unlike Brazil and Ecuador, private reserve designations in Peru are not permanent, but have an initial twenty-year term subject to renewal.¹⁰³

Bolivia currently has nineteen private reserves called RPPNs authorized under the Forestry Law of 1996.¹⁰⁴ Previous attempts to create private reserves as wildlife refuges or under special decrees had generally failed. However, the requirement for clear title poses a significant barrier to the creation of private reserves in Bolivia today, as the government is in the process of redefining property boundaries, and only twelve percent of landowners currently have approved title

⁹⁸ Decree No. 7317, 1992, *Ley de Conservación de Vida Silvestre* (Costa Rica).

⁹⁹ *Id.*

¹⁰⁰ Costa Rica Poverty Law, Law No. 7575 (1996).

¹⁰¹ Regulation for the law of Protected Natural Area, Supreme Decree No. 038-2001-AG, Chapter IX (June 26, 2001).

¹⁰² Resolución Ministerial No. 134-2001-AG, D.O. 12.12.2001.

¹⁰³ See Decree No. 1922, 5 June 1996. (Brazil).

¹⁰⁴ Ley No. 1700 Ley Forestal, published in *Diario Oficial* 12 June 1996. The Forestry Law entered into force on June 12, 1996 and makes reference to protection lands, which are defined in Art. 13 as: "lands with or without vegetal covering, that due to their degree of vulnerability to degradation, and/or the ecological services they render to the hydrographical basin, specific objectives, or to social interest or private initiative, are not susceptible to farming or forestry activities, limiting themselves to hydroenergetic, recreational, investigative, educational and any other indirect non-consuming uses."

documents.¹⁰⁵ The Bolivian situation illustrates the importance of having clear land titles, as they are a prerequisite to the use of private reserves and other private land conservation tools.

3. Advantages and Disadvantages of Private Reserves

Private reserves have a number of strengths, as well as limitations. First, they must qualify under legal criteria and be recognized by a government entity as having special value for conservation. Such recognition provides government endorsement but also restricts the opportunity to create private reserves. Second, the designation imposes a number of land use restrictions and procedural requirements that obligate the owner of the private reserve to develop and follow a management plan and make annual reports to the government. These restrictions tend to make private reserves a tool used for strict conservation purposes. Private reserves, therefore, fall somewhere between a voluntary land conservation practice of private landowners and a form of land management similar in some ways to the operating concepts of larger national parks.

Overall, the advantages of using private reserve designation to protect lands include:

1. Creation of greater juridical security of land tenure because governmental approval of private reserves recognizes the property's importance and endorses the proposed land use as a valid socio-economic use, thereby avoiding potential problems with land tenancy laws;
2. Provides a basis for the provision of government financial, technical, or other incentives by determining the lands to be of priority value; and
3. Helps to assure continued compliance with the conservation objectives of the designation through a government monitoring process.

The disadvantages associated with the use of private reserves include:

1. Private reserves status is limited to strict conservation of lands considered of biological importance to the government;

¹⁰⁵ No. 1715 Law of National Service of Agrarian Reformation 18 October 1996, published in *Diario Oficial* 21 December 1996 [hereinafter INRA Law]. The INRA Law establishes that all the properties, with or without title, must be subjected to the INRA title search process until the year 2006.

2. The government approval process can be burdensome and time-consuming, potentially discouraging anyone but the most determined conservation owner from gaining this status; and

3. Private reserves are basically treated as mini-parks, with requirements to adopt management plans and report on progress to the government parks authority, which can be burdensome to private landowners.

These advantages and disadvantages suggest useful reforms for private reserve laws. Instead of treating private reserves as “mini-parks,” governments should establish terms and conditions for private reserves that recognize the independence and voluntary initiative of the private landowner, and allow for more flexibility in management of the property than that associated with public protected areas. The procedures and paperwork required should be made as unburdensome as possible. A five-year updating of the management plan or adequate government monitoring procedures could replace the need for annual reports from the landowner. The government might also elect to develop categories of private reserves with differing requirements, the nature and strictness of which could determine any incentives or benefits provided to the landowner.

C. Easements

1. Overview

An easement is a voluntary agreement in which a landowner gives to another entity, typically a neighboring landowner, the right to use or limit the use of their property in a certain way. An easement, also called a servitude, can be created for a term of years or for perpetuity, depending on the country’s law. It can be used for conservation purposes by limiting the rights to use land in certain ways or limiting the intensity of development in order to conserve its natural features. Because easements are real property rights, they are inscribed in the registry of deeds and are binding on all future landowners. This makes them a useful tool for long-term conservation purposes.

Two kinds of easements can potentially be used for the conservation of private lands: traditional appurtenant easements between two adjacent properties, and easements “in gross” that can be held by a government organization or a non-profit conservation

organization.¹⁰⁶ The property laws of Latin American countries are based on the European civil code and, to date, only recognize the traditional form of appurtenant easements created between two neighboring estates. No country has a national law that explicitly recognizes the use of easements for conservation purposes, or authorizes the use of conservation easements that can be held independently by NGOs or government agencies.

NGOs working with conservation-minded landowners have used the traditional form of appurtenant easements under the civil code for conservation purposes in a growing number of Latin American countries. This is shown below in figure 4. However, the lack of a secure legal framework and a number of other barriers are slowing the use of easements in the region. Removing these barriers is a priority for conservation groups in this region.

2. History and Use of Easements

Costa Rica pioneered the use of easements for conservation purposes in Latin America by beginning to use appurtenant easements to protect land in 1992. Since then, over fifty easements have been created in that country, principally by the Center for Environmental Law and Natural Resources (CEDARENA).¹⁰⁷ Since 1998, a small number of easements have also begun to be created for conservation purposes in other countries. Figure 4 below summarizes the history and use of easements for conservation purposes in Latin America as of December 2002.

FIGURE 4. USE OF TRADITIONAL EASEMENTS FOR CONSERVATION PURPOSES AS OF 2002

¹⁰⁶ The conservation, or “in gross” easement, has been used successfully in the U.S. for several decades. In most cases, the landowner enters into an agreement with a qualified conservation organization that monitors the land use and enforces the easement. Such easements remain in effect even when the land passes to a new owner and may be created for a period of years or be permanent. Landowners may qualify for various financial incentives, including reductions of property and income tax, for entering into a conservation easement.

¹⁰⁷ See Chacon, *supra* note 25.

COUNTRY	LEAD ORGANIZATION	YEAR OF FIRST EASEMENT	NUMBER OF EASEMENTS	APPROX. HECTARES PROTECTED
ARGENTINA ¹⁰⁸	FUNDACIÓN NEUQUEN	2000	1	144
COSTA RICA ¹⁰⁹	CEDARENA	1992	42	5,000
	OTHERS		15 (APPROX.)	500
ECUADOR ¹¹⁰	CEDA	1999	4	300
GUATEMALA ¹¹¹	FUNDAECO	1999	4	7,233
MEXICO ¹¹²	PRONATURA	1998	10	UNAVAILABLE
PARAGUAY ¹¹³	NATURAL LAND TRUST	2000	12	UNAVAILABLE

All of these easements, with the exception of one easement in Mexico, employed the traditional form of appurtenant easements under the Civil Code that require two adjacent estates. However, a number of techniques have allowed traditional easements to be created in a variety of circumstances that use or expand the strict requirement for adjacent private properties.

a. NGO Purchase of Adjacent Lands

One way to meet the requirement for adjacent lands is for a conservation NGO to acquire, by donation or purchase, a piece of property adjacent to the land subject to the easement. This allows the NGO property to be the dominant estate and hold the easement over adjoining lands.

b. Use of Non-Adjacent Lands

Another creative method is to create an easement between properties that are non-adjacent, but that have some relationship or shared characteristics in order to establish an adequate nexus. One

¹⁰⁸ A. Sibileau & E. F. Santagada, *Environmental Easement for the Perpetual Protection of Private Land in Patagonia, Argentina: Case Study "Las Lagunas de Epulauquen"*, FUNDACION NEUQUEN (2003) (on file with Fundacion Nenquen).

¹⁰⁹ See Chacon, *supra* note 25.

¹¹⁰ Unpublished information provided by Centro Ecuatoriano de Derecho Ambiental, Quito, Ecuador (2003).

¹¹¹ Unpublished report provided by Association of Private Natural Reserves of Guatemala (Guatemala City, Guatemala 2003).

¹¹² Martin Gutierrez, Pronatura, presented at the Fifth Latin American Congress on Private Lands Conservation (Cancun, México, Jan. 29, 2003).

¹¹³ Information from Natural Land Trust and Guyra Paraguay (Asuncion, Paraguay, 2003).

example is an easement created by CEDARENA between a parcel of private land and a nearby state reserve in Costa Rica which share the same birds.¹¹⁴

c. Reciprocal Easements

Reciprocal easements between adjacent landowners allow them to limit their respective land uses, thereby allowing both properties to be protected. Conservation groups working with private landowners in Mexico and Paraguay have used reciprocal easements with provisions that give the third-party NGO the right to enforce the easement provisions. The NGO then has specific authority to enter the property, monitor compliance, and judicially enforce the rights and obligations derived from the easement.¹¹⁵ The use of reciprocal easements can therefore create enforceable rights over land for a conservation NGO without the need for the NGO itself to own adjacent land.

d. Use of Public Lands as the Dominant Estate to Hold an Easement

In Mexico and Costa Rica, easements over private land have been created using adjacent or nearby public lands as the dominant estate.¹¹⁶ The easements also provided rights to a third-party NGO to enforce the easements, along with the Director of Reserve. In a related use, Pronatura also helped create an easement at Las Berenjenas in Jalisco, consisting of 800 ha. of pine forest owned by the NGO Bosque Antiguo, in which the dominant estate was the adjacent lands held by the Huichol indigenous group, integrating cultural and environmental objectives in the same instrument.¹¹⁷

e. International Easements

In Tecate, Baja California, a conservation easement was created between two portions of one hill, with the land subject to the

¹¹⁴ See Chacon, *supra* note 25.

¹¹⁵ BUILDING MODELS FOR SUCCESS, *supra* note 1, at 23-24.

¹¹⁶ *Id.* at 24. In Mexico, an easement was created at Rancho el Paval within the El Triunfo Biosphere Reserve in Chiapas, in which the dominant estate was the Reserve itself. *Id.* In Costa Rica, several easements have been created with public land as the dominant estate. See also Chacon, *supra* note 25.

¹¹⁷ See Gutierrez, *supra* note 112.

easement located in Mexico and the dominant estate located in the United States.¹¹⁸

Although the above methods are creative solutions, several are novel arrangements that pose legal uncertainties that have not been tested in court. One potential problem involves the legality of the practice of giving a third party, such as an NGO, the right to sue or enforce the easement. Because traditional Civil Law only recognizes the right of the holder of the easement to enforce its provisions, this practice may not survive legal scrutiny. Moreover, it is unclear whether the monitoring and enforcement rights granted to NGOs are actual property rights that follow the property through subsequent changes in ownership, or are personal rights enforceable only against the original maker of the easement. The uncertainty over the nature of the enforceable rights granted to NGOs could undermine the effectiveness of these techniques.

3. *Barriers to the Wider Use of Easements*

There are a number of barriers to the wider use of easements for conservation purposes in Latin America.

a. Lack of Legislative Recognition of the Use of Traditional Easements for Conservation Purposes

None of the countries in the study have a national law that explicitly recognizes the use of traditional easements for conservation purposes. A potential problem with the use of easements for conservation purposes is that while most easements create positive rights, such as a rights of way over the land, conservation easements create negative rights that prevent certain uses of land. Because such negative easements have been rarely used in Latin America, they may be more difficult to enforce.

b. Lack of Legislative Recognition of Independent Conservation Easements

Legislation is needed to authorize the creation of independent easements in gross, which run with the land but can be held by independent entities. Easements in gross eliminate the need to have the easement held by an adjacent property owner (the dominant estate), and allow the easement to be held and monitored by a

¹¹⁸ BUILDING MODELS FOR SUCCESS, *supra* note 1, at 24.

conservation group that acts as a land trust. These latter rights must be created by statutory authority, which has only been accomplished in three Mexican states: Nuevo Leon, Quintana Roo, and Veracruz.¹¹⁹

The laws in the Mexican states that have authorized conservation easements also require state approval for all private lands conservation instruments, including easements. In doing so, these laws add an element of government involvement that is usually lacking with easements created in common law jurisdictions like the United States. Such laws further require that the land become part of the state protected area system. Having easements formally approved by the state, or becoming part of the state-protected area system, provides an additional element of protection, as it provides recognition that may protect the land against other state actions that may harm the land. Therefore, in this respect easements in civil law countries may become even stronger than conservation easements available in common law countries.

The absence of national laws explicitly recognizing the use of traditional easements for conservation purposes, or authorizing easements in gross, is a major barrier for the widespread use of easements for conservation purposes. Therefore, creating laws that authorize in gross conservation easements that may be held by land trusts and similar entities is one of the most important legal reforms in Latin America. Fortunately, proposed laws authorizing in gross conservation easements have been introduced in a number of countries, such as Chile, Costa Rica, and Ecuador.¹²⁰

c. Lack of Clear Land Title

A lack of clear land title is also a major challenge to the use of easements in many countries. In Bolivia, where the government is in the process of revising land titles, clear title exists for only 12 percent of the land area.¹²¹ In the Amazon basin, many rural lands are subject to conflicting possessory claims, and several different land titles may exist over the same territory or be claimed by different municipalities. These difficulties hinder the creation of easements, which require clear and valid land title for their creation.

¹¹⁹ See, e.g., Nuevo Leon; Quintana Roo Civil Code, article 2215.

¹²⁰ BUILDING MODELS FOR SUCCESS, *supra* note 1, at 22.

¹²¹ *Id.* at 19.

d. Uncertain Enforcement

In general, judicial systems are relatively weak in Latin America. Such weakness raises the question of how the assertion of new rights, such as the use of easements for conservation purposes, will be treated in courts. Only two easements have been litigated to date in Latin America. The Las Cañadas easement in Mexico was defended successfully by the landowner with the help of the conservation NGO Pronatura.¹²² Another in Argentina was successfully defended by the Fundación Neuquen.¹²³ Litigating such cases is costly—the defense of the Las Cañadas easement cost approximately \$15,000.¹²⁴

D. Informal Private Protected Areas

Many privately owned lands are protected informally on the basis of the commitment of the current landowner to conserve the land. Although such commitment to conservation may be strong and the protection measures excellent, the lack of any legal guarantee that the conservation measures will continue after the current landowner dies or sells the property jeopardizes the long-term conservation of these properties.

Creating strong, flexible, and readily implemented procedures for private land conservation is a necessary step to translate the conservation commitment of such landowners into legal reality.

E. Conservation Concessions on Public Lands

Conservation concessions are lease agreements in which governments lease public lands or resources to conservation groups to be managed for conservation purposes. The extensive private involvement in leasing public lands for forestry and other extractive purposes indicates conservation concessions are a potentially important instrument for conservation action.¹²⁵

¹²² See Gutierrez, *supra* note 112.

¹²³ Sibileau, A., and E. F. Santagada, 2003, *Environmental Easement for the Perpetual Protection of Private Land in Patagonia, Argentina: Case Study "Las Lagunas de Epulauquen"*; Fundación Neuquen, San Martín de los Andes, Argentina, available at <http://www.prodiversitas.bioetica.org/des50.htm> (last visited Mar. 10, 2004).

¹²⁴ See Gutierrez, *supra* note 112.

¹²⁵ See generally, Jared Hardner & Richard Rice, *Rethinking Green Consumerism*, SCIENTIFIC AMERICAN, May 2002, at 89, available at <http://www.sciam.com> (last visited June 27, 2004) (describing conservation concessions).

The first pure conservation concessions were granted in Chile, where the law provides that the Ministry of Bienes Nacionales may grant concessions to NGOs for conservation purposes.¹²⁶ The terms of the law are favorable: NGO concession holders are not required to pay any fees to the government, and the duration of the concession may be indefinite and is not subject to the normal fifty-year limit for commercial concessions.¹²⁷ Several large conservation concessions were granted in the early 1990s to three environmental foundations, including a 35,000 ha. area within Isla Magdalena to Fundación Lahuen.¹²⁸ However, none of the foundations were able to establish the management or infrastructure needed to maintain the concession areas. Consequently, control of the areas reverted back to Bienes Nacionales. Other smaller land concessions have since been granted in Chile, generally to companies seeking to develop relatively small amounts of land for ecotourism purposes.

Peru recently established the right to a conservation concession under the new regulation of the Forestry and Wildlife Law.¹²⁹ The first concession over 135,832 ha. in the Río de los Amigos watershed was created by a Ministerial Resolution in 2001.¹³⁰ The concession protects an Amazonian watershed in its natural state and grants to the non-profit Amazon Conservation Association the exclusive rights to the area for conservation purposes for a renewable period of forty years. The group agreed to make an initial investment of five million dollars over the first five years and to reinvest in the reserve any additional income generated from research and capacity-building activities.¹³¹

Although Brazil¹³² and Bolivia both have laws authorizing conservation concessions on public lands, they have rarely been

¹²⁶ Decree No. 1,939, Art. 57, 11 October 1977, article 57° *et seq.* (modified by art. 10°, No. 3 of Decree No. 19,606 (1999)).

¹²⁷ *Id.*

¹²⁸ Claudia Sepúlveda et al., *Catastro de Iniciativas Privadas en Conservación de la Biodiversidad Implementadas en Chile*, (Working Paper No. 49), Centro de Investigación y Planificación del Medio Ambiente (CIPMA) (1998).

¹²⁹ Decree No. 27,308, of 16 July 2000, Forest and Wildlife Law and its Regulation, Supreme Decree 014-2001-AG; *see also* Resolución Ministerial 0566-2001-AG created complementary dispositions for conservation concessions (Peru), and Resolución Jefatural No. 059-2004 – INRENA for private reserves.

¹³⁰ Resolución Ministerial No. 134-2001-AG (published 27 December 2001).

¹³¹ Information of Amazon Conservation Assoc., <http://www.amazonconservation.org>. *See also* BUILDING MODELS FOR SUCCESS, *supra* note 1, at 172-73.

¹³² Decree No. 271, Art. 7, 28 February 1967.

implemented. Bolivia's law authorizes concessions "for conservation and protection of biodiversity, research and ecotourism."¹³³ Although this provision has been used once, the concession is not currently active.

A second method of using concessions for conservation purposes occurs when conservation NGOs outbid resource users for the rights to traditional extractive concessions over public lands. In a number of countries, Conservation International (CI) has purchased the rights to existing timber concessions from logging companies and then nullified them. In Bolivia, CI paid \$100,000 to the holder of a roughly 45,000 ha. timber concession to leave Madidi National Park. This allowed the government to upgrade the status of roughly 300,000 ha. of the park from a multiple use zone to a strictly protected area.

Also in Bolivia, CI paid a timber company \$170,000 to renounce its claim to a timber concession of 105,000 ha., 52,100 ha. of which was within the Biosphere Reserve Pila Lajas. In Guatemala, CI and the local group ProPeten negotiated an arrangement with a community which had rights to harvest timber within 75,000 ha. in the Maya Biosphere Reserve, to allow the land to be leased instead for conservation purposes.¹³⁴

F. Donation or Transfer of Lands to a Public Park System

Another strategy for private lands conservation—primarily used by NGOs—is for a private entity to purchase land and then donate it to the government for inclusion in the public park system. This practice is common in the United States, where local land trusts regularly buy land for subsequent transfer or sale to government conservation agencies.¹³⁵

¹³³ Article 26 (3) of Ley INRA "authorize[s] concessions of state land for conservation and protection of biodiversity, investigation and ecotourism, previously certification of INRA concerning existing property rights in the area of concession, modifying these, revoking these, terminate them, and establish fees for such use." An impediment to the use of concessions in Bolivia today is that most properties lack clear land title, a problem that is likely to continue until Bolivia's land titling "saneamiento" process has been completed.

¹³⁴ See Hardner & Rice, *supra* note 125.

¹³⁵ The Land Trust Alliance calculates that of the over six million acres (2.4 million ha.) of private land protected by over 1200 local and regional land trusts in the United States, 2.4 million acres were bought and transferred to the government to hold in conservation status. LAND TRUST ALLIANCE, NATIONAL LAND TRUST CENSUS 2000 (2001), available at http://www.lta.org/newsroom/census_summary_data.htm (last visited June 27, 2004). In addition, the largest national land trust, The Nature Conservancy, has transferred about half of the fourteen million acres it has saved in the United States to

Donation to the public park system assures long-term conservation of the land and allows the government to assume the costs of management. Also, there are political and cultural reasons to conserve large landholdings as governmentally declared protected areas, given the Latin American social history that discourages the holding of large extensions of land in private ownership.¹³⁶

In Latin America, this approach has only been pursued in countries with well-run park systems, such as Argentina, Chile, and Costa Rica. In Argentina, private donations of land in 1903 helped to establish the national park system.¹³⁷ More recently, 3796 ha. of Atlantic forest were donated by the Cat Survival Trust to the Misiones province to become the Piñalito Provincial Park in 1997,¹³⁸ and Fundación Vida Silvestre Argentina and Patagonia Land Trust donated 60,000 ha. of coastal land in the Santa Cruz province to the federal government to create a national park.¹³⁹

Similarly, in Chile, a few small parcels of land have been donated to the public park system. As well, the owner of the vast Pumalin private park has expressed an intention to ultimately give the property to the state as a public protected area.¹⁴⁰ In Costa Rica, the Fundación de Parques Nacionales, an NGO with government

government entities. It continues to manage 7.3 million acres. *See generally* The Nature Conservancy, *Science at TNC* (July 2002), available at <http://nature.org/theScience> (last visited Mar. 11, 2004).

¹³⁶ Dan Janzen, who helped lead the private efforts to the purchase of 70,000 acres of private land that form part of the 153,000 ha. Area de Conservación Guanacaste in northwestern Costa Rica, writes: "Irrespective of considerations of management logic, such a single property would have been substantially too large to be allowed by the social forces characterizing Costa Rica's contemporary democratic society to exist as one private holding in a tiny country." E-mail from Dan Janzen to World Parks (Oct. 2002).

¹³⁷ The first protected areas in Argentina were created in 1903 from a donation of lands of great scenic beauty in Patagonia by Perito F.P. Moreno, to be preserved intact for future generations by the National Government. Soledad Aguilar, *Environmental Non-Government Organizations in Argentina*, RECIEL Vol. II, Issue 2, at 225 (2002).

¹³⁸ "In March 1997 an agreement was reached with the Provincial government of Misiones for the adoption of the reserve by the government as a Provincial Park. This relieves the charity of all responsibility for management and protection of the area although rights of access are retained and an area of three hectares has been designated a Private Park on which a study center and residential building can be erected. This is a very satisfactory arrangement for all concerned and represents a successful conclusion of the first phase of the Cat Survival Trust's involvement in South America." The Mission Rainforest Foundation, *Cat Survival Trust Report* (Nov. 13, 2002), available at <http://members.aol.com/cattrust/MRF.htm> (last visited Mar. 3, 2004).

¹³⁹ See Alejandra Herranz, *Argentina's First National Coastal Park Created in Patagonia*, ENVIRONMENT NEWS SERVICE (June 5, 2001).

¹⁴⁰ See Sepúlveda, *supra* note 128.

representation, has served as an intermediary to transfer privately purchased lands to the government.¹⁴¹ Also, in Costa Rica, NGOs bought land that would later be included within an expansion of the boundaries of the Guanacaste Conservation Area, a public park.¹⁴²

Although donating land to the government is a direct method of private-public partnership to assure long-term protection, there are several factors limiting the widespread use of this tool. First, it is only practical in countries that have well-run public park systems, with park agencies that are capable and willing to take on increased responsibilities. In many countries, the park service lacks the funding to manage the existing protected area system, much less accept new donations. Second, governments will generally only accept donations of land if they are in areas the government has already identified as a high priority for biodiversity conservation.

G. Community Accords

The conservation of community-owned property is an important element of private lands conservation in Latin America. In most Latin American countries, a significant portion of private rural lands may be held in common ownership by campesino communities, which are productive communities organized under the countries' agrarian laws. In addition, many indigenous communities live on reserved lands, but these typically are public lands managed as part of the state-protected areas system, and are not considered private lands initiatives.

Depending on the flexibility of a country's laws, lands that are privately owned by communities can be subject to conservation easements, private reserves, and other land conservation instruments, just as any other private land. In addition, community lands can be protected by quasi-legislative decisions made by community assemblies and other similar bodies that act on behalf of the community. In general, these community agreements are made in consideration of some financial benefits to community members in compensation for conservation actions.

Despite the extent of community-owned lands in Latin America, there are comparatively few instances of formal private land protection actions undertaken by communities. One of the few is the

¹⁴¹ See generally InBio, http://www.inbio.ac.cr/en/inbio/inb_premioinbio02.htm (describing the Fundación de Parques Nacionales) (last visited Sept. 29, 2004).

¹⁴² See AREA DE CONSERVACION GUANACASTE, *supra* note 56.

Chapparri private conservation area, where a campesino community set aside 34,000 ha. of its lands to create Peru's first private reserve.¹⁴³ Also in Peru, the conservation group Tropical Nature has obtained the agreement of several communities to conserve their rainforest lands in exchange for providing capital and tourism expertise to help develop jointly-owned ecotourism projects on community lands.¹⁴⁴

Mexico is a particularly important country in this regard, as communal groups organized as ejidos or communities own fifty-two percent of all land.¹⁴⁵ In Michoacan, NGOs and the federal government have worked with ejidos to conserve the wintering grounds of the monarch butterfly on community lands.¹⁴⁶ Also, the conservation NGO Pronatura has helped create conservation agreements with land-owning communities to protect the areas of Las Bufas and El Carracito in the Sierra Madre Occidental.¹⁴⁷ In another case, Pronatura acquired the timber rights to over 2500 ha. of communal land for a term of fifteen years for an annual payment to the community members. In return, community members agreed to refrain from cutting nesting trees of the Thick-billed Parrot and taking other actions that might disturb sensitive conservation areas. Reaching an accord is a complex process, as Mexican law requires that community agreements be carried out through a number of procedures, including certification by a formally convened assembly in the presence of a federal government official and inscription in the National Agrarian Registry.¹⁴⁸

These examples indicate the potential of working with communities. They also show that some organizing force by an

¹⁴³ Resolucion Ministerial No. 134-2001-AG, published in *Diario Oficial* of 12/12/2001.

¹⁴⁴ Interviews with Peter English, Director & Charlie Munn, President, Tropical Nature (Nov. 2002); *see also* TROPICAL NATURE, at <http://www.tropicalnature.org> (last visited Aug. 22, 2004).

¹⁴⁵ VII Censo Agrícola-Ganadero y Ejidal, INEGI, 1994 y Programa de Titulación y Certificación de Parcelas y Solares (PROCEDE) (Mexico).

¹⁴⁶ *See* ENVIRONMENTAL LAW INSTITUTE, LEGAL ASPECTS OF FOREST MANAGEMENT IN MEXICO 91-103 (1998) (discussing creation and enforcement of the Special Biosphere Reserve for the Monarch Butterfly).

¹⁴⁷ *See generally* PRONATURA, available at <http://www.pronatura.org> (last visited Mar. 3, 2004).

¹⁴⁸ *See* ENVIRONMENTAL LAW INSTITUTE, *supra* note 146 (providing a general description of legal steps and conservation actions taken in the Special Biosphere Reserve for the Monarch Butterfly).

individual or NGO may be necessary to initiate and to carry out a formal conservation program.

H. Other Private Land Conservation Mechanisms

1. Usufructo

The usufructo is a personal, contractual civil law right over land through which a property owner grants to another the use and enjoyment of the property.¹⁴⁹ Because it is a personal right, a usufructo does not bind subsequent landowners and cannot last longer than the life of the beneficiary, or twenty to thirty years in the case of organizations. It can be adapted for conservation purposes by setting forth limitations on the use or development of the land. The landowner has the right to monitor the property to ensure conservation, although monitoring rights can also be granted to third parties. In the event of a breach of the conservation obligations, the general civil rules regarding breach of contract apply. The contract of usufructo is formalized before a notary public and inscribed in the public registry, making it enforceable against others.

Creative use of the usufructo can help lower the cost of purchasing land for private conservation. In Mexico, Pronatura was able to purchase ecologically valuable property at a significantly reduced price because the owner was given through usufructo the right to continue to live on and use the property for his lifetime, subject to a number of conservation-oriented conditions and restrictions on land use.¹⁵⁰

2. Comodato

The comodato is a civil law contract through which a landowner lends land, or rights to resources on the land, to another person free of charge.¹⁵¹ The recipient is under the obligation to return the land or resources in the same condition, either upon request, after the expiration of the term of the contract, or upon realization of an agreed condition. The rights and obligations flowing from this contract are personal and do not transfer to subsequent owners. However, if the person who transfers the comodato dies, the obligations and rights are

¹⁴⁹ BUILDING MODELS FOR SUCCESS, *supra* note 1, at 29.

¹⁵⁰ *Id.*

¹⁵¹ *Id.* at 29-30.

transmitted to his or her heirs. Contracts of comodato over lands are usually in writing and signed before the notary public, making them enforceable against others. The landowner or her designee monitors the use of the property and if the user does not comply with the terms of the contract, the landowner has the right to terminate the comodato and obtain restitution of the property. As with other personal contracts, only the parties of the agreement can typically enforce or modify the agreement.

3. Conditional Donations and Legacies

Land may be transferred to others without charge through a donation or legacy, which may be conditioned on the fulfillment of elements that guarantee its future conservation.¹⁵² A donation is made by a living person, whereas a legacy is made through the testament of a deceased person. These instruments need to be witnessed by a notary public and inscribed in the lands registry of deeds to be effective. Also, by including a reversion clause in a donation, the donor can require that property automatically revert to the original owner if the person to whom it is given does not comply with the conservation objectives. The donor is responsible, however, for monitoring the property to detect any violations and for bringing any enforcement. Such responsibility can reduce the usefulness of this device for long-term protection.

4. Lease Agreements

A lease contract allows a person to temporarily use property in exchange for the payment of rent, and can be used for conservation objectives by including land use limitations in the contract.¹⁵³ Rental agreements, however, are of limited use for long-term conservation because they are personal in nature and do not create real property rights that automatically transfer to future owners of the land. They are appropriate in situations involving property owners who have not been convinced to use more permanent protective methods.

A rental contract can also be used by an NGO to conserve lands without needing to pay for the acquisition costs. Fundación Jatun Sacha recently leased 2000 ha. of dry forest in southeastern Ecuador

¹⁵² *Id.* at 30.

¹⁵³ *Id.*

for thirty years for conservation and scientific research.¹⁵⁴ The Foundation does not pay rent but agreed to pay the owner half of any net proceeds of revenue-producing activities on the site, such as educational courses and ecotourism. It is hoped that this reserve will become self-supporting and the owner will sufficiently benefit from his share of the revenue-producing activities to continue the arrangement.¹⁵⁵

V

MANDATORY CONSERVATION RESTRICTIONS ON THE USE OF PRIVATE LANDS

In Latin America, mandatory conservation restrictions imposed through direct government regulation of private lands have been a widely used legal approach for achieving the conservation of private lands.¹⁵⁶ Almost all countries have such restrictions, which are typically contained in the country's forestry or protected area laws. Such restrictions include: general restrictions placed on all landowners to protect soils and watersheds; general restrictions regulating tree-cutting; and special restrictions on private lands that lie within designated resource conservation areas. These limitations reflect the extensive state power in civil law countries to regulate uses of land, and have few equivalents in common law countries.¹⁵⁷

Due to their importance for private lands conservation, the strong mandatory conservation measures in these laws are briefly reviewed below, although they are rarely enforced in most countries. While they could form one of the strongest possible tools for private land conservation, these mandatory conservation requirements are ineffective because of this institutional lack of enforcement.

¹⁵⁴ FUNDACION JATUN SACHA, TITO SANTOS BIOLOGICAL RESERVE, at http://www.jatunsacha.org/english/tito_santos.html (last visited Mar. 11, 2004).

¹⁵⁵ Information from Michael McComb, Executive Director of Jatun Sacha Foundation (Nov. 2002). See also, BUILDING MODELS FOR SUCCESS, *supra* note 1, at 30.

¹⁵⁶ See *infra*, Part II, Fig. 1.

¹⁵⁷ In a federal common law jurisdiction such as the United States, such restrictive rules can be imposed by state governments. To a limited extent, such rules have been imposed in special areas such as the Adirondacks State Park and margins of the Chesapeake Bay. See *infra* note 170.

A. General Restrictions Related to Soil Conservation and Erosion Control

Almost all countries impose a number of environmentally beneficial limitations on land uses, principally to assure sound land use planning and erosion control. One set of laws requires either the strict or partial conservation of natural vegetation along water courses, in watersheds, and on steep slopes. In addition, most countries also require a management plan and permit for the cutting of any tree on rural properties, potentially allowing the state great control over forest exploitation or development practices. These laws are summarized in the box below for selected countries.

BOX 1. SELECTED COUNTRY LAWS IMPOSING LAND USE RESTRICTIONS FOR ENVIRONMENTAL PURPOSES

Protection of:	Watercourses	Watersheds	Steep slopes	Forestry plan required
Argentina ¹⁵⁸	100 meters	Yes	>20 degrees	
Bolivia ¹⁵⁹	10 - 100 meters	Yes	>45 degrees	Properties >3 ha
Brazil ¹⁶⁰	30-500 meters	Yes	>45 degrees	
Chile ¹⁶¹	100-200 meters	Limited	>45 degrees	Variable (>20-1000 ha)
Costa Rica ¹⁶²	10-50 meters	Limited	N/a	Properties >2 ha

¹⁵⁸ Decree No. 13.273, and its regulation, Decree 710, 1995 (Argentina).

¹⁵⁹ Regulation of the Law of Silviculture Decree No. 24453, Art. 3 (Bolivia).

¹⁶⁰ Forest code amendment, Decree No. 7.803, (1989) (Brazil).

¹⁶¹ Decree No. 4,363, 1931; Decree no. 18378 and its regulation, Decree no. 259 de 1980 Art. 4; Decree no. 19.300, Art. 10 (Chile).

¹⁶² Forestry Law, No. 7575 (1996) (Costa Rica).

Ecuador ¹⁶³	50 meters	Some areas	N/a	All properties
Peru ¹⁶⁴	50 meters	Yes	N/a	All properties

These general restrictions against deforestation along watercourses, in watersheds, and on steep slopes, however, are rarely enforced in any country. The requirement for a management plan prior to the cutting of timber is typically enforced only against large landowners and commercial timber operations, leaving many deforestation activities unaffected. Government capacity to review and monitor forestry management plans is also weak in most countries. Although these laws could provide the framework for one of the strongest approaches for private conservation, their potential remains untapped because of this widespread lack of enforcement.

B. Additional General Conservation Restrictions

In addition to these general laws, some countries, most notably Brazil, have even stronger laws that impose mandatory conservation practices on landowners. Brazil requires all rural private landowners to preserve from twenty to eighty percent of their property in natural conditions.¹⁶⁵ In some areas, such as the Atlantic Forest, Brazilian law totally prohibits the cutting of trees on any part of the property.¹⁶⁶ These provisions in Brazil likely represent the strongest private lands conservation laws in the Americas. Enforcement of these laws, however, is sporadic at best. As a result, these laws may have slowed, but have not halted, deforestation in many critically endangered ecosystems.

In a study regarding illegal deforestation in the Atlantic forest of southern Bahia, Brazil, Conservation International (CI) conducted one of the few studies that has examined the root causes of the failure to

¹⁶³ Regulation of the Forest Law, D.E. 1529, R.O. 965 (Feb. 22, 1983).

¹⁶⁴ Forestry and Wildlife Law, Law No. 27308 and its Regulation, Supreme Decree 014-2001-AG.

¹⁶⁵ Law No. 4.771 of 1965 was promulgated to implement the new Forest Code and is still in force, although amended by laws No. 7.511, of 1986 and No. 7.803, of 1989 (Brazil).

¹⁶⁶ Decree No. 750, 1993 (Brazil).

enforce environmental laws.¹⁶⁷ The study found that despite efforts by the government, enforcement of environmental laws was weak. A number of serious problems include a low probability of detection and the complex procedure by which cases are handled as they travel through six offices in three cities, which can result in paperwork becoming “lost.” Additionally, jurisdictional confusion results in delays so long that prosecutors can become unable to proceed with a case. Furthermore, even if the case were tried, the lack of familiarity of prosecutors and judges with environmental laws can result in lack of conviction. Finally, the overall scarcity of prosecutors and judges, especially in remote areas, can prevent any effective enforcement.¹⁶⁸

The study concludes that weaknesses exist in virtually every step of the enforcement system and that improvements are needed in a number of key areas, including greater budgets, clarification of jurisdictional issues, greatly simplified procedures, and improved training and capacity of key personnel. It further pointed out that improving only one area, such as hiring more personnel to increase detection of infractions, may have little effect unless problems in other areas are also addressed.¹⁶⁹

C. Mixed Public-Private Protected Areas

An important type of conservation restriction on private lands in Latin America occurs when governments establish protected areas that are intended to permanently include both public and private lands, without expropriating the latter. These mixed public-private areas are different from traditional public parks, in which private lands are considered “inholdings” that should eventually be purchased by the government. In mixed protected areas, the private lands are intended to stay private, but must comply with conservation restrictions imposed by the government. These mandatory restrictions limit uses of the land in a way similar to conservation

¹⁶⁷ Anita Sundari Akella, James B. Cannon, and Heloisa Orlando, CONSERVATION INTERNATIONAL, CENTER FOR CONSERVATION AND GOVERNMENT AND INSTITUTO DE ESTUDOS SOCIO-AMBIENTAIS DE SUL DA BAHIA, ENFORCEMENT ECONOMICS AND THE FIGHT AGAINST FOREST CRIME: LESSONS LEARNED FROM THE ATLANTIC FOREST OF BRAZIL (draft, Washington, D.C. October 2002).

¹⁶⁸ *Id.* at 14.

¹⁶⁹ *Id.* at 30-31.

easements and have virtually no equivalent in common law jurisdictions such as the United States.¹⁷⁰

Typically, these mixed public-private protected areas cover relatively large natural areas of importance for the conservation of biodiversity or natural resources. Although they consist mostly of private lands, many surround one or more publicly owned core areas, such as national parks. Typically, the government allows agricultural activities and grazing to continue on private lands but restricts other private land uses that could degrade the area's natural resources, such as prohibiting the cutting of trees, industrial uses, contamination of soils, or other acts that would destroy the natural values of the land.

These mixed public-private conservation areas are frequently used in Latin America, as shown in the figure below. In Chile and Costa Rica, however, a recent development has been that the government today declares such areas only with the consent of the landowners involved.

BOX 2. PROTECTED AREA CATEGORIES THAT INCLUDE AND REGULATE PRIVATE LANDS

Bolivia	Integral Management Natural Area
Brazil	Area of Environmental Protection (APA)/others
Chile	Nature Sanctuary/others (publicly declared)
Costa Rica	Wildlife Sanctuary, Reserved Zone (publicly declared)
Ecuador	Protect Forest (publicly declared)
Mexico	All public protected areas
Paraguay	Managed Resources Reserve, potential areas in SINAP
Peru	Buffer zone of any public protected areas

¹⁷⁰ The only equivalent regulation in the United States can be imposed by state law, and the best example is the Adirondack State Park, which covers six million acres in upstate New York, of which 57% is privately owned. The act creating the park and its regulations subject private lands within the park to restrictions on land use, development, and subdivision. N.Y. EXEC. LAW §§ 801-820 (Consol. 2003); N.Y. COMP. CODES R. & REGS. tit. 9 §§ 572-580 (2004). Landowners must apply for and receive an agency permit before undertaking any development project such as buildings or roads within the park or else have an approved land use program for their land. Land use, development, and subdivision involving a shoreline are subject to regulations regarding minimum lot width, building setbacks, and sewer setbacks. In addition, no more than thirty percent of the shorefront may be cleared of vegetation. *Id.*, tit. 9 § 575.1(e). Further rules and regulations apply to land within wild, scenic, and recreational river areas.

The amount of land covered by these public-private areas can be considerable in some nations—eleven million ha. in Brazil and as much as six to eleven percent of the country in smaller nations such as Costa Rica, Ecuador, and Paraguay.¹⁷¹ In Mexico, this paradigm applies to virtually all public protected areas, where the government owns only thirty percent of the land and has only limited intentions to purchase the remaining land.¹⁷² In these countries, the amount of private land subject to conservation restrictions in these mixed public-private areas far exceeds the amount protected by the voluntary use of land conservation tools, as shown below.

FIGURE 5. EXTENT OF MIXED PUBLIC-PRIVATE PROTECTED AREAS

	DESIGNATION	AREA (HA) (% OF COUNTRY)	AREA PROTECTED BY VOLUNTARY MEANS (HA)
BRAZIL	AREA OF ENVIRONMENTAL PROTECTION, ETC.	11,577,757 ¹⁷³	405,114 ¹⁷⁴
COSTA RICA	ZONA RESERVADA, RESERVA FORESTAL, ETC.	563,686 (11%) ¹⁷⁵	220,652 (PSA) ¹⁷⁶
ECUADOR	BOSQUE PROTECTOR (STATE-DESIGNATED)	2,237,183 (9%) ¹⁷⁷	113,683 ¹⁷⁸
PARAGUAY	POTENTIAL AREAS FOR PROTECTED AREA SYSTEM	2,662,000 (6%) ¹⁷⁹	200,952 ¹⁸⁰

¹⁷¹ See *infra*, Part V.C, Fig. 5.

¹⁷² A.C. PRONATURA, HERRAMIENTAS LEGALES PARA LA CONSERVACIÓN DE TIERRAS PRIVADAS Y SOCIALES EN MÉXICO (México, D.F. 2002).

¹⁷³ UNEP World Conservation Monitoring Centre, Protected Area Database (2003), at http://www.unep-wcmc.org/protected_areas (last visited Oct. 6, 2004).

¹⁷⁴ Information of Fundacao O Boticário, derived from data of IBAMA (Dec. 2002).

¹⁷⁵ MINAE, Informe Nacional Sobre el Sistema de Areas Silvestres Protegidas. (San Jose, Costa Rica Feb. 2003).

¹⁷⁶ *Id.*

¹⁷⁷ See Regulation of the Forestry Law, *supra* note 71.

¹⁷⁸ *Id.*

¹⁷⁹ Article 64 of Law 352/94, referring to the use restrictions established in article 24(b) (Paraguay).

¹⁸⁰ FUNDACION MOISES BERTONI & UNITED STATES AGENCY FOR INTERNATIONAL DEVELOPMENT USAID-PARAGUAY, PROGRAMA DE APOYO A INICIATIVAS PRIVADAS DE CONSERVACION—UNA REVISION DE 10 ANOS DE EXPERIENCIAS (Program of Support to Private Conservation Initiatives—A Review of 10 Years of Experience) (Asuncion, Paraguay, 2000).

Actual implementation of the restrictions imposed on private lands within such mixed areas varies by country. Although they are better enforced than the general restrictions on private lands mentioned above, the restrictions are not strictly enforced, allowing gradual degradation of the area. In Ecuador, implementation of Protective Forest areas is relatively weak and the entity responsible for managing the land is often under-funded. As a consequence, many Protective Forests have been stripped of their vegetation by inappropriate land use. In Brazil, the regulations for the mixed public-private protected areas, such as Areas of Environmental Protection, are stronger, but many productive uses continue to be allowed. In all countries, additional protection measures for the private lands within these areas would significantly enhance the conservation benefits.

Increasing the protection of these valuable areas is arguably one of the most important challenges for private land conservation in Latin America. The government designation defines these areas to be particularly important for the conservation of natural resources and biological diversity, and imposes conservation restrictions on all private lands within the designation. Therefore, these areas are particularly appropriate for public-private collaboration. The private sector can contribute significantly to their conservation to both increase the effectiveness of state enforcement and work with landowners to implement additional private land conservation measures on properties.

Another aspect of a public-private partnership for these mixed areas would be for governments to give priority in providing incentives and assistance to private lands within these important areas. Costa Rica pursues exactly such a course in establishing the priorities for its payments for environmental services.¹⁸¹ Priority is given first to private lands within public protected areas, and then to lands recognized as private reserves. This strategy would also address concerns expressed by Latin American governments that government-sponsored incentives for private lands conservation should be allocated only to lands that have been determined to be a priority for nature conservation.

¹⁸¹ Costa Rica gives first priority to private lands within parks and other public protected areas, then to private lands officially recognized as private reserves, and then to other private areas. Funding is typically only sufficient for the first category. *See* Chacon, *supra* note 25.

D. Private Lands That Are Inholdings Within Public Protected Areas

Private land conservation tools may also be important to conserve the private lands that remain as inholdings within national parks and similar public protected areas. The extent of privately owned lands in national parks varies greatly in the region, from five percent in Chile¹⁸² (and the US) to seventeen percent in Costa Rica¹⁸³ to seventy percent in Mexico.¹⁸⁴ In many instances, private lands have remained as inholdings for a long time, especially in countries where governments have lacked the resources to expropriate and compensate landowners for these properties.

During the interim period when the land is still private, most governments severely restrict land uses and require that no action be taken that would degrade the natural resources of the area. Because governments lack the resources to expropriate the lands and do not have the capacity to enforce the restrictions, however, private lands conservation tools may be needed to help conserve these inholdings. Ultimately, however, a more permanent solution is needed, such as government purchases of the lands. Another option would be to redesignate the area as a managed resource reserve where private ownership could continue, in which case, the private lands conservation measures would become permanent.

VI

INCENTIVES FOR PRIVATE LANDS CONSERVATION

Another important element of a private lands conservation strategy is the creation of incentives for landowners to conserve their lands. Such incentives have been slow to develop in Latin America. Governments are able to offer two major kinds of incentives: financial incentives, such as tax exemptions, and juridical incentives that increase the security of land tenure. Their use has been very limited. Only Costa Rica has provided a significant financial incentive for landowners, and most countries do not provide enhanced or even effective juridical security for protected lands.

¹⁸² CODEFF, *LAS ÁREAS SILVESTRES PROTEGIDAS PRIVADAS EN CHILE: UNA HERRAMIENTA PARA LA CONSERVACIÓN* (Santiago de Chile, 1999).

¹⁸³ MINAE-SINAC, *TENENCIA DE LA TIERRA EN ÁREAS SILVESTRES PROTEGIDAS* (Costa Rica, Sept. 2001).

¹⁸⁴ See PRONATURA, *supra* note 172.

Landowners can also be very receptive to non-economic incentives, including public relations in the case of companies. In addition to these incentives, communities are receptive to negotiated arrangements that provide economic benefits to the community in return for land conservation. The use of such incentives are reviewed below.

A. Juridical Incentives in Achieving Secure Land Tenure

Increasing the juridical security of land tenure through designation of the property as a private protected area was found to be a major incentive in many countries, especially in those with relatively weak judicial systems. Private landowners repeatedly expressed the hope that designation would protect them from having their land seized and given away by the state or would support their legal actions against unauthorized land invasions or mining claims. A related incentive in some countries is that government recognition of the property as an official private reserve creates juridical security by satisfying the owner's need to justify the socioeconomic use of the lands.

Although enhancing juridical security would be a major incentive to many landowners, the study found relatively few instances in which private conservation status actually led to greater juridical security for land. In many instances, the conservation status of land did not even lead to effective government enforcement of existing laws protecting property rights, especially those protecting against land invasion. In some cases, the government land reform agency was even the cause of the problem by giving away land title or supporting land claims within private protected areas. Clearly, governmental recognition of the importance of private protected areas and effective or preferential enforcement of existing laws in such areas would be a major incentive to their creation.

Ideally, governments would not only enforce existing laws but create improved procedures to protect the juridical security of formally protected private lands. One country that does this is Costa Rica, whose laws provide expedited judicial review in the case of invasions of land that has been designated as a private reserve.¹⁸⁵

¹⁸⁵ Ley Forestal No 7575 13 Feb. 1996.

B. Economic Incentives

Economic incentives for private landowners interested in protecting their properties are still infrequently used in the region.¹⁸⁶ In addition, given the substantial pressures on the budgets of most Latin American countries, the future of economic and tax incentives to promote private lands conservation is not promising.

Overall, the most common financial incentive is an exemption from property tax for lands participating in official private lands conservation programs. Brazil¹⁸⁷ and Costa Rica¹⁸⁸ currently provide such an exemption. In Ecuador, Guatemala, and Bolivia, the exemption was once available but has been withdrawn in the current fiscal crisis.¹⁸⁹ However, this form of incentive has not been highly attractive to private landowners because Latin American rural property taxes are traditionally very low and the tax collection systems weak.¹⁹⁰ Even where the exemption exists, some owners feel obliged to continue to pay the taxes to avoid possible arbitrary actions by government land reform agencies who may choose not to recognize the tax exemption and then impose penalties or confiscate the land.

The most successful financial incentive program has been Costa Rica's program involving payments for environmental services,¹⁹¹ which now covers 220,652 ha. Through this program, the government makes cash payments of roughly fifty dollars per ha. to private landowners to conserve or sustainably manage their properties.¹⁹² Priority is given to owners of lands within national park boundaries and to those who have formally established private

¹⁸⁶ See *infra*, Part II, Fig. 1.

¹⁸⁷ Owners of RPPNs may obtain a rural property tax exemption from the National Institute of Colonization and Agrarian Reform (Instituto Nacional de Colonização e Reforma Agrária), as they become part of the National Protected Areas System of the Environment (SISNAMA).

¹⁸⁸ Ley Forestal No 7575 of 13 Feb. 1996.

¹⁸⁹ The original Guatemalan law, Decree 4-89, provided in articles 31 and 32 land and income tax exemptions, but these were rescinded in 1997 through Decree 117-97.

¹⁹⁰ However, it is important to point out that this situation is changing, as governments are increasing their efforts to raise their income to reduce their high public deficits. On one hand, governments, such as Brazil's and Costa Rica's, are improving their tax collection systems so tax breaks become more attractive to landowners. On the other hand, in Ecuador and Bolivia, tax exemptions are being eliminated, and therefore this type of incentive no longer exists.

¹⁹¹ BUILDING MODELS FOR SUCCESS, *supra* note 1, at 113.

¹⁹² Ley Forestal No. 7575 of 13 Feb. 1996.

protected areas. Although this program has been highly successful in attracting the interest of private landowners, not all eligible landowners receive payments and the program is limited to a term of five years, after which all landowners must renew their solicitation.¹⁹³

VII

THE WAY FORWARD: MODELS FOR SUCCESS

Private lands conservation efforts can play an important role in the protection of biodiversity and sustainable use of natural resources in Latin America. Many private landowners have a strong commitment to carrying out conservation activities, and national and international NGOs and donors are interested in supporting these efforts. The following actions are needed to establish the fundamental legal and policy tools to effectively support private lands conservation efforts.

A. Strengthen the Legal Framework for Private Lands Conservation

The lack of a strong legal framework for private lands conservation is the major barrier to the increased conservation of private land in the region. Although countries have made advances in this area, no country has a comprehensive legal framework in place. Only a few countries have passed laws authorizing the establishment of private reserves, only some of which provide for their perpetual duration. Furthermore, no country has yet enacted national legislation explicitly authorizing the use of easements for conservation purposes or legislation providing for independent conservation easements that can be held by land trusts or government entities.

A comprehensive legal framework for private lands conservation will have at its core strong laws authorizing the creation of conservation easements, private reserves, and conservation concessions. These three tools provide parties of different sizes, financial needs, and interests—large and small landowners, conservation NGOs, rural and indigenous communities, and the government—with a broad range of approaches for structuring private protected areas.

Conservation easements. A model conservation easement law would do two things: authorize the use of traditional appurtenant

¹⁹³ See Chacon, *supra* note 25.

easements for conservation purposes, and allow qualified organizations to hold conservation easements, thereby establishing independent or “in-gross” easements. The law should further provide that such easements may be established for perpetuity and provide enforcement and incentive mechanisms.

Private reserves. A model private reserve law would authorize governments to recognize private reserves in areas of importance for biodiversity or resource conservation, either for a term of years or in perpetuity. It would require landowners to develop an appropriate management plan and provide for monitoring and reporting requirements to ensure compliance, involving either the government or a designated third party such as a conservation NGO. Such laws could allow private reserves to become part of the governmental protected areas system, which would help ensure protection of the property against other government agency actions.

Conservation concessions. The legal framework should authorize concessions over public lands to be made to qualified NGOs for conservation purposes. This legal tool would allow NGOs to manage public lands, either without the obligation to pay fees to the government or under financial arrangements that meet the economic needs of local communities, the government, and other relevant parties.

B. Strengthen Juridical Security of Conservation Lands, Including Reform of Land Tenure Laws and Improved Law Enforcement

A number of important steps are needed to assure the juridical security of private lands that are placed into conservation status. First, land tenure laws need to be reformed to explicitly recognize conservation as an appropriate use of the land. Otherwise, landowners who conserve their land may not be able to justify its socioeconomic use, making it difficult to defend against invasion by squatters or potential confiscation by the government. Second, governments need to enforce the laws protecting property rights on private conservation lands, especially to protect against land invasion. Governments should also implement new procedures that provide for more rapid judicial and enforcement responses to violations of property rights on conservation lands. Finally, governments should ensure that all governmental agencies support private lands conservation actions, including those in charge of land reformation, taxation, and land use planning.

C. Establish Economic Incentives for Private Lands Conservation

To the extent that it is economically feasible, countries should develop economic incentives for private individuals, NGOs, and communities to adopt conservation practices on their lands. These should include property tax exemptions for lands placed in conservation status, tax exemptions for lands owned by non-profit organizations, and payments for the environmental services provided by conservation lands. If not already established, governments should establish national environmental trust funds with support from international development assistance and authorize the use of such funds for conservation activities on private lands. In providing such incentives, priority may be given to properties that are within designated public protected areas, or have been granted official recognition as private conservation lands. This would focus funding on areas with high conservation value.

D. Increase Institutional Capacity and Financial Support to Key Institutions Promoting Private Land Conservation

There needs to be increased capacity in the private and public entities involved in conserving private lands. In the public sector, government officials need to develop the capacity to authorize and monitor formal private conservation lands. Officials also need to better integrate private lands conservation actions into their overall conservation strategies. In the private sector, conservation NGOs need greater support and capacity to fulfill their leadership role in developing legal tools, identifying private lands conservation opportunities, establishing and maintaining private conservation areas, and providing technical assistance to conservation-minded landowners.

E. Enhance Training and Education Opportunities for Private Land Conservation

Coupled with building institutional capacity is the need to enhance training and education opportunities for people working in the key sectors involved in private lands conservation, such as government parks agencies, conservation NGOs, and large land-holding entities. Subsequently, training should extend to other sectors involved in land transactions and enforcement, such as commercial lawyers, private sector technical experts, local registrars, and judges and prosecutors for law enforcement.

The topics and forms of training will vary depending on institutional needs, ranging from general capacity-building to the application of detailed technical issues and procedures. Training may be provided through short courses, workshops, and internships, as well as formal education programs and fellowships for individuals dedicated to biodiversity conservation on private lands.

F. Increase Public-Private Collaboration in the Management and Conservation of Protected Lands, and Particularly Public-Private Protected Areas

Finally, private lands conservation efforts need to be coordinated with, and integrated into, public conservation strategies to be most successful. Collaboration is especially important to conserve ecosystems not represented in the public protected areas systems, to protect buffer zones and conservation corridors around public protected areas, and to improve the protection of mixed public-private conservation areas. A conservation strategy that coordinates and integrates public and private efforts can also seek to assure that private efforts focus on areas of priority for biodiversity conservation or sustainable resource use.

One of the most important objectives of private land conservation is to improve the management of private lands within mixed public-private protected areas that regulate private land uses within designated public protected areas. Attention needs to be paid to enhancing state capacity to manage these areas and monitor compliance on private lands, and that of private actors that implement private lands conservation measures. Effective partnerships can use the respective capabilities of the public and private sectors to maximize the effectiveness of land conservation programs, as well as develop financial resources through international and national sources.

CONCLUSION

There is increasing interest, momentum, and activity in the conservation NGO community and other stakeholder groups to improve private land conservation throughout Latin America. NGOs are working with governments to build adequate legal frameworks and incentives for private lands conservation. This effort has already succeeded in developing new policies and laws in several countries and comprehensive legislation has been introduced and awaits approval in a number of countries. With adequate funding and

resources from a variety of local and international sources, the conservation community—in partnership with landowners and other stakeholders—is well positioned to help complete the legal and incentive frameworks needed to support the conservation of private lands in the region.