

***WILDLIFE LEGISLATION AND THE  
EMPOWERMENT OF THE POOR  
IN LATIN AMERICA***

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## List of Acronyms

APN	Argentina's National Parks Administration
CAN	Andean Community of Nations
CBD	Convention on Biological Diversity
CITES	Convention on International Trade in Endangered Species
CMS	Convention on Migratory Species
COFEMA	Argentina's Federal Council for the Environment
CONABIO	Brazil's National Biodiversity Commission
CONABIO	Mexico's National Commission for the Knowledge and Use of Biodiversity
CONAF	Chile's National Forestry Corporation
CONAMA	Brazil's National Environment Council
CONAMA	Chile's National Environment Commission
CONAMA	Guatemala's National Environment Commission
CONANP	Mexico's National Commission on Protected Areas
CONAP	Guatemala's National Council on Protected Areas
CORAC	Costa Rica's Regional Conservation Areas Councils - Consejos Regionales Ambientales
EIA	Environmental Impact Assessment
EMBRATUR	Tourism Federal Agency
FANP	Mexico's Fund for Protected Natural Areas
GEF	Global Environment Facility
IBAMA	Brazil's Institute of the Environment and Natural Resources
ICMBIO	Brazil's Chico Mendes Institute for Biodiversity Conservation
INE	Mexico's National Institute of Ecology
INRENA	Peru's National Institute for Natural Resources
MoU	Memorandum of Understanding
NGOs	Non-governmental organizations
PAs	Protected Areas
PROFEPA	Mexico's Federal Prosecutor for the Protection of the Environment
SAG	Chile's Agriculture and Livestock Service
SEMARNAT	Mexico's Secretary of Environment and Natural Resources
SERNAP	Bolivia's National Protected Area Service
SINAC	Costa Rica's National Conservation Areas Service
SISNAMA	Brazil's National Environment System
SNAP	Bolivia's National Protected Area System
SNV	National Society of Vicuna Breeders of Peru - Sociedad Nacional de Criadores de Vicuña del Perú

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## Executive Summary

This study analyzes and compares national legislation on wildlife management in eleven countries in Central and South America, with the aim of identifying strengths and weaknesses of legal frameworks in the promotion of sustainable wildlife management and in allowing all members of society, and particularly disadvantaged people, to directly benefit from wildlife management. The study identifies several approaches to wildlife regimes in the region, which may be generally classified as either holistic or sectoral. Holistic regimes regulate biodiversity and its components through comprehensive regimes governing all extractive and non-extractive uses of wildlife, while sectoral ones consist of a series of different legal instruments – usually developed independently from each other – on disparate issues such as hunting and wildlife conservation in protected areas.

International treaties ratified by countries in the region had a positive influence on national wildlife legislation. In particular, the international agreements promoting or requiring the design of management plans for specific species or areas, like the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) and the Ramsar Convention on Wetlands, have been instrumental in promoting wildlife management planning when countries lacked provisions to this end in national legislation. Since both CITES and Ramsar are two of the earliest wildlife-related global conventions (both entered into force in 1975), they have helped shape many of the legislative developments in the countries studied since the Seventies. CITES has also allowed the successful implementation of the regional Vicuña Convention (1979), an agreement whereby Argentina, Chile, Peru, Bolivia and Ecuador have inverted an unsustainable use trend that was leading vicuñas to extinction. By enforcing decisions made in the framework of the Vicuña Convention upon all CITES parties, both Conventions have enabled vicuña populations to recover, while providing indigenous communities with a valuable source of income through the live-shearing of these animals following traditional indigenous practices. The more programmatic Convention on Biological Diversity has also been useful by encouraging a shift towards a more comprehensive,

ecosystem-based approach in wildlife management legislation. It has also been conducive in channelling Global Environment Facility resources to Latin America that have supported, for instance, the creation of protected area systems, the enforcement of wildlife legislation, the streamlining of biodiversity issues into other development areas and the design of participatory protected area regimes. One notable example is the Mesoamerican Biological Corridor, a project supported with international funding, engages communities from Mexico, Guatemala, Belize, El Salvador, Honduras, Costa Rica, Panama and Nicaragua in sustainable management of wildlife through the establishment of a regional biological corridor.

Legislation on wildlife use in Latin America is generally aimed at controlling or banning extractive practices and is thus not designed to channel benefits from wildlife utilization to local communities. Albeit in a limited number, though, successful examples of legal instruments allowing communities to benefit from sustainable wildlife use can be found in the region, such as: reserving quotas for the commercial export of species listed in CITES Appendix II to communities (Argentina); allocating communities a limited number of hunting permits for key endangered species (Mexico, Guatemala, Ecuador); and creating eco-labels for legal vicuña fiber products produced by communities (Argentina, Chile, Bolivia and Peru). Besides very specific examples as the live-shearing of vicuñas – in highlands that are usually unsuitable for agriculture – most good examples of wildlife management benefiting poor communities actually take place within state-owned protected areas. This may be linked to the uneven distribution of land ownership in Latin America, which results in the marginalization of the poorest communities from access to natural resources including wildlife. Careful regulation of wildlife use could provide opportunities for communities that traditionally have used wildlife to sustain their livelihoods, to continue their activities in a sustainable way, engage in legal trade and access new markets and new sources of income.

Clear and systematic legislation is equally necessary to this end: currently, sectoral approaches, such as those adopted by Argentina and Peru, are built on the basis of

piece-meal legislation and require a high level of expertise and insiders' knowledge of institutions to understand the functioning of the wildlife management legal regime. This fact contributes to marginalization of disadvantaged communities by placing legal wildlife management beyond their reach. Legislation should thus be drafted in a user-friendly way, and presented in consolidated versions or in accessible explanatory documents, that could possibly be made available online, ensuring clear elucidation of licensing requirements and fees. Although most legislation in the region is available online, few countries have provided user-friendly versions to facilitate users' understanding of legal requirements.

The study reviewed institutional arrangements for wildlife management: while legislation often provides for the creation of multi-stakeholder advisory bodies, participation of a broad range of non-governmental stakeholders is unevenly required and usually targets environmental non-governmental organizations rather than local communities using or living in contact with wildlife. In addition, general principles on public participation in the law are not accompanied by the necessary procedures for their implementation. Most community-based wildlife management initiatives and opportunities for public participation in decision-making are the result of externally-funded projects or administrative good-will rather than legislation, and usually take place in protected areas but not in private lands. Legislation in the region could therefore be improved by promoting participation in decision-making and management by indigenous communities and local users through detailed and transparent procedures. There is also a need to strengthen

enforcement capacity in Latin America through further engaging stakeholders involved in legal wildlife utilization in monitoring compliance with wildlife law.

The study notes a limited emphasis in national legislation on management planning within private lands, and a reliance on bans on commercial wildlife use and/or expensive or cumbersome licensing procedures, which may be conducive to the creation of perverse incentives for local communities and individuals to sell products in unregulated 'black markets,' or most simply to perform alternative – sometimes less sustainable – land uses such as agriculture or forestry. In Latin America, unenforceable regulations, rather than lack of regulation, is one of the main incentives to illegal wildlife trade. All authorities interviewed noted the lack of financial resources to evaluate and monitor management plans as one of the greatest barriers to a more effective approach to wildlife management regulation. Legislation must be tailor-made to each country's capacity for implementation and enforcement.

In conclusion, many countries in the region are in need of a clear and transparent wildlife regulatory system promoting sustainable wildlife management use in a participatory way and with emphasis on the poor, and focusing management efforts beyond protected areas. All extractive and non-extractive uses of wildlife should be addressed by legislation in a systematic way, with a view to promoting sustainable use and allowing sustainable traditional practices to benefit from legal wildlife utilization.



## INTRODUCTION

### i. Overview

Legal tools may ensure that local or indigenous communities will be able to benefit from wildlife use in a way that promotes biodiversity conservation, support livelihoods and reduces poverty. Restrictive or flexible approaches to wildlife conservation, institutional arrangements for wildlife management, and related rules on tenure, management planning and restrictions to wildlife use in private lands and protected areas form the basis of legal arrangements that establish how wildlife will be used in a particular country and whether benefits from such use will reach local communities. This study seeks to analyze and compare national legislation on wildlife management in eleven countries in Central and South America, with a view to identifying strengths and weaknesses in ensuring the environmental sustainability of wildlife management, as well as in allowing all members of society, and particularly disadvantaged people, to directly benefit from wildlife management. The analysis is thus carried out through the lenses of the concept of “legal empowerment of the poor,” as developed by the Commission on Legal Empowerment of the Poor, established under the aegis of the United Nations between 2005 and 2008.<sup>1</sup> On the basis of common trends identified in the national legal frameworks in the region, the final objective of this study is to provide useful guidance to legislators with a view to effectively regulating wildlife management for environmental sustainability, socio-economic development and the empowerment of the poor.

Latin America hosts five of the most populated and mega-biodiverse countries in the world, hence the sustainable use of biodiversity resources is critical to ensure the right balance between development and conservation goals. The region’s biodiverse resource base has a great potential to generate income for local and indigenous communities, but adequate management planning, implementation and law enforcement are needed to ensure sustainability. These require legal frameworks that are conducive to building capacity and

empowering local communities to effectively contribute to the sustainable use and conservation of wildlife resources. In most cases markets alone are not sufficient to create incentives for sustainable management, and capacity building and cooperation between different actors (institutions and non-governmental stakeholders) are necessary to change unsustainable management practices.

The country studies show that Latin America’s legal approach to wildlife management has evolved in the last decades from one centred on narrow command-and-control measures to protect specific species or areas, to a more comprehensive approach addressing ecosystems as a whole. Comprehensive approaches use a variety of legal instruments to create protected areas systems and biological corridors, as well as market instruments that enable communities to benefit from the sustainable use of biodiversity while ensuring its conservation, both in private and public lands. Examples of market-based instruments for sustainable wildlife management used in the region include: reserving quotas for the commercial export of species listed in CITES Appendix II to local communities (Argentina), auctioning to local communities a small number of hunting permits for key endangered species (Mexico and Ecuador), and creating eco-labels for legal vicuña fiber products produced by local communities (Argentina, Chile, Bolivia and Peru). However, comprehensive and progressive regulatory practices are not very widespread and generally coexist with more traditional regimes. Positive trends in national legislation are attributed to a number of considerations, most of which have been enshrined in international environmental treaties. Among them are the recognition of the interdependence among different species and the direct and indirect threats to wildlife; and a people-centred approach to wildlife management including the participation of concerned individuals in wildlife-related decision-making, the involvement of local communities in wildlife management, and the sharing of its benefits to sustain livelihoods (Morgera and Wingard, 2008).

This study will review wildlife management legislation in Latin America, and showcase pro-

<sup>1</sup> The Commission completed its mandate in 2008. See [www.undp.org/Legalempowerment](http://www.undp.org/Legalempowerment).

poor wildlife legal provisions that create and/or facilitate the exercise of rights related to sustainable wildlife management. It will highlight those legal tools that facilitate the implementation of policies that directly empower communities to conserve and use wildlife sustainably, or, at a minimum, channel the benefits of sustainable wildlife management to local communities who are mostly affected by poverty and marginalization from decision-making.

## ii. Contents and methodology

The study is divided in two parts. Part I presents a comparative analysis of wildlife legislation in Latin America, highlighting regional trends and pointing at the strengths and weaknesses of national legislation with respect to pro-poor wildlife management. Part I is thus divided in nine chapters, each providing specific recommendations for policy makers. Chapter 1 addresses international legal instruments, including global wildlife-related treaties and their influence on wildlife legislation. Chapter 2 addresses the general approaches to wildlife management in Latin America, including the coherence and consistency of legal regimes and the extent of public participation in wildlife management. Chapter 3 briefly presents relevant institutional arrangements that are most common in the region highlighting avenues for stakeholder participation in decision-making. Chapter 4 evaluates the importance of wildlife tenure and use rights in channelling the benefits of sustainable wildlife use to local and indigenous communities. Chapter 5 looks at requirements for wildlife management planning. Chapter 6, in turn, focuses on requirements and conditions for wildlife use, including extractive and non-extractive activities. Chapter 7 addresses issues related to law enforcement, access to environmental information and access to justice that may be significant in empowering local communities to participate in sustainable wildlife use. Chapter 8 briefly addresses other relevant issues such as consideration of

gender equity issues and human wildlife conflicts. Finally, Chapter 9 summarizes the main recommendations formulated in the previous chapters and proposes specific legal options to implement each recommendation.

Part II of the study presents country studies on national legislation from eleven countries in Central and South America, highlighting the main legal provisions affecting wildlife use by local communities. The individual country studies cover: Argentina, Belize, Brazil, Bolivia, Chile, Costa Rica, Ecuador, Guatemala, Guyana, Mexico and Peru. They start with an overview of the relevant legal framework, and continue with an analysis of legal provisions related to: the institutional set-up and public participation in decision-making, wildlife tenure and use rights, wildlife management planning, requirements and limits for wildlife use, and enforcement and access to justice. These country studies aim at highlighting practical examples of successful implementation of pro-poor sustainable wildlife use initiatives.

All legislation cited in the paper is available on FAO's legislative database – FAOLEX, which is available for consultation at [www.fao.org/faolex/index.htm](http://www.fao.org/faolex/index.htm). In order to cross check the findings of the desk review of legal texts available and to discuss implementation and enforcement issues, interviews were held with national wildlife management authorities and experts for each country.

Descriptions of country legal frameworks only intend to provide an overview, including references for further detailed analysis of particular elements or tools. This paper is thus not intended as a comprehensive evaluation of relevant legal frameworks, but rather focuses on the legal tools that enable and support participatory wildlife management and promote the enjoyment of benefits deriving from sustainable wildlife use, particularly among disadvantaged people. It takes into account both existing measures that are likely to be successful in facilitating access to benefits, and measures which may constitute a hindrance to this end.

## PART I - COMMON TRENDS IN WILDLIFE LEGISLATION IN LATIN AMERICA

*Wildlife management* can be defined as the process of keeping certain wildlife populations, including endangered species, at desirable levels on the basis of scientific, technical and traditional knowledge. *Sustainable* wildlife management adds to this objective the aim of balancing the economic, ecological and social values of wildlife, with a view to protecting the interests of present and future generations. Thus, this concept goes beyond the protection of interests related to hunting and protection for individual species, and rather focuses on wildlife as a renewable natural resource in a holistic way. References to wildlife management in this study, therefore, are meant to include both the conservation and sustainable use of wildlife.

The present study starts by identifying the key international instruments influencing national wildlife management policies in Latin America, and by reviewing main approaches to legislation on wildlife management in selected Latin-American countries. It then identifies general trends, as well as best practices and shortcomings commonly found in the region on: institutional arrangements and stakeholder participation in decision-making; wildlife tenure and users' rights; wildlife management planning; restrictions to wildlife use; law enforcement and access to justice; and other issues which may sometimes affect wildlife management regulations including consideration of gender equity issues and human-wildlife conflicts. In each case, the analysis of existing legislation will identify relevant legal tools for public participation, community-based management, and for channelling the benefits of wildlife use to the communities living in the proximity of wildlife, to assess whether national wildlife legislation in Latin America contributes to empowering the poor.

### 1. The influence of international legal instruments

International legal instruments have had visible influence on the design of legal frameworks on wildlife management in Latin America. As

Table 1 shows, countries covered in this study are active participants in international legal regimes related to sustainable wildlife management. Wildlife-related international agreements have been widely ratified in Latin America, with the exception of the Convention on Migratory Species (CMS).

All of these international legally binding agreements are of key importance for the review and drafting of effective national legislation on sustainable wildlife management, either because they direct the manner in which countries must regulate certain aspects of wildlife use and conservation, or because they call for the implementation of specific principles, methods and processes for the management, protection and use of wildlife.<sup>2</sup> Indeed, experts interviewed for this study have confirmed the large influence that international legal instruments have on the design of national legislation on wildlife in the region.

This section will therefore first concentrate on global wildlife-related treaties, looking at species-based and area-based instruments, and then at the Convention on Biological Diversity. It will then provide an overview of regional treaties and agreements, as well as other international initiatives that have had a bearing on national wildlife legislation in Latin America.

#### 1.1. Global wildlife-related treaties

Among the species-based convention, the **Convention on International Trade in Endangered Species of Wild Flora and Fauna** (CITES, Washington, 1973) prohibits commercial trade of species listed in Appendix I, and establishes strict requirements for any other trade that is not for primarily commercial purposes. Species listed in Appendix II require export permits granted upon a finding that such export "will not be detrimental" to the survival

<sup>2</sup> For a more detailed discussion of the relevant international legal framework, see "Principles for developing sustainable wildlife management laws," FAO Legal Paper Online #75, by Elisa Morgera and James Wingard; and Birnie, P. and Boyle, A. 2002. *International Law and the Environment*, Oxford University Press.

of that species. CITES therefore requires countries to undertake **non-detriment finding procedures** to allow the commercial export of Annex II species, which in turn translate at the national level into management plans for species that are subject to international trade. Species listed in Appendix III may be exported upon confirmation of the legality of origin of the specimen or product to be exported. The CITES requirement to perform a non-detriment finding prior to authorizing exports of listed species, has been cited as the basis for the development of most management plans for commercially relevant endangered species at the national level. CITES also requires countries to have in place scientific and administrative authorities, which generally also regulate non-CITES-listed species.

All countries reviewed in this study are parties to CITES, and most have adopted CITES-compliant legislation. The only country still lacking legislation to implement the Convention is Belize, which has, however, recently communicated its decision to adopt new legislation on this issue to the CITES Standing Committee (CITES, 2009). Chile, Bolivia, Ecuador and Guyana, on the other hand, have legislation that does not meet all CITES requirements and are expected to complete their regulatory frameworks in the near future (CITES, 2007).

**The Convention on the Conservation of Migratory Species of Wild Animals (CMS, Bonn, 1979)** aims to conserve terrestrial, marine and avian migratory species throughout their range, thus requiring cooperation among range states host to migratory species regularly crossing international boundaries. With regard to endangered species in Appendix I, states must prohibit their taking and conserve and restore their habitats; removing or minimizing impediments to their migration. With regard to species with an unfavourable conservation status listed in Appendix II, range states undertake to conclude global or regional agreements to improve the situation of these species. Agreements for international collaboration in migratory species conservation range from legally binding agreements to less formal instruments, such as memoranda of understanding (MoU). As noted above, participation in CMS by countries in Latin America is uneven. For example, Mexico, Guyana, Brazil and Belize are not parties to

the CMS, although most of them do participate in CMS-related agreements and MoUs for the protection of specific migratory species.

The main area-based treaties are the **Convention on Wetlands (Ramsar Convention, Ramsar, 1971)**, and the **Convention concerning the Protection of the World Cultural and Natural Heritage (Paris, 1972)**. Area-based international obligations are usually implemented at the national level through the creation of protected areas legislation (national parks, nature reserves, etc.), as well as with legislation ensuring the prevention or minimization of negative interferences in or near these areas. Area-based conventions are regarded by management authorities as positive instruments to raise the profile of protected areas, as well as ensure and attract international cooperation and funding.

As opposed to the sectoral approach of the species- or area-based international treaties, the **Convention on Biological Diversity (CBD, Rio de Janeiro, 1992)** reflects the increased global awareness of the interdependence among species. The Convention is thus not limited to particular species or habitats, but provides for the conservation and sustainable use of biodiversity, defined as "the variability among living organisms," including "diversity within species, between species and of ecosystems" (art. 2). Although successive to the other wildlife-related international agreements described above, the CBD has become an "umbrella" framework for the global biodiversity-related international regime providing opportunity to coordinate and promote synergies among earlier agreements.

The main obligations of the CBD that have a bearing on national wildlife legislation include the need to:

- engage in planning exercises, establishing a system of protected areas, rehabilitating and restoring degraded ecosystems and promoting the recovery of threatened species (art. 8);
- identify and control all potential sources that may have an adverse impact on biodiversity, and carrying

out environmental impact assessments (art. 14);

- conserve animals outside their natural habitats ("ex-situ conservation", such as in zoos, parks, etc.), with a focus on facilitating recovery and rehabilitation of threatened species and reintroduce them into their natural habitats under appropriate conditions, while at the same time avoiding threatening ecosystems and in-situ populations of species (art. 9);
- protect and encourage customary use of biological resources in accordance with traditional cultural practices that are compatible with conservation or sustainable use requirements, supporting local populations to develop and implement remedial action in degraded areas, and encouraging cooperation between governmental authorities and the private sector in developing methods for sustainable use (art. 10); and
- build incentives into conservation and sustainable use objectives (art. 11).

The parties to the CBD have further adopted specific principles and operational guidelines on sustainable use (Decision VII/14: the **Addis Ababa Principles and Guidelines for the Sustainable Use of Biodiversity**), which provide guidance to ensure that the use of the components of biodiversity will not lead to its long-term decline. The Addis Ababa Principles and Guidelines have been drafted with a view to generating incentives for the conservation and restoration of biodiversity because of the social, cultural and economic benefits that people derive from it, and are considered as applying to both consumptive and non-consumptive use of biodiversity. Although not legally binding, these guidelines comprise several elements that may inspire national legislators in regulating the use of wildlife to ensure its sustainability, although their

implementation will require a flexible and adaptable legal and policy framework adjustable to local realities and specific ecosystems. Indeed, Principle 1 stresses the important role of legislation in ensuring sustainable use. Furthermore, the Principles call for the consideration of local customs and traditions when drafting new legislation and regulations, and the development of new supportive incentives measures. They, moreover, underline the need to resolve any overlaps, omissions and contradictions in existing laws and policies; and highlight the benefits of creating cooperative and supportive linkages between all levels of governance in order to avoid duplication of efforts or inconsistencies. In the following sections, specific principles and their operational guidelines will be cited when appropriate.

Overall, the treaties that have been recognized by the experts interviewed for this study as exerting the most influence on the elaboration of national legislation on wildlife in Latin America are CITES and the Ramsar Convention: they have often been cited as the main reason for the adoption of wildlife management plans, be they species-based in the case of CITES, or area-based in the case of Ramsar. CITES has also had significant impacts on legislation regarding wildlife trade, while the Ramsar Convention has influenced legislation related to protected areas. CMS, although its membership in Latin America is not so widespread, has been successful in generating bilateral and multilateral agreements on specific migratory species that have received ample support in the region. The Biodiversity Convention has had significant impacts on legislation ranging from protected areas to access to genetic resources, biosafety and invasive alien species, as well as encouraging a shift towards a more comprehensive, ecosystem-based approach in wildlife management legislation.

**Table 1: Wildlife Treaties and Agreements in selected countries of Latin America**  
(date of entry into force).

	CBD	Ramsar	CMS	CITES	Vicuña	Albatrosses & Petrels	High Andean Flamingos	Migratory Grassland Bird Species	Ruddy-headed Goose
<b>Argentina</b>	22.11.94	04.09.92	01.01.92	08.04.81	07.02.90	01.11.06		26.08.07	21.11.06
<b>Belize</b>	30.12.93	22.08.98	NP	21.09.81	NP				
<b>Bolivia</b>	03.10.94	27.10.90	01.03.03	04.10.79	19.03.82		04.12.08		
<b>Brazil</b>	28.02.94	24.09.93	NP	04.11.75	NP	01.12.08		27.08.07	
<b>Chile</b>	09.09.94	27.11.81	01.11.83	01.07.75	19.03.82	01.12.05	04.12.08		21.11.06
<b>Costa Rica</b>	26.08.94	27.04.92	01.08.07	28.09.75	NP				
<b>Ecuador</b>	23.02.93	07.01.91	01.02.04	01.07.75	07.05.82	01.02.04			
<b>Guatemala</b>	08.10.95	26.10.90	NP	05.02.80	NP				
<b>Guyana</b>	29.08.94	NP	NP	25.08.77	NP				
<b>Mexico</b>	11.03.93	04.11.86	NP	30.09.91	NP				
<b>Peru</b>	07.06.93	30.03.92	01.06.97	25.09.75	19.03.82	01.08.05	04.12.08		

## 1.2. Regional wildlife-related treaties and agreements

Among relevant regional conventions, the **Vicuña Convention** (1979) provides a good example of multilateral cooperation for the sustainable management of a species. Within this framework, Argentina, Chile, Peru, Bolivia and Ecuador set an important precedent in achieving sustainable management through the adoption of national action plans for vicuña management. The Vicuña Convention establishes an obligation for parties to prohibit all hunting and trade in vicuña products, except in cases closely monitored by the state and approved as sustainable practices within the Vicuña Convention. Its effectiveness, however, relies on CITES to ensure global cooperation for the implementation of management decisions taken by the parties. The global membership to CITES ensures that all international trade in vicuña products takes place in harmony with the Vicuña Convention.

The CMS-related **Agreement on the Conservation of Albatrosses and Petrels** (2004) has the aim to prevent population decline of these migratory birds, through the implementation of an Action Plan comprising

research, monitoring and conservation measures such as reduction of incidental mortality in fisheries and maintenance of habitats. Ecuador, Peru, Chile, Argentina, Brazil and Uruguay are among the parties to this treaty.

Other CMS-related agreements include: the MoU concerning **Conservation Measures for the Ruddy-headed Goose** (*Chloephaga rubidiceps*), signed by Argentina and Chile in 2006; the MoU on the **Conservation of Southern South American Migratory Grassland Bird Species and their Habitats** signed by Argentina, Brazil, Paraguay and Uruguay in 2007; and the MoU on the **Conservation of High-Andean Flamingos and their Habitats** signed by Bolivia, Chile and Peru in 2008. All these instruments set out cooperation mechanisms, including the development of action plans, as well as regular meetings and information-sharing requirements to improve the conservation of migratory wildlife species.

Regional agreements relating to biodiversity also include the **Amazon Cooperation Treaty** (1978), which created a cooperation and political mechanism aiming to harmonize

regional policies with the objective of conservation and sustainable use of biodiversity in eight Amazon countries (Bolivia, Brazil, Colombia, Ecuador, Guyana, Suriname, Peru and Venezuela). It includes a 2004 strategic plan with a programmatic area focusing on biological diversity, biotechnology and biotrade.

The countries belonging to the Andean Community of Nations (CAN) also approved in 2002 a **Regional Biodiversity Strategy for the Tropical Andean Countries** (CAN Decision 523) with the objective of identifying joint, prioritized actions for the conservation and sustainable use of the elements of biological diversity, specifically referring to the *in situ* and *ex situ* conservation of wildlife in areas where Andean countries have comparative advantages.

### 1.3. International initiatives and financing

The existence of international funding is sometimes critical to design or reform legislative frameworks for wildlife management. Latin America has received a large amount of funding to support institutional strengthening and legal reform in areas related to biodiversity. In particular, the Global Environment Facility (GEF), acting as the financial mechanism to the CBD, has been instrumental in setting up protected area systems, as well as providing funds to support them, in many countries in Latin America.

The World Bank, which is one of GEF's implementing agencies, has provided loans and grants amounting to US\$ 1.78 billion for biodiversity projects in Latin America and the Caribbean during the past decade.<sup>3</sup> Many of these projects include components strengthening institutions governing wildlife use and conservation, with particular emphasis on protected areas. Other projects without a specific focus on biodiversity but aiming at strengthening environmental governance in general also have a significant impact on wildlife policy reform. For example, the World Bank has approved during 2009 a US\$ 1.3 billion loan to support the mainstreaming of biodiversity into Brazil's policy environment.

<sup>3</sup> Source: World Bank Online Project Database (6/6/2009): Active and closed projects; 1999–2009; in Latin America and the Caribbean with major theme "Biodiversity".

This project will ensure that 'green' incentives and economic instruments are integral parts of the government's response to the current economic crisis (World Bank, 2009). Along the same lines, the World Bank approved a US\$ 330 million loan to Peru to strengthen the new Ministry of the Environment and improve environmental management in key sectors of the Peruvian economy, including mining, urban transport, fisheries and biodiversity conservation (World Bank, 2009b).

Other initiatives, like the UN Conference on Trade and Development (UNCTAD) Bio-Trade initiative, have worked on pilot projects building capacity to engage sustainable trade by poor communities with international markets, allowing benefits from international trade to reach the community level (rather than be captured by intermediaries as is most common). These projects aim at empowering local communities to benefit from existing legal frameworks for sustainable management of wildlife.

The World Bank and GEF have also financed the development of a transnational biological corridor. The Mesoamerican Biological Corridor engages communities from Mexico's southern states in sustainable management of wildlife through the establishment of a regional biological corridor involving Mexico, Guatemala, Belize, El Salvador, Honduras, Costa Rica, Panama and Nicaragua. The objective of the Corridor is to connect the North American and South American ecosystems through the Central American Isthmus, uniting natural or unaltered ecosystems, as well as areas subject to sustainable use of its natural resources. The Corridor is based on the following zoning system integrated by four types of areas: a) core areas exclusively devoted to the conservation of ecosystems and species, where human activities are forbidden; b) buffer areas that allow restricted uses; c) the corridors that help facilitate the movement, dispersion and migration of species, while allowing low-impact human activities; and d) multiple-use areas that may include areas devoted to agriculture, forestry, livestock, etc. (CONABIO, 2009). Most of the communities in the project are indigenous communities, who sustain their livelihoods through multiple uses of their biological resources, generally based on resources derived from plants, but also including birds and reptiles. These activities have been found to be positive for the



conservation of biodiversity (Toledo, 2003). Within the programme, specific initiatives finance, for example, the participation of women in the conservation and sustainable use of biodiversity (CBMM, 2009b).

#### 1.4. Conclusions and recommendations

This section has shown that global wildlife-related treaties have provided conceptual frameworks for national wildlife policies, and are recognized by management authorities to exert a positive influence in wildlife management practices, in particular with reference to the design of management plans for specific species. They also exercise a visible influence on the design of national legislation, having facilitated a shift towards a more comprehensive, ecosystem-based approach to wildlife legislation. In line with Addis Ababa Principle 8, which states that there should be arrangements for international cooperation where multinational decision-making and coordination are needed, Latin America presents several positive examples of regional species-based treaties and agreements, like the Vicuña Convention and CMS-related agreements, all of which were considered powerful tools to harmonize policies, promote sustainable trade and combat illegal trade in valuable wildlife species that cross national borders.

The following are key recommendations to ensure that as decisions by the parties of global agreements continue evolving, they are regularly reflected into national wildlife legislation (legal options to implement these recommendations will be provided in Section 9).

- Ensure that new legislation is coherent with global wildlife-related agreements to which each state is a party, where such agreements direct the manner in which countries must regulate certain aspects of wildlife use and conservation, or when they call for the implementation of specific principles, methods and processes for the conservation and use of wildlife (such as adaptive management, stakeholder involvement and incentive-based approach).
- Continue to develop transboundary arrangements for international cooperation

when the distribution of wildlife populations or habitats being used span two or more nations.

- Continue to promote multinational technical committees, like the Vicuña Technical Committee, to prepare recommendations for the sustainable use of transboundary wildlife resources.
- Continue to engage in bilateral or multilateral agreements for the sustainable use of migratory species.
- Take advantage of existing international initiatives and opportunities, such as the allocation of GEF funds for biodiversity, to leverage resources to implement wildlife management legislation at the country and local level.

## 2. General approaches to wildlife management in Latin America

Wildlife legislation in the selected Latin-American countries covered by this study presents different general approaches. Some approach the issue with a holistic view of biodiversity and its components, while others have built their regimes based on sectoral arrangements focusing on specific activities such as hunting and wildlife conservation in protected areas. Coherence and accessibility of wildlife regulations also varies, with all countries making legislation available online albeit some, like Peru, with a multitude of intertwining regulations – mostly targeting forestry concessions, but also applicable to wildlife. A few countries do have clear and concise regimes (Mexico), or have produced updated or consolidated versions of wildlife legislation (Ecuador, Chile, Guyana), to ensure transparency and allow effective enforcement. Furthermore, some legal frameworks are more equipped than others, to ensure public participation in wildlife-related decision-making. The consideration of sustainable wildlife use also varies from very restrictive frameworks that ban most uses of wildlife to legal regimes that are based on allowing sustainable use. This section will provide examples of legal tools that determine the scope and ensure coherence of regimes, procedures for public



participation in legislative processes, and different approaches to wildlife management, drawing upon the findings of the country studies included in Part II of this paper.

## 2.1. Scope, coherence and consistency

Wildlife laws in Latin America are set within the framework of relatively modern constitutions that recognize an individual and collective right to a balanced environment. However, since wildlife laws are in many cases 'older' than the constitutional amendments, they do not always reflect a right-based approach.

Mexico presents an example of a modern – holistic – approach to wildlife management regulation that addresses a wide variety of wildlife-related activities. Its regulatory framework comprehensively address wildlife management and conservation in two laws: the General Wildlife Law (2000, as amended) and the Ecological Balance Law (1988, as amended), which address in a coherent manner both extractive and non-extractive uses of wildlife, in private and public lands, and in protected areas.

Regimes based on older laws, conversely, often present a more **sectoral approach** to wildlife regulation. They build on old hunting or forestry laws, typically containing separate legislation governing wildlife as forest produce, hunting and wildlife conservation in protected areas. Sectoral approaches, such as those adopted by Argentina and Peru, are harder to understand for users, as they are built on the basis of piece-meal legislation, including laws, decrees, ministerial resolutions and provincial legislation, adopted at different points in time, often resulting in contradictory requirements and over-regulation of activities like hunting. Understanding these legal regimes requires a high level of expertise and insiders' knowledge of institutions in order to fully grasp the actual functioning of the wildlife legal regime. This fact contributes to marginalize disadvantaged communities by placing legal wildlife management beyond their reach.

A first condition for legislation to be conducive to sustainable wildlife management is therefore that it must be **consistent and coherent**. A sectoral approach may give rise to regulatory loopholes, for example by providing detailed hunting requirements and no guidance on non-extractive practices like eco-tourism. Efforts to

improve coherency and consistency that may be highlighted are those of Ecuador, which has presented all legislation deriving from disparate sources in a consolidated text that is easily accessible online.

## 2.2. Public participation

The openness of a legal framework to **stakeholder participation** in the design of new wildlife legislation, as well as in wildlife management decision-making and planning, and its flexibility to allow tailor-made solutions for the sustainable use of specific species is critical. There are many different approaches to public participation, through both formalized procedures and informal ones. The country studies have shown that local communities seldom participate in wildlife management decision-making, while environmental non-governmental organizations (NGOs) are often incorporated in multi-stakeholder advisory bodies. In fact, several of the selected countries require by law that new legislation or management decisions related to wildlife should be vetted by **collegiate advisory organs** (the mandates and integration of these collegiate bodies will be further explained in Section 3.2.). In addition to the creation of permanent, multi-stakeholder advisory bodies, national legislation may provide for **ad hoc public consultations** on the enactment of new legislation or the creation of protected areas (Guyana).

Participatory mechanisms should aim to incorporate a wide range of views into the decision making process. In addition, decision-makers need to take into account stakeholders' comments, and provide reasons for their decision, while also maintaining certain flexibility when incorporating such views. There are numerous instances in Latin America where framework legislation establishes a basis to create participatory mechanisms, but additional, detailed procedures remain to be adopted. The fact that public participation, in many cases, remains a matter of administrative practice rather than a legislated procedure does not contribute to empowering stakeholders in wildlife management in a secure and long-term fashion.

### 2.3. Wide or restrictive approach to sustainable wildlife management

Legislation may promote the sustainable use of wildlife in general, or combine a general prohibition on wildlife use with tailor-made exceptions. In this regard, an issue raised by several of the management authorities interviewed for this study is the general lack of resources for the implementation and enforcement of wildlife legislation, and the need to choose those legal tools with the lower enforcement costs, focusing the scarce resources available on species or areas of major concern. **Cost-effectiveness** of legal tools for sustainable wildlife management is thus an important issue in Latin America.

It is therefore not surprising to find a common approach to wildlife legislation in Latin America that combines a **general prohibition** for extractive uses of wildlife **with specific exceptions**. Certain countries analyzed in the study thus rely to some degree on general bans to extractive practices. Exceptions usually allow subsistence hunting or scientific takings, and sometimes also recreational hunting or commercial extractive uses in accordance with sustainable management plans for particular species that have been approved at the national level (Argentina, Brazil, Bolivia, Costa Rica, Ecuador). This broad pattern has been explained during the interviews with reference to regulatory efficiency: general prohibitions with a handful of exceptions are considered to provide the benefits of simpler and less costly enforcement. However, it is also recognized that such an approach, by placing severe restrictions on wildlife use, generates an **indirect incentive for land-use change**. Private land owners perceive this as an reason to choose other uses of land that are less strictly regulated, thus favouring the transformation, for example, of wild pastures or forests into agricultural lands – with the accompanying detriment to biodiversity.

A different approach to wildlife management is, however, adopted by Chile and Guatemala, which **categorize all native species according to their conservation status**, and establish allowed uses of wildlife for each category. Insufficient resources to undertake wildlife population studies, and the application of the precautionary principle, lead to the inclusion of many species within categories

that ban extractive uses. Nevertheless, this system is still a step forward from an outright ban on wildlife use as it may provide a desirable flexibility for the use of wildlife by individuals and communities, while keeping bureaucracy and enforcement costs limited. It does require, however, regular updates to species categorizations based on scientific information and the precautionary principle. It further does not allow for the consideration of site-specific approaches, as species may be more abundant in some areas than others. It may also pose other enforcement challenges, as it requires enforcement officers and border agents to have knowledge of taxonomy in order to detect violations of the law.

Countries with a more sophisticated approach, like Mexico, premise their regimes on an **area-based approach** that enables any landowner to register property as an Environmental Management Unit (*Unidades de Manejo para la Conservación de Vida Silvestre* - UMAs). UMAs can be established in both private and public lands, including protected areas, and currently encompass more than 20 million hectares (which is almost equivalent to the size of protected areas in Mexico). Once registered, managers of UMAs are required to use wildlife according to sustainable management planning criteria, approved by environmental authorities, and are allowed to trade the products resulting from their activities. The Mexican approach to wildlife regulation thus allows the implementation of basic sustainable management planning regulations in private lands, including extraction quotas and annual reporting requirements, in vast portions of the national territory that would otherwise be unregulated. The benefit of this system is its potential to reduce perverse incentives for land-use change. Although enforcement is undoubtedly complex in a large country such as Mexico, uniform national legislation and a centralized mechanism to obtain permits for wildlife management (available online) create a workable legal framework. This arrangement may promote pro-poor management, when local and indigenous communities are the holders of wildlife management units. The system is, however, bureaucracy-intensive, requiring national authorities to review all management plans and provide for more specific controls and enforcement measures, thus entailing a more efficient, yet costly, enforcement alternative.

## 2.4. Conclusions and recommendations

This section shows that a **holistic approach** to wildlife management generally leads to a more sound structure for the legal framework that may thus be easier to understand for stakeholders and to implement for the administration, whereas a collection of piecemeal regulations may confuse users and unduly increase the administration's discretion. It certainly reduces transparency, as only 'experts' with inside knowledge of bureaucracies can work with the system. It is also generally not conducive to the empowerment of the poor, as it marginalizes members of local and indigenous communities from accessing complex legal procedures. The Addis Ababa Principles and Guidelines for the Sustainable Use of Biodiversity highlight the "need to have congruence in policies and laws at all levels of governance associated with a particular use" (Principle 1, Rationale). Coherence, consistency and transparency in the design of legal regimes are keystones to allow marginalized communities access to legal wildlife management.

Regarding **public participation**, Addis Ababa Principle 9 recommends an interdisciplinary, participatory approach at the appropriate levels of management and governance related to the use. It recognizes that besides strictly biological parameters, social, cultural, political and economic factors are equally important to ensuring sustainable wildlife use. "It is therefore necessary to take such factors into consideration and involve indigenous and local communities and stakeholders, including and the private sector, and the people experienced in these different fields, at all levels of the decision making process" (Addis Ababa Principle 9; Rationale).

Legislation must be tailor-made to each country's **capacity for implementation and enforcement**. In Latin America, unenforceable regulations, rather than lack of regulation, is one of the main causes of the continued existence of the illegal wildlife trade. Careful regulation of wildlife use thus provide opportunities for communities that traditionally have used species to sustain their livelihoods, to continue their activities in a sustainable way, engage in legal trade, and access new markets and new sources of income. This legal approach does entail, however, higher levels of expertise by enforcement agents to evaluate

and monitor compliance of activities with management plans. In addition, since all countries studied in Part II presented similar budgetary restrictions preventing them from making wildlife population studies and monitoring the status of most endemic species, the reality that must be acknowledged is that the precautionary approach to wildlife use should continue to be the norm. Specific valuable species could be, nonetheless, identified in each country and managed sustainably to improve livelihoods of communities while protecting their habitat.

The following recommendations can thus be formulated:

- Careful regulation of wildlife use, whether as an area-based approach or a species-list approach, should be preferable to an outright ban, unless so required by an international legal obligation of a country. This may be more conducive to the empowerment of the poor and long-term conservation objectives, as long as sustainability is ensured through the adoption and implementation of adequate management plans.
- Adopt and/or publish updated versions of legislation (in a consolidated text including latest amendments) or compile regulatory frameworks for wildlife management, to enhance transparency and reduce potential for abuse by implementing and enforcing authorities.
- Design simple licensing procedures to promote sustainable management of species in accordance with species list-based legislation and/or area-based legislation.
- When evaluating legal reforms consider market forces affecting the values and use of wildlife resources; and ensure new legislation provides incentives to sustainable wildlife use (Addis Ababa Principle 10).
- Couple general principles on public participation with specific procedures for their implementation to limit the administration's discretion and provide certainty to stakeholders.

- Examine existing mechanisms for public participation and identify the need to provide/enhance legal tools for stakeholder participation at **all** levels of wildlife-related decision-making (design or reform of wildlife legislation, policies, programmes and plans, environmental impact assessments, listing of protected species, creation and management of protected areas).
- Ensure that mechanisms for public participation allow and facilitate the participation of representatives of local and indigenous communities that use wildlife resources or live in their proximity, as well as the representation of other interests that may be affected by wildlife management decisions (farmers, conservation organizations, logging companies, etc.), providing for a balanced array of inputs to management authorities.
- In drafting or reforming wildlife legislation, take into account socio-economic, political, biological, ecological, institutional, religious and cultural factors that could influence the sustainability of management (Addis Ababa, Principle 9, Operational Guidelines).
- Engage in a realistic assessment of the country's capacity to implement and enforce legislation and consider simplifying legal requirements to allow sustainable wildlife use, especially by poor communities living in the proximity of wildlife resources.

### 3. Institutions and stakeholders

Institutional arrangements for wildlife management reflect the particular characteristics of each country, and the relative priority attributed to environmental management. Wildlife management authorities may be unified to include tasks related to wildlife and protected areas, or tasks may be allocated to different ministries, thus creating the need for different mechanisms for inter-institutional coordination. They may as well include collegiate advisory bodies with stakeholder participation; and set up specific

funds to channel resources towards biodiversity conservation, sustainable wildlife use or protected areas. This section will provide an overview of the different institutional arrangements for wildlife management in Latin America.

#### 3.1. Institutional mandates

State institutions in charge of wildlife management are often part of environment ministries (Belize, Brazil, Costa Rica, Ecuador and Mexico), agricultural ministries (Chile and Peru) or, in some cases, protected area authorities (Guatemala). Country studies show that placing of wildlife management authorities under the aegis of one ministry or another does not have a major influence on the development of each country's legal framework, although it may determine the general approach towards this issue (use-focused or conservationist) and the availability of funding (as some ministries have larger budgets than others).

For example, Mexico has put in place a unified system governing all elements of biodiversity, and placed it under the aegis of the environment ministry, while Chile has separate wildlife and protected area authorities, under the aegis of the agriculture ministry. Bolivia has a ministry of agriculture and environment that deals with wildlife and protected areas, and Guyana, a wildlife unit in the Office of the President. The most unusual case is provided by Argentina, which has a protected areas authority depending from the Secretary of Tourism under the Ministry of Production, and a Direction of Wildlife depending from the Secretary of Environment under the Chief of Cabinet. Except for Guatemala, where the protected area's authority is also in charge of wildlife in private lands, most countries in the region have a clear separation of jurisdiction among protected areas and wildlife authorities. Areas where mandates are sometimes shared relate to the performance of environmental impact assessments (EIAs) – generally subject to revision by the wildlife authorities, even if pertaining to protected areas.

All of the countries studied presented institutions with fairly clear mandates over wildlife regulation in private lands and protected areas. However, those countries with a federal system like Argentina and Brazil – and to some extent Peru, which is undergoing

a reform of its environmental management system – may create overlapping mandates over wildlife regulation among federal and state authorities (i.e. wildlife may be under state jurisdiction as far as hunting is concerned, but pertain to federal jurisdiction if transport or endangered species under federal protection are concerned).

### **3.2. Inter-institutional coordination and public participation in decision making**

It is common in the region to have collegiate advisory organs to deal with issues such as the categorization of endangered species, and the approval of protected area management plans. Some organs include exclusively government representatives, as Costa Rica's National Environment Council. The Council advises the President of Costa Rica on issues related to environmental policy, including the mechanisms to conserve "environmental elements" and the means to integrate them into the sustainable development process with the organized participation of communities (Costa Rica's Organic Environmental Law, arts. 77-78). Ecuador has also created a national environment system as a tool for inter-institutional coordination among different federal and state organs. Other countries have general advisory organs that liaise directly with the President (Costa Rica and Chile); or councils that advise management authorities (Bolivia). Others also include representatives of environmental NGOs. For example, the Executive Council of Chile's National Environment Commission (CONAMA) is composed of ministers from all areas related to the environment, including the ministers of economy, agriculture, health, transport and mining, whereas a National Advisory Council and Regional Advisory Councils are composed of representatives of academia, scientists, NGOs, business and labour unions (General Environment Law, art. 78).

Institutions with the widest stakeholder participation include Brazil's National Environment Council (CONAMA), which adopts national standards for environmental quality, environmental licensing and regulations on wildlife and protected areas. It not only includes representatives of federal and state entities but also representatives of non-governmental organizations, indigenous organizations, civil society and environmental associations, the private sector, and workers

unions. Information relevant to the election of representatives is available online ([www.mma.gov.br](http://www.mma.gov.br)). Mexico has two consultative organs with stakeholder participation advising the Secretary of Environment and Natural Resources (SEMARNAT): a National Technical Council for the Conservation and Sustainable Use of Wildlife presents opinions and recommendations on endangered species and critical habitats, and a National Commission on Protected Areas (CONANP) advises SEMARNAT on the management and conservation of protected areas. Both councils are integrated by public administration officials, representatives of research institutions, NGOs, business and producers, and social organizations. Council members are self-selected by representatives of the different stakeholder groups, and conditions for participation as representatives of each group are published in the SEMARNAT website (SEMARNAT 2009b).

These arrangements thus serve a double purpose: they facilitate inter-institutional coordination when mandates related to wildlife management are shared among different authorities, and they also constitute a permanent avenue for stakeholder participation in decision-making. As was mentioned in Section 2.2, however, it is most common to find environmental NGOs or private sector representatives in such commissions, due to their direct interest and higher degree of awareness and capacity to participate, rather than the community representatives who have a more diffuse interest in these matters.

Ensuring that local communities – other than elected municipal authorities or formal authorities of indigenous groups – enjoy fair representation in advisory bodies is always a complex task, as legitimacy for such representation may be contested, especially when dealing with wide territories. In many cases, granting regional authorities jurisdiction to oversee management plans, as is the case of Mexico, is considered positive to facilitate access by local communities to sustainable wildlife management programs. However, this is not always the case. The report presented by Peru to the Vicuña Convention in 2008, for example, notes that the current redesign of the environmental institutional framework to favour decentralization has generated opposition by communities managing vicuñas, which claim

that their participation in the management of vicuñas is being reduced in favour of regional authorities (Peru, 2008).

The country studies show that participation by various stakeholders, in particular representatives of local and indigenous community is often better ensured in protected area legislation, than in legislation dealing with wildlife management in private lands. In the case of protected areas, where nearby communities are easier to be identified and representation simpler to be ensured, examples of community participation are more common and can be considered more successful in building a sense of ownership over wildlife conservation projects. For example, Bolivia has Protected Area Management Councils (Bolivia's Protected Area Regulation, 1997, and Management Councils Decree, 2000) which have a say on all proposed activities within protected areas, support control and enforcement of regulations, and oversee the implementation of management plans. The protected area director will perform an evaluation of the different socio-cultural groups in the area, as well as municipalities, provinces and other public or private institutions involved in the protected area's management, and then require identified relevant stakeholders to name a representative. Along the same lines, Costa Rica has Regional Conservation Areas Councils (CORACs), which advise on the management of each specific conservation area and include representatives of local community organizations. A public call for those organizations interested in registering for participation in a CORAC is required prior to its constitution, and each sector elects its own representatives (Costa Rica Regulation to the Biodiversity Law, arts. 30-31). Other interesting examples include Brazil, where registered NGOs can elect their own representatives to CONAMA, and Mexico, where each groups of stakeholders is called upon to elect their representatives to advisory bodies.

### 3.3. Funding

All authorities interviewed noted the lack of financial resources to evaluate and monitor management plans as one of the greatest barriers to a more effective approach to wildlife management regulation. Moreover, most country studies underscore that funds obtained from activities related to wildlife management,

such as hunting permits or national park entry fees, are channelled to general treasuries and thus cannot be reinvested in wildlife management.

A few countries have set up, however, specific funds to earmark certain financial resources to support the work of authorities on wildlife management. Some are integrated by the proceeds from hunting licences, while others receive donations from international cooperation agencies and individuals. For example, Costa Rica and Guatemala have wildlife funds that administer the proceeds of wildlife fees charged for authorizations, permits and licences (Costa Rica Wildlife Conservation Law, art. 11; Guatemala Hunting Law, arts. 17–18) to finance conservation activities.

In a significant number of cases, it is the protected areas legislation that creates funds which may contribute to wildlife management within protected areas, and that may or may not co-exist with other wildlife-specific funds (Argentina, Belize, Costa Rica, Guatemala, Mexico, and Peru). The nature of these funds and the use of their proceeds vary according to the instruments establishing the funds. For example, Belize's Protected Areas Conservation Trust, funded by a conservation fee per protected area visitor and a 20 percent commission from cruise ship passenger fees, not only funds research projects regarding national park management, assessment programmes for freshwater fish, and sustainable management for Mayan regions ([www.pactbelize.org](http://www.pactbelize.org)), but may also buy land to further its goal of promoting the natural and cultural resources of Belize and maintaining biodiversity (Belize Protected Areas Conservation Trust Act, sec. 16).

Mexico's private Fund for Protected Natural Areas does not receive income from protected area management, but is integrated by donations from public sources and international cooperation. The Fund supports the implementation of basic activities within protected areas including: zoning, awareness raising, and protection and monitoring of key species. The Fund does not support projects, hence small community projects within these areas obtain funding from other sources (FANP Operative Manual, 2008). Similarly, Peru's Fund for Protected Areas administers funds from donations and international

cooperation for the support of Peru's protected areas system ([www.profonanpe.org.pe](http://www.profonanpe.org.pe)).

Another interesting case is that of Ecuador, where a fund collects all proceeds from tourist entry fees to the Galapagos Island to be used for the conservation of this unique ecosystem (Ecuador's Special Galapagos Province Law, Art. 11). In addition, the Ecuadorian forest fund may provide financing to wildlife management, with resources obtained from the concession for tourism licences in protected areas or hunting licences in continental Ecuador.

Legislation in the region, however, rarely enters into the details of the allocation procedures for the financial resources of the funds. An example to the contrary is Belize, where the Protected Areas Conservation Trust clearly indicates potential beneficiaries (registered management organizations of protected areas, non-governmental organizations, community-based organizations, and governmental agencies that are involved in the conservation and management for sustainable use of Belize's natural resources - sec. 35). The Act also spells out transparent and participatory governance system for the fund, establishing a trust to conserve biodiversity and promote the natural and cultural resources of Belize (explicitly including fauna), involving non-governmental stakeholders on the Board of Directors (sec. 2). Among the eleven members, there must be one representative from a community-based organization chosen by the Environment Minister (sec. 4).

In alternative or in addition to the creation of a fund, national legislation may also provide generic clauses seeking to ensure that appropriate funding is earmarked for wildlife management. In Ecuador, for instance, the Environmental Management Law establishes that the Environment Ministry will finance the execution of programs for environmental control through, among others, the proceedings for fines and levies set in accordance with the law. Along similar lines, in Bolivia, the law stipulates that management of protected areas will be financed with resources obtained, among others, from income generated by the areas, which may not be utilized for other purposes (Protected Areas General Regulation, art. 5). It also states that income from tourism activities in protected areas shall be used to fund the management of

these areas (art. 111). Mexico's Ecological Balance Law also provides that revenue received from the issuing of licences, authorizations and permits in protected areas will be channelled towards preservation and restoration activities within the areas that generated the resources (art. 75 bis).

### 3.4. Conclusions and recommendations

Countries covered by this study have designated institutions with fairly clear **mandates** when it comes to defining jurisdiction over wildlife regulation in private lands and protected areas. However, better inter-institutional communication among these institutions and coherence among their sectoral policies are needed to ensure the effectiveness of wildlife management. For example, when wildlife management and protected areas are found under the jurisdiction of different ministries, unless all major legislation is required to be approved by inter-institutional coordination bodies, such arrangements usually lead to incoherent and overregulated wildlife regimes. As the Addis Ababa Principles and Guidelines state, "there must be clear and effective linkages between different jurisdictional levels to enable a "pathway" to be developed which allows timely and effective response to unsustainable use and allows sustainable use of a resource to proceed from collection or harvest through to final use without unnecessary impediment" (Principle 1, rationale). Furthermore, the Addis Ababa Principles and Guidelines state the need to strengthen and/or create cooperative and supportive linkages between all levels of governance in order to avoid duplication of efforts or inconsistencies. In addition, even where mandates are reasonably clear, coordination is still needed to enhance coherence among regulations applicable to sensitive areas such as those adjacent to protected areas or biological corridors. Another important issue, in countries privileging forestry like Peru, is to prevent implementation loopholes regarding wildlife management in private lands that are not subject to forest legislation.

Several of the selected countries have created permanent **multi-stakeholder advisory bodies**. These arrangements serve a double purpose: they facilitate inter-institutional coordination when mandates related to wildlife management are shared among different



authorities; and constitute a permanent avenue for stakeholder participation in decision-making. In addition, they generally evidenced a more developed approach to local communities' and stakeholder participation in protected area management regimes.

Regarding **funding**, Addis Ababa Principle 13 states that the costs of management and conservation of biological diversity should be internalized within the area of management and reflected in the distribution of the benefits from the use. The country studies in Part II show that most legal regimes do not channel income generated by sustainable wildlife management back to communities. Licensing charges are usually collected by management authorities, seldom return to local communities, and in many cases accrue to the general treasury or sustain centralized wildlife management authorities' recurring costs. A clear legal basis is necessary to set aside revenue from wildlife management and ensure that it is reinvested in wildlife conservation and sustainable use. Although several countries in the region have established specific funds to this effect, legislation seems silent on key issues such as including communities and traditional users among the beneficiaries of these funds, or setting out criteria and procedures for the disbursement of funds, and accountable governance mechanisms to monitor the use of the funds.

The following recommendations can be formulated to strengthen wildlife management institutional arrangements:

- Ensure that the mandates of institutions involved in wildlife management are clearly spelt in legislation and expressed in terms of powers and duties, avoiding unlimited discretion by setting criteria for the exercise of powers and transparent procedures.
- Facilitate/require communication and exchange of information at and among different government levels.
- Ensure inter-institutional coordination mechanisms include all ministries with jurisdiction over wildlife extractive and non-extractive uses including protected areas.

- When legislation creates multi-stakeholder advisory bodies, legal provisions should ensure that participation from a variety of stakeholders (in particular, marginalized and vulnerable groups) is required, and transparent mechanisms for the appointment of stakeholders' representatives are set out at all levels.
- Put in place effective means for communications between all stakeholders. Such communications will facilitate availability of the best (and new) information about the resource and enhance the effectiveness of sustainable management policies (Addis Ababa Principle 14, Rationale).
- Create a legal basis for the return of financial resources accrued through wildlife management to the sector. In the case of wildlife funds, legislation should specify their objectives, beneficiaries and transparent governance system. Possibly, indigenous and local communities that contribute to conserve and/or use sustainably wildlife should be included among the beneficiaries of these funds, and even be given priority among other potential beneficiaries.

## 4. Wildlife tenure and use rights

Variations in legal provisions related to wildlife tenure were found in the country studies presented in Part II. Tenure over land is generally related (directly or indirectly) to wildlife ownership and thus has significant impacts in channelling income from wildlife management to communities (when these are also landowners). When either wildlife or its habitat is owned by the state, as is the case in most protected areas, profits generated by wildlife use – extractive or non-extractive – generally accrue to the state and only in exceptional cases are benefits shared with local or indigenous communities or are use rights granted to communities beyond their recognized territories. This section briefly reviews some of the issues related to tenure and use rights that impact on the capacity for communities and traditional resource users to benefit from sustainable wildlife management.



It focuses on legal rights over wildlife derived from: ownership over land, wild specimens bred in captivity, and traditional use of wildlife resources by indigenous communities beyond their recognized territories.

#### 4.1. Tenure over wildlife in private lands

There appears to be two clear trends in Latin America in defining tenure over terrestrial and avian wildlife. Some countries consider wildlife as private property, either as *res nullius* (subject to appropriation) or as a component of land where it is found (thus property of landowners). Others consider wildlife as state property. In addition, most regimes require an authorization for wildlife use, regardless of private or state ownership, thus limiting 'access' to wildlife resources even when considered private property. Consequently, the fact that some countries consider wild fauna as private property (Argentina, Chile), and others as property of the state (Brazil, Bolivia, Ecuador, Costa Rica and Peru), does not seem to make a great difference in determining wildlife use rights, although the former generally adds the authorization of the landowner to other requirements for wildlife use. Such authorization, however, usually entails the generation of benefits for landowners for the use of wildlife in their properties. This may therefore in theory be a tool to ensure benefit-sharing, but may in practice result in the marginalization of local and indigenous communities that do not own land.

In the case of Mexico, for example, where wildlife belongs to the state and sustainable use is guaranteed by legislation focused on an area-based approach, ownership of land plays a key role as only landowners are able to register a wildlife management areas and thus engage in legal sustainable use practices.

Overall, most good examples of wildlife management benefiting poor communities have actually been found to take place within protected areas, which are generally under state ownership, rather than on private or community lands that are typically used for more profitable activities like agriculture or forestry. Within protected areas, the prohibition of undertaking agricultural activities and the existence of external funding for sustainable management projects have been instrumental in shifting away from traditional unsustainable

practices, towards alternative sustainable wildlife uses that can generate income for local communities. Competing land uses continue, though, to put pressure on protected areas. Guatemala, for example, has had several cases of 'invasions' into protected areas by poor communities displaced by armed conflict in search of agricultural lands and by rich *narco-ganaderos* – powerful individuals who take control of these areas for livestock farming and drug-related illegal activities (CONAP, 2009).

For non-extractive uses of wildlife, tenure over land seems to play a more significant role in determining land uses and the allocation of benefits. Eco-tourism activities in private lands, for example, generally do not require wildlife use permits and generate direct income to landowners and possibly also employment opportunities to local communities (who may provide tourism services or be employed as guides, cooks, drivers, etc.). Eco-tourism services in protected areas generally require permits, reserving a portion of income to national treasuries or national parks services. Another example of the importance of tenure on non-extractive uses of wildlife is provided by vicuña live-shearing operations in Bolivia. In this case, vicuñas are state property, but the state hands over 'in custody' to indigenous communities groups of animals found on their lands. Those vicuñas handed in custody coincide with the animals found on each community's recognized territories, thus having clear land titles is a pre-requisite for local communities to benefit from sustainable wildlife use.

Finally, some countries like Guatemala also have mixed protected area regimes where private landowners are able to benefit from allowing the integration of their lands into the national system of protected areas. Guatemala's private natural reserves are co-managed with landowners according to the Guatemalan Protected Areas System, but property remains with the landowner (Protected Areas Law, art. 10).

#### 4.2. Tenure over wildlife in captive breeding operations

All countries analyzed in this study have specific regulations for captive breeding operations. In some instances, such as Brazil, Costa Rica and Ecuador, commercial wildlife

use is limited to animals reproduced in breeding operations. Regulations are generally detailed and require the elaboration of management plans for the species being bred, although they do not usually require an assessment of impacts on wild species.

As breeding operations tend to be private commercial undertakings, wildlife tenure does have a significant role to play, as owners generally receive all the proceeds from the commercial use of wildlife, except for the payment of licences to operate captive breeding operations and to export species. Captive breeding therefore presents a valuable option for communities to benefit from the wildlife that surrounds them. Given the risk that breeding of some valuable endangered species may lead to the collateral effect of increasing illegal trade in the same, though, a careful analysis of the capacity to enforce regulations and of the resources available to adequately monitor breeding operations is critical to ensuring sustainability.

Certain “ranching” activities have also been specifically regulated to benefit local communities. For instance, the *Quelônios da Amazônia* project in Brazil allows the gathering and relocation of 10-20 percent of turtle offspring within the project’s areas to commercial breeding centres which are managed by local communities, who receive the total of the income generated by these operations (available at [www.icmbio.gov.br](http://www.icmbio.gov.br)).

#### 4.3 Wildlife use rights beyond privately owned lands

Indigenous and local communities in Latin America are not in many cases landowners. Both structural poverty and lack of property rights over land act as barriers to their participation in wildlife management and to obtaining economic benefits from sustainable wildlife use. Profits are generally captured by landowners, the state, or intermediaries in the commercial chain. Women are also often marginalized from tenure rights, which may prevent them from enjoying of benefits from sustainable wildlife use. Moreover, traditional use of wildlife beyond private or community lands – when recognized – is generally a precarious right (which may be tolerated but may not be opposed to land owners). For example, Peru’s native communities and farmers are allowed to benefit from wildlife for **subsistence or ritual purposes** in their lands and adjacent areas, but their entitlement

cannot prevail over third parties’ competing rights, and thus is terminated when the government assigns the resource to any other entity (Peru’s Organic Law, art. 17).

Bolivia presents an interesting example as its new Constitution grants indigenous communities rights to co-manage protected areas (owned by the state) overlapping with their traditional territories (Chapter VII), in accordance with “the procedures and regulations of the indigenous communities [...] while respecting the objectives of the creation of the protected area” (art. 385 II). This Constitutional clause, while not expressly changing tenure rights over protected areas, provides some recognition of traditional indigenous territories, granting communities rights over the management – and potentially of benefiting – from activities in these areas.

#### 4.4. Conclusions and recommendations

Country studies show that property rights over wildlife and land play a key role in allowing communities to benefit from wildlife use. Usage rights awarded to landowners are also affected by a combination of costs of ‘access to resources’ and expected benefits. Users first weigh the costs of access, including required licences and transaction costs of engaging in bureaucratic procedures, against the expected benefits from wildlife use. If costs are higher than benefits, they are likely not to engage in the activity and turn to other land uses like forestry or agriculture, or continue their unregistered activities in the ‘black market’ (Commission on Legal Empowerment of the Poor, 2008b, p.16).

Non-extractive uses of wildlife in private lands are generally unregulated or subject to very light regulation, therefore tenure plays a larger role in determining uses, as costs of access are minor.

An important issue to note is the role of tenure and access costs have to be balanced with those of alternative land uses. The country studies demonstrate that besides very specific examples of the live-shearing of vicuñas – in highlands that are usually unsuitable to agriculture – most good examples of wildlife management benefiting poor communities actually take place within protected areas – under state ownership – rather than on private or community lands, which are usually used for

more profitable activities like agriculture or forestry. Other than the vicuña case, the region does not provide many examples of community-based wildlife management schemes adopted through legislation.

The following recommendations can thus be formulated:

- Define clearly tenure over wildlife and its relation to land ownership, so that access and management responsibilities are clearly allocated for both extractive and non-extractive uses.
- Avoid excessive bureaucratic requirements that place barriers to access by poor communities to sustainable wildlife management activities (Addis Ababa Principle 1, Operational Guidelines).
- In drafting wildlife legislation with the aim of “empowering the poor,” consider customs governing land and possible discrimination of disadvantaged groups (for example women) resulting from them. All possible efforts to avoid the perpetuation of discrimination in the wildlife sector should be made. The new wildlife legislation would then have to be particularly clear in granting specific rights to targeted groups, thus, “bypassing” any ambiguities or inequities of other legislation or practices.
- When the tenure system leads to the marginalization of traditional wildlife users and/or local or indigenous communities, create a specific legal basis for community-based wildlife management, and/or for sharing among local and indigenous communities living in proximity of wildlife, the benefits derived from wildlife use in state or private-owned areas.
- Provide capacity building and targeted support to enable local communities to access national and international markets, reducing transaction costs and strengthening monitoring. Communities often need support to negotiate their share of benefits from sustainable wildlife use, and guidance in accessing international markets.

## 5. Wildlife management planning and impact assessment

Wildlife management planning may take place at national, project or user levels. Thus legal provisions in this regard vary greatly from one country to another in Latin America. National planning exercises may take place when: setting out policies or programmes for wildlife conservation and use; determining categories of wild species based on their conservation status; or adopting national or regional plans for the use of specific species like vicuñas. National planning exercises may also take place to determine protected area categories, or create such areas, in line with protected areas legislation. Management plans may also be adopted at the local level, for individual projects or areas, usually by users or area managers themselves. From an overview of the country studies presented in Part II, it emerges that wildlife-specific management planning is not consistently enshrined in national legislation. Very detailed regulations on some sectors like protected areas often coexist with lack of any sustainable planning requirements in private lands.

This section will review the main trends in the region regarding management planning, concentrating on: activities that trigger the need for a management plan; the kind of input required for management planning processes including, for example, wildlife surveys; and different levels of planning (i.e. wildlife management planning at the government level, and at the user level). Public participation in management planning, as well as on environmental impact assessment (EIA) that may trigger the need for management plans, will also be reviewed.

### 5.1. Triggers and input to management planning processes

Management plans are generally not required for wildlife use in private lands, except for particular activities like hunting ranches or breeding operations. Except for the notable cases of Mexico that requires management plans for all wildlife uses in private lands, countries analyzed in this study rely on general government regulations putting in place bans or requirements and conditions for hunting.

These are in many cases not part of a general management planning scheme and also fail to empower stakeholders to produce site-specific management plans for wildlife on their own land.

On the other hand, most countries present a more developed planning process for protected areas, requiring site-specific management plans. Argentina, Belize, Bolivia, Brazil, Chile, Ecuador, Guatemala and Mexico all require protected areas to conform to general planning or zoning requirements, as well as develop a site-specific management plan for each protected area. For example, Guatemala's Protected Areas Law requires for each category of protected area (PA) to develop a "master management plan" and annual operative plans approved by the National Council on Protected Areas (CONAP), in accordance with the activities allowed for the relevant category of protected area (arts. 8 and 18).

Project-specific management plans are sometimes required in the case of hunting ranches (Argentina) and captive breeding operations (Brazil, Costa Rica, Guatemala). Guatemala also requires that commercial use of species in categories II-III of its List of Endangered Species should be subject to the approval by authorities of management plans developed by users, to guarantee sustainable use.

## 5.2. Wildlife surveys

Most management plans require input from a variety of information sources, both scientific and resulting from field observation by users and local communities. Wildlife surveys or population studies are only exceptionally undertaken in the region. In Argentina, for example, management plans are most often based on indicators of population abundance, including, for example, the consideration of capture effort, size and age of specimens taken (information which is provided by users). Indicators are designed and adapted to particular species and regularly updated to ensure their effectiveness in portraying a species status.

Legal provisions requiring periodic surveys of wildlife species are scant in Latin America. When these provisions are included in legislation, they may be very generic, as in the

case of Guatemala, where the Hunting Law also requires CONAP to base regulations on hunting seasons and quotas on scientific information obtained from field studies (art. 20).

In Chile, SAG categorizes species according to **census information**, for example in the case of valuable species like guanacos, vicuñas, pumas and grey foxes. However, for many species quotas are set on the basis of historical extraction levels as population studies are unavailable. The SAG continually improves its information and re-categorizes species and quotas as information from census becomes available. In Brazil, a new information system is expected to allow the traceability of all legal wildlife products from their production to their export.

Even when legal provisions are in place with regards to wildlife surveys, financial and human resources to carry out these information-gathering activities are usually not available. For example, in Costa Rica, the Wildlife Regulation lists all endemic species according to their conservation status, and determines restrictions applicable to each category. Due to budget restrictions, however, the conservation status of species is not based on population studies, but rather on adaptive management strategies drawing from the opinion of collegiate bodies and experts, as well as findings from universities, NGOs and international organizations. Communities with interest in particular species are requested their input, as a matter of administrative practice – not through formalized processes.

## 5.3. Wildlife management planning at the government level

There are not many examples of legal provisions concerning general wildlife management planning in the region. Some countries have national management plans for specific species, but few approach wildlife management with a general planning perspective. Guyana requires its Environmental Protection Agency to coordinate the establishment and maintenance of a wildlife protection management programme (sec. 4).

Many countries in the region call for the adoption of specific plans for particular species or for protected areas. In these cases, plans

may define whether extractive or non-extractive activities are allowed, and set out applicable limitations. For example, legal provisions on protected areas allow the taking of wildlife with limitations on quotas, seasons or purpose of hunting (commercial, subsistence or recreational). In other instances, only non-extractive uses, like eco-tourism, are allowed. Yet in other situations, all uses in strict conservation areas are forbidden (Argentina, Brazil and Guatemala). Moreover, in Argentina, the Ministry of Environment adopts, in coordination with relevant provinces and based on studies and assessments, management plans for CITES-listed species and other species of special concern, including through the setting up of maximum extraction quotas and other measures.

More detailed management planning provisions are thus usually found in protected area legislation. For example, Guatemala's protected areas legislation requires a "master management plan" and annual operative plans to be approved for each protected area. All concessions for wildlife use, whether extractive or non-extractive, must be issued in accordance with master management plans for each area. In Belize, pursuant to the National Parks Act, upon declaration of a wildlife sanctuary, the Chief Forest Officer must provide a management plan for the area subject to approval of Minister of Natural Resources. Sometimes, forest legislation may provide the framework for integrating wildlife management in area-based planning exercises. In Guyana, one of the objectives of the forest management plan should be to protect the forest's wildlife and biodiversity in general.

In Chile's case, the Protected Areas Law establishes that CONAF must elaborate a **management plan for each protected area** establishing its management category (art. 13). The General Environment Law also requires **EIAs** for all activities in protected areas and sets out the procedures for public participation in the review of, and comment on, EIAs presented (arts. 10 and 26–31).

#### 5.4. Wildlife management planning at the user level

Project-specific management plans are generally required in the case of hunting ranches and captive breeding operations

(Argentina, Brazil, Costa Rica, Ecuador, Guatemala and Mexico). Activities in protected areas also typically require the presentation of a sustainable wildlife management plan to be developed by managers.

Most countries set out the content of user-level management plans in detailed regulations. For example, Mexico promotes the development of a national system of UMAs in the areas of influence of protected areas, in order to reinforce buffer zones and give continuity to ecosystems. UMAs are also promoted within protected areas to involve local communities in the management of wildlife with priority given to non-extractive uses (art. 47). Registration of an UMA in Mexico requires a management plan designed by a registered technician. Management plans must include specific objectives and indicators for success, methodology for collecting information, a calendar of activities, and measures to manage habitat, population and specimens, as well as control and contingency measures. Specific population studies are not required, and technicians may present management plans based on different approaches and methodologies. However, SEMARNAT may request that management plans be developed based on different methodologies, and will evaluate periodical presentations of advance in activities including indicators on the sustainability of activities to be undertaken (Mexico Wildlife Law, arts. 39–41).

Guatemala allows commercial use of wildlife for particular species subject to the presentation of a management plan that must be approved by CONAP to guarantee sustainable use. In addition, the use of species in protected areas requires an environmental impact assessment.

Project-specific plans are also sometimes requested for community-based wildlife management. In Bolivia, plans for the management of vicuñas or reptiles are elaborated by communities, usually funded and aided by either NGOs or universities, and presented to the national authorities. Plans are then evaluated, and if adopted, authorities issue a biannual quota to a community to use particular wildlife species in a particular area. In Brazil, a wildlife management plan is required for captive breeding operations leading to exporting CITES-listed species.

## 5.5. Public participation in management planning

Public participation in wildlife management planning can take many forms, with stakeholders including local communities, wildlife traders, recreational hunting associations, farmers, indigenous peoples, NGOs, international donors and state authorities from the municipal to the highest government levels. Allowing for public participation, thus, generally brings to the forefront the underlying tensions among all of these groups. Having public participation schemes in place in itself does not guarantee an outcome that will benefit the most vulnerable, as they generally have more difficulty in accessing bureaucracies and markets, and may thus be underrepresented in public participation exercises. Management plans for specific species or areas, whose development process includes all stakeholders as well as local authorities, at an early stage, are more likely to face less resistance when implemented, and improve the quality of enforcement and control, during implementation.

Argentina is required by its federal legal system to build consensus among range provinces and stakeholders for a plan to be adopted at the national level. Such consensus building exercises usually take the form of workshops where stakeholders assess and try to achieve consensus on the status and proposed regulations to ensure sustainable management of specific species. Argentina, thus, organized workshops for the development of management plans for specific species of national concern (such as South American camelids guanacos and vicuñas, Andean deer, foxes and parrots), discussing management requirements and maximum extraction quotas with interested members of the public.

Processing of information may take many forms. It is usually undertaken as a discretionary activity by authorities, with varied levels of public participation. Participation is most often formalized in protected area management planning legislation. For example, Brazil has a Regulation for the design of Participatory Management Plans, 2007, which defines that the categories of extractive reserves and sustainable development reserves require a management plan to be developed in

consultation with local populations (arts. 1–2). In these cases, each protected area has a deliberative body, chaired by IBAMA and with representatives of public institutions, civil society and traditional populations (residents in the area and users). Inhabitants of the reserve receive special consideration, in decisions regarding management plans, infrastructure that may impact on the unit and conflict resolution.

Ecuador requires that decisions on species for which hunting will be allowed should be based on technical studies and in consultation with hunting and fishing clubs and associations (Ecuador Biodiversity Regulations, art. 82). Ecuador has also one of the best examples of interdisciplinary participation in management planning in its Special Galapagos Province Law (art. 37). This piece of legislation establishes that the management plan for the island is developed by an inter-institutional management authority presided by the Minister of Environment and integrated by ministers, or their representatives, of defence, trade, industrialization, fisheries and tourism, as well as the Galapagos provincial tourism chamber, the Galapagos' artisanal fishing sector, and the conservation, science and education sector of Galapagos (arts. 13–14).

Many countries require the opinion of collegiate bodies within management planning processes. For example, Bolivia requires the support of its Wildlife Advisory Council prior to the enactment of ministerial resolutions approving management plans by national authorities (Bolivia Decree on sustainable wildlife management plans, 1999, arts. 1–5).

As a result of management planning exercises, authorities decide on limits or conditions on wildlife use. For example, Argentina adopts management plans for CITES-listed species, such as the South American camelids guanacos and vicuñas, Andean deer and parrots, whereby maximum extraction quotas and other measures are detailed (Wildlife Decree, arts. 8–9).

## 5.6. Environmental impact assessments and sustainable wildlife management

Sustainable wildlife management does not only entail the protection of species or of their habitats from activities directly affecting them (such as off-take and trade) through

management planning, but also protecting them from activities that may indirectly impact on them in a negative way. This is the case of industrial developments, construction, tourism and mining operations, which may seriously disturb wildlife species or destroy their habitat. In addition, competing land uses (forestry or agriculture) may also affect wildlife, and usually different pieces of legislation may regulate in different (and sometimes conflicting) ways their impacts on wildlife. Indeed, in accordance with the Convention on Biological Diversity, countries are required to identify and control all potential sources of adverse impacts on biodiversity, and to carry out environmental impact assessments of projects likely to have "significant adverse effects" on biodiversity (art. 14). Wildlife laws, therefore, should consider these impacts when providing for the conservation of wildlife, by providing tools for their detection and mitigation.

Cross-references between wildlife legislation and EIA legislation are not very frequent in the region, although several countries require EIAs for wildlife-related activities, such as breeding operations or activities in protected areas (Bolivia, Costa Rica, Chile, Guatemala, Mexico and Peru). In Belize, the protection of wildlife from harmful activities is instead explicitly considered in legislation on the EIA. In performing EIAs for projects that may significantly affect the environment, developers must consider the effect of development on fauna (Belize Environmental Protection Act, sec. 20). Similarly, in Guyana, the protection of wildlife from harmful effects of development is also regulated in the provisions regarding environmental impact assessments. Each assessment must be carried out by an independent person as approved by the Environmental Protection Agency and the person must consider the effect of the proposed project on fauna and species habitats (Guyana Environmental Protection Act, sec. 11). In Brazil, a wildlife management plan is required in private lands prior to the granting of environmental licences for development projects that may impact on wildlife in accordance with the Environmental Policy Law.

## 5.7. Conclusions and recommendations

Certain Latin American countries fail to require private landowners to comply with sustainable management planning regulations. On the

contrary, they tend to set general bans on wildlife use combined with detailed procedures for management planning in captive breeding operations, hunting ranches, or protected areas. Protected areas legislation in particular provides good examples of management planning and the promotion of non-extractive uses of wildlife. Most countries in the region have created large protected areas where community-based management and benefit sharing from non-extractive wildlife uses have been experimented, albeit still under heavy government control given that relevant areas belong to the state.

Sound management planning and participation by interested communities and individuals is a pre-condition to creating an enabling environment for sustainable wildlife use and identify opportunities for empowering the poor through community-based management or benefit-sharing.

Most management planning in the region tend to rely on local knowledge, feedback and monitoring of resources used, as a basis for decision-making, rather than on systematic studies of the status of particular species. However, lack of resources to engage in population census should not detract authorities from engaging in participatory processes to establish management plans. Especially when wildlife resources are used in practice and illegal markets are established, general prohibitions rarely succeed in dismembering existing commercial channels, and adaptive management strategies regulating the use of the resource, with adequate controls, may be more suitable. In this respect, the Rationale to Addis Ababa Principle 4 notes that it is necessary for the management to monitor the effects of that use and allow adjustment of the use as appropriate, including modification, and if necessary suspension of unsustainable practices. It is preferable to use all sources of information about a resource when deciding how it can be used. In many societies, traditional and local knowledge has ensured sustainable use of biological diversity over long periods of time. Incorporation of such knowledge into modern use systems can do much to avoid inappropriate use and enhance sustainable use of components of biodiversity.

Lack of resources for the implementation of species-based management plans is also

ubiquitous in Latin America. The management authorities interviewed for this study highlighted the need to provide practical alternatives to the traditional design of management plans based on population studies and census, such as setting limited extraction quotas based on data on historical use, and monitoring and control of abundance indicators, including, for example the consideration of capture effort, size and age of specimens taken, to tailor management plans and ensure sustainability at lower costs. The key issue in this case is to design and adapt indicators to particular species, including regular reviews, and allowing public participation in the process, to ensure the scientific robustness of indicators chosen and prevent the setting of quotas based more on market demands than the relative abundance of the resource.

According to the interviews, the participation of the poor and or of representatives of local and indigenous communities in wildlife management planning in Latin America is limited, as it reflects the existence of structural barriers to fruitful participation, including lack of capacity, marginalization, distance from decision-making centers, etc. In most cases, stakeholders with specific interests (such as hunting associations, international conservation NGOs, tourism operators, wildlife products exporters, etc.) benefit the most from public participation schemes.

The following recommendations can thus be formulated:

- Specify when management planning is required in relation to wildlife in both public and private lands, and/or ensure appropriate linkages with related legislation (such as protected areas or forest laws) in which broader management planning exercises may also include wildlife.
- Assign clear responsibilities for management planning, specifying information needed (both science- and traditional knowledge-based), public participation requirements, a logical sequence of steps in the process and their timelines, and legal consequences.
- In planning, consider opportunities to delegate rights, responsibility, and accountability to those who use and/or manage biological resources.
- With a view to achieving adaptive management, require periodic monitoring, evaluation and updating of management plans.
- Enshrine in the legal basis for management planning requirements for participation by relevant stakeholders, in particular traditional users and local and indigenous communities, at all levels, and identify opportunities for community-based wildlife management so that impacts on livelihoods are taken into account in order to ensure benefits also accrue to those communities in close contact with the resources.
- Implement constructive programmes that benefit local communities, such as capacity building that can provide income alternatives, or assistance in diversifying their management capacities (Addis Ababa Principle 12, Rationale).
- Apply a precautionary approach in management decisions in accordance with principle 15 of the Rio Declaration on Environment and Development and respond quickly to unsustainable practices (Addis Ababa, Principle 4, Operational Guidelines).
- Ensure that negative impacts on wildlife from other land uses or harmful activities are appropriately covered by the general legislation on EIA, or by specific provisions in wildlife laws. Access to information and public participation in the conduct of EIAs should also be clearly backed up by legislation.

## 6. Requirements and conditions for wildlife use

The implementation of wildlife management policies and plans usually entails placing limitations and conditions on extractive and non-extractive uses of wildlife, to ensure the long-term environmental sustainability of



activities involving the use of such resource. Most countries differentiate activities according to whether they are performed in protected areas or private lands; and generally specify different requirements and conditions for commercial extractive practices, recreational hunting and subsistence hunting. These legal tools may have significant impacts on empowering the poor, by facilitating or rather hindering local and indigenous communities' participation in wildlife management activities and/or benefit-sharing. This section will look at those requirements and conditions for extractive and non-extractive uses of wildlife, as well as for captive breeding operations, that are most common in the region.

### **6.1. Requirements and conditions for extractive uses of wildlife**

The country studies in Part II underscore that all countries – even in the absence of management plans – require licences or permits for extractive uses of wildlife and limit the impact of extractions on the wild through quotas, and regulations on methods of hunting, age of specimens and season restrictions.

Extractive uses of wildlife are generally regulated according to three broad categories: subsistence hunting, recreational hunting or commercial hunting/taking. These widely defined activities create products that are consumed locally, or enter national and international markets, for the supply of food, and for products such as wool, leather or furs, as live animals for the pet trade, or as hunting trophies.

Certain countries in the region rely on a general ban on commercial hunting and then create specific exceptions for species with commercial value (Brazil, Bolivia, Ecuador and Costa Rica). As wildlife management is regarded as less lucrative than timber production, and more likely to generate bad publicity for use of endangered species, the approach to extractive practices is thus generally very restrictive in the region. Restrictions to commercial extractive practices are generally not based on a management plan or evaluation of species abundance for a specific species or area, but determined discretionally by authorities.

#### **6.1.1. Hunting permits and licences**

Most countries tend to over-regulate hunting activities requiring several permits or licences at each stage of the authorization process, thus rendering lawful hunting an exercise in bureaucratic wrangling and enforcement a nightmare. Moreover, countries with federal structures like Argentina which require both federal and state authorizations for extractive practices of species with commercial or hunting value, favour the establishment of middlemen, with little or no interest in sustainable use, who do the paperwork and keep most of the profits from wildlife use, at the expense of local communities. In Argentina, recreational hunters must obtain: a hunting permit by the provincial authority where hunting will take place, subject to the payment of a fee; a recreational hunter's licence by the national authority subject to the payment of another fee; and an authorization by the landowner. The latter, though, is the main mechanism by which benefits accrue to local communities (which, however, only takes place when communities own the land).

Both in Chile and Costa Rica, professional hunters are requested not only to obtain a licence, but also to successfully complete an exam to prove their knowledge of hunting regulations. In Mexico SEMARNAT establishes restrictions regarding recreational hunting methods and seasons when evaluating management plans and granting permits and requires foreigners engaging in recreational hunting to contract an authorized operator, who must own an UMA and have all permits required by the law.

Many countries grant authorities broad discretion in establishing the amount to be paid for commercial or other hunting permits (Belize, Costa Rica, Chile, Peru) including setting out preferential tariffs for local hunters (Belize, Ecuador). Brazil, on the contrary, has a transparent tariff system, whereby all tariffs are published in the Annex to the Environmental Policy Law.

Some countries are using recreational hunting just as an opportunity to generate revenues for the state. For instance, Ecuador establishes differential licence prices for natives and foreigners (Ecuador Biodiversity Regulations, art. 86). Others, instead, direct recreational hunting to support communities' livelihoods,

through carefully crafted **community-based management plans for species with high recreational hunting value**. For example, Mexico's Borrego Cimarron project, allows the issuance of a handful of hunting permits to benefit conservation research and sustain the livelihood of a local community through the registration of their land as an UMA and the issuance of permits for recreational hunting of Borrego Cimarron (*Ovis canadensis*) that are then sold by communities to foreigners every year.

With regards to extractive practices for subsistence, many countries either relieve **subsistence hunters** from the permit requirement (Guyana, Mexico, Peru) or from fees applicable to the issuing of permits (Ecuador, Guatemala). The latter case does not seem an effective way to deal with subsistence hunting, as requiring permits for these activities may create bureaucratic obstacles to activities that support the livelihoods of the poor. Another way to support community-based wildlife management is used in Mexico, where authorities are legally mandated to provide technical support to communities to assist them in complying with the law.

#### 6.1.2. Conditions on use

Mexico provides a system whereby all extractive uses in private lands must justify extraction levels on the basis of the management plans previously approved for the area and population studies presented by applicants. Permits are issued upon consideration of evidence that proposed extraction levels will not affect natural renovation of populations and establish the quotas and period for which authorization for extractive use is valid.

For native species, Chile's Hunting Regulation categorizes wildlife according to its conservation status and sets general criteria and conditions for the use of wildlife in each category. Wildlife is classified according to the following **categories**: beneficial for agriculture; with reduced population density; beneficial for ecosystem balance; in danger of extinction; vulnerable; rare; with insufficient information; and not in danger.

Certain species-specific regulations allow **community-based management of**

**commercial extractive practices** in Argentina (parrots), Mexico (deer) and Bolivia (crocodilians). For example, Argentina's *Elé* project is based on an inter-provincial agreement among nine provinces for the Conservation of *Amazona aestiva* (Blue-fronted parrot). The inter-provincial agreement led to the adoption of two types of regulations by the Secretary of Environment: a resolution periodically reviewing criteria for management, including seasons and modalities for extraction of birds, and conditions for transport and identification; and an annual resolution determining maximum extraction quotas, seasons for harvest of specimens, and conditions for exporters (CITES, 2008).

#### 6.2. Requirements and conditions for non-extractive uses of wildlife

Non-extractive uses of wildlife encompass activities from wildlife-watching tourism to live shearing of vicuñas, which rely on biodiversity to generate revenue but do not take species from the wild. Most of the selected countries do not regulate non-extractive wildlife uses in private lands, leaving these activities to the discretion of landowners (Argentina, Bolivia, Brazil, Costa Rica, Chile and Guatemala). Mexico is one of the few countries that require a permit by SEMARNAT for non extractive uses, including tourism, in UMAs. Most countries, on the other hand, do regulate non-extractive uses in protected areas, either through general guidelines or within each protected area's management plan.

A good example of **community-based non-extractive uses of wildlife** is provided by vicuña live-shearing operations in Bolivia. Communities in this case perform live vicuña-shearing operations according to regulations and receive the full income derived from the sale of vicuña fiber. In this case, regulations allow only local communities to register a live vicuña-shearing operation, although they may develop their plans and activities in collaboration with private parties or NGOs. Peru also has a tailor-made government program and regulations for vicuñas. As a result, the Lucanas Community managing a population estimated in 5 215 free ranging vicuñas has earned an average of US\$ 200 000 per year selling the fiber to companies in Italy (Peru, 2008).

A few countries have regulations addressing **tourism in protected areas**. For example, Bolivia's regulation on Tourism Operations in Protected Areas details the national or departmental authorities in charge of issuing tourism operation licences and determining fees for such operations (arts. 9–10). It tasks Protected Area Management Committees with promoting tourism projects with direct benefits that engage local communities (art. 12) and notes the approval of tourism licences may include restrictions or limitations to specific activities. Guatemala's CONAMA has also published guidelines for non-extractive uses of wildlife in protected areas, including a Code of Conduct Regarding Bird Watching and Eco-Tourism in Protected Areas (CONAP, 2000). In Ecuador, management plans and monitoring of impacts on protected areas are required for the undertaking of tourism operations.

Legal tools for **community-based management (or co-management) of protected areas** have been used in few countries in the region. In Bolivia, the new Constitution establishes that protected areas that overlap with traditional indigenous territories will be co-managed according to the procedures and regulations of the indigenous communities (*"naciones y pueblos indígena originario campesinos"*), while respecting the objectives of the creation of the protected area (art. 385 II). It is, however, too soon to assess whether this provision has had significant impact on the ground. Similarly, the Constitution of Ecuador calls upon the state to promote the participation of communities, peoples and "nationalities" in the management of protected areas that were inhabited since ancestral times (art. 405). It grants communities the right to participate in the use, benefits, administration and conservation of renewable natural resources found on their lands (art. 57). This concept, translates in practice, into activities implemented by the Ministry of Environment for the sustainable management of wildlife and the legalization of unregistered wildlife operations by local communities. In Brazil, local communities participate in the development of wildlife management plans in protected areas, classified as extractive reserves and sustainable development reserves. Each federal conservation unit has a deliberative body, comprising representatives of public institutions, civil society and traditional populations (residents in the area and users).

Inhabitants in the reserve are especially considered, in decisions regarding management plans, infrastructure development that may impact on the unit and conflict resolution.

### 6.3. Requirements and conditions for wildlife captive breeding

Some countries in the region have detailed regulations for captive breeding operations (which, depending on each country's definition, may require the taking of some specimens from the wild). Brazil, Costa Rica and Ecuador allow only authorized captive breeding operations to engage in commercial wildlife trade. In Costa Rica's case, once approved, captive breeding projects must be publicized in newspapers, allowing a week for the presentation of objections, after which authorities determine maximum quotas for commercialization according to the technical criteria and inventories presented (Costa Rica, Regulation to the Wildlife Law, arts. 45 and 87; and Wildlife Conservation Law, arts. 14 and 25).

Brazil encourages the creation of captive breeding centres that are originally populated with specimens obtained from procedures to combat illegal wildlife trade. Breeding centres require an authorization by the Institute of the Environment and Natural Resources (IBAMA) to operate, and must record all their activities related to movements of specimens in an information system, via the Internet. In addition, ranching of turtles is allowed in specific areas, where commercial breeding centres managed by local communities are allowed to obtain 10–20 percent of turtle offspring from the project areas.

### 6.4. Conclusions and recommendations

Legal requirements and conditions for wildlife use demonstrate that legal frameworks are not designed to channel benefits from wildlife utilization to local communities, therefore it is not surprising that this goal remains elusive. It is not uncommon in the region for wildlife use requirements and conditions to be designed to obtain revenue, following the model of large-scale logging concessions, thus they are unlikely to promote small-scale or community-based sustainable wildlife use. In addition, over-regulation or outright bans may lead to the creation of illegal markets, while lack of

enforcement has placed many species at the brink of extinction. Achieving the right level of regulation, in accordance with resources available for enforcement and implementation, thus seems to be managing authorities' greatest challenge.

Allowing traditional extractive practices by poor or marginal communities, that would otherwise foster illegal markets, to be quantified, controlled and monitored through simple licensing procedures and sustainable management plans, permits the poorest members of society to engage in legal activities and retain a larger portion of the wealth created by wildlife products, rather than leaving all profits with middlemen and bribes to corrupt officers. As the Commission on Legal Empowerment of the Poor clearly stated, "Legal registration can dramatically improve the productivity and profitability of informal businesses. [...] So while traditional and informal businesses certainly have their advantages, poor people should have the opportunity to legally register their businesses if they so wish" (Commission on Legal Empowerment of the Poor, 2008, p.53). However, **licensing procedures** should be streamlined to avoid over-regulation. The fact that wildlife use is heavily regulated, and land use change – for example, turning wild pastures into agricultural lands – is generally unregulated does not bode well for the promotion of sustainable management practices in the region as land use change may appear as a more profitable and flexible option. Enabling wildlife use, with clear and simple licensing procedures, should be the objective of wildlife regulation, rather than outright bans on all types of uses, especially when black markets are well established.

In this regard, regulation of non-extractive wildlife uses within protected areas presents a more coherent approach to wildlife management, with several examples of laws that rather than provide detailed requirements and conditions, set out general guiding principles and institutions to oversee that activities approved in conformity with each area's management plan. For example, tourism activities in protected areas may both support local livelihoods (as communities may be hired as guides, or provide supporting services to the tourism industry), and generate income that may be channelled to further conservation objectives.

The importance of framing requirements and conditions for wildlife use within approved management plans for specific species or areas should thus be the main principle – instead of setting of conditions wildlife use based on expected fiscal revenue or plain discretionality.

The following recommendations can thus be formulated:

- Avoid unnecessary and inadequate regulations of uses of wildlife because they can increase costs, foreclose opportunities, and may lead to unsustainable land or wildlife uses (adapted from Addis Ababa Principle 3, Operational Guidelines).
- Require that issuing permits for any type of wildlife use be based on approved plans or on legislatively fixed criteria to reduce discretion and potential for corrupt practices and to increase transparency and predictability.
- Ensure that fees for licences for extractive and non-extractive uses of wildlife also be uniform and made available to the public.
- Ensure that minimum controls are in place for non-extractive uses of wildlife, and that legislation provides for incentives to these kinds of uses when sustainable.
- Based on sustainable management plans, define the scope for legal wildlife use activities (species and areas allowed) and provide opportunities, including through the adoption of simplified procedures (i.e. one-stop-shops; internet-based permitting) to allow poor communities that are away from decision-making centres, to benefit from legal wildlife use activities.
- Provide capacity building and targeted support to enable local communities to access national and international markets, reducing transaction costs and strengthening monitoring. Communities often need support to negotiate their share of benefits from sustainable wildlife use, and guidance in accessing international markets.

- Create a specific legal basis for community-based wildlife management, and/or for sharing among local and indigenous communities living in proximity of wildlife the benefits derived from wildlife use in state or private-owned areas.

## 7. Enforcement of wildlife legislation

Lack of or limited enforcement capabilities by national wildlife management authorities has been often cited by those interviewed as one of the main barriers to the effectiveness of sustainable wildlife use regulations. This section will review some examples of how stakeholders and communities may be involved in aiding government authorities in the enforcement of wildlife regulations.

### 7.1. Participation in enforcement efforts

The need to strengthen monitoring and enforcement capacity seems ubiquitous according to both users and management authorities in Latin America. A cost-effective way to achieve higher levels of enforcement is by further engaging stakeholders involved in legal wildlife utilization in supporting enforcement activities. Legislation to be effective in this endeavour should, however, formally recognize this role for stakeholders and possibly include incentives for them.

Most countries in the region provide avenues for citizens to trigger enforcement procedures by, for example, giving them standing to file claims for violations of wildlife legislation. Often these rights are even recognized at the constitutional level. For instance, according to the new Constitution of Ecuador individuals, communities and peoples have standing to request from public authorities the respect of the rights to Mother Nature or “Pacha Mama” (art. 71). Furthermore, individuals, communities and peoples have standing to request public authorities the respect of such right (art. 71). In addition, every citizen or group of citizens has a right to be heard in civil or criminal proceedings that arise from violation of environmental laws, even if their own rights have not been affected (Ecuador’s Environmental Management Law, art. 42).

In Belize, it is general environmental legislation that empowers any person that suffers loss or damage resulting from violation of the Environmental Act to bring a compensation claim before a court (sec. 40). Some countries go further and do not require a relation between the claimant and the elements of the environment at stake (Ecuador, Argentina). Alternative – non judicial – ways to present claims include Brazil’s wildlife-related free-toll number (‘Green Line’) that is available for any citizen to present reports of wrongdoing regarding wildlife management in Brazil.

Provisions allowing members of the public to assist in wildlife regulation enforcement procedures are rare, however, and generally do not include incentives (whether as a monetary benefit or a symbolic reward). Chile, for example provides for the designation of *ad honorem* inspectors to aid wildlife law enforcement authorities. These honorary inspectors can be civil society organizations, including wildlife breeders associations, hunting clubs, associations for the protection of animals, and environmental institutions. Their tasks include requiring hunters to show their permits and identification, and presenting claims to relevant authorities for violations or crimes found during the exercise of their tasks. Along similar lines, in Costa Rica, the Environment Ministry may appoint members of civil society to Natural Resource Control Committees, which are involved in wildlife law enforcement.

Vicuña rearing communities in Bolivia also organize activities to prevent poaching. Experiences in organized community control in the *San Pablo de Lipez* Area have been highlighted by national authorities in their annual report to the Vicuña Convention, noting the need to further support community control mechanisms and the reception by authorities of claims and reports by communities regarding illegal activities (Bolivia, 2008, p.16).

### 7.2. Access to specialized courts and administrative proceedings

Most countries in the region also have specific provisions in general legislation on environmental protection granting access to environmental information and justice, with varying degrees of stringency in terms of the timeliness of responses from the administration. The most notable example is

perhaps presented by Bolivia where the Environment Law recognizes the right of all individuals to present claims for wildlife law violations, and establishes that petitions must be responded within 15 days from their submission, further to a public hearing. It further states that challenged decisions may be suspended through an appeal (arts. 93–94).

Similarly, Brazil's Environmental Impact Assessment Resolution establishes that environmental impact assessments are public even while subject to technical consideration (art. 11). The Resolution of Public Hearings further requires that public hearings be organized when interested parties express an interest in being informed of the EIA underway. For instance, public hearings may be requested by environmental associations, or a group of at least 50 citizens (art. 2).

The lack of awareness and knowledge of wildlife legislation by ordinary tribunals is a common cause of concern in the region, as large operations against wildlife trafficking by border authorities are in many cases dismissed by a judicial system that is not interested or well-equipped in pursuing these types of crimes. For this reason, Brazil, Costa Rica and Mexico have created specialized environmental prosecutors.

Along the same lines, the new Bolivian Constitution has created agro-environmental tribunals to deal specifically, among other issues, with wildlife legislation violations (art. 186). In Peru, instead, the General Environment Law calls upon authorities to foster specific mechanisms for dispute settlement including conciliation and arbitration to resolve environmental conflicts (arts. 151–152).

### 7.3. Conclusions and recommendations

There is a need to strengthen enforcement capacity in Latin America through further engaging stakeholders involved in legal wildlife utilization in monitoring compliance with wildlife law.

Although most countries in Latin America provide for general principles on public access to information related to wildlife, there are few specific rules that guarantee that these rights are effectively exercised in practice. Specific procedures should be set forth in legislation to

guide authorities in implementation and provide the public with certainty about their rights.

The creation of specialized bodies for policing or enforcing wildlife regulations (especially at international trade entry and exit point, such as ports and airports) is also critical to strengthening the reach of legislation.

The following recommendations may therefore be formulated:

- Provide a clear legal basis for public participation in wildlife law enforcement, recognizing formally honorary guards and other forms of collaboration with formal law enforcement agents, and possibly provide incentives to this end.
- Clarify the rights of the public to access relevant information, which is a precondition to their effective participation in decision-making, management planning and management activities themselves. Specific procedures should complement general statements of rights in this respect.
- Provide for access to justice related to wildlife law. Specific bodies may be created to ensure that a specialized approach is taken in this respect. Alternatively, providing capacity-building to existing enforcement bodies, especially at the local level, as well as to ordinary courts to address wildlife legislation disputes necessary to strengthen the effectiveness of wildlife regulations and to provide incentives for lawful wildlife utilization.
- Make available to local communities engaging in legal wildlife utilization alternative dispute resolution mechanisms, as well as arbitration, mediation, and conciliation, as these mechanisms have proven preferable for the poor because they are more accessible than courts, affordable, more easily understood and (often) effective (Commission on Legal Empowerment of the Poor, 2008b, p.25).

## 8. Other issues: Gender and human-wildlife conflicts

**Gender equity** in access and use of wildlife does not appear as a concern reflected in legislation in Latin America. In some instances, however, gender concerns may be taken into account in the implementation of national wildlife law as requested by internationally-funded projects. For example, CONAF highlights an example of community and gender equity in the management of wildlife in the Rapa Nui National Park in Easter Island. In this UNESCO World Heritage Site, three female members of the native community are park rangers, a percentage of female rangers that is yet unmatched in the rest of the protected areas service in Chile (CONAF, 2008).

**Human-wildlife conflicts** are generally addressed in the national legislation of the countries covered by this study although these relate to wildlife threatening property (such as agricultural land or livestock), rather than threatening human life. Several countries allow the killing of 'problem animals' as an exception to general hunting bans (Argentina, Chile and Brazil) although these regulations, are perceived as creating loopholes for wildlife legislation enforcement.

The following recommendations can thus be formulated:

- Address gender equity issues in wildlife legislation, when it is necessary to provide opportunities of equal access and use of wildlife resources, and/or require equal representation of women and men on wildlife advisory bodies.
- Address in the legislation human-wildlife conflicts, with a view to alleviating the position of some of the less advantaged people in rural communities. Provisions addressing "problem animals" could be improved by requiring some consultation over the adoption of relevant measures, while also obtaining people's support of any necessary restrictions.

## 9. Summary of recommendations and legal options

This section summarizes the recommendations emerging from the comparative analysis of wildlife and wildlife-related legislation of selected countries in Latin America and provides specific suggestions on how to adapt the legal framework in the recommended direction. To this end, this section builds upon the set of design principles which FAO developed in 2008 on the basis of international obligations and standards on wildlife management, described in [FAO Legal Paper Online #75](#) "Principles for developing sustainable wildlife management laws" (Morgera and Wingard, 2008). In addition, certain legal tools identified in a recent comparative study on wildlife legislation in Sub-Saharan African – [FAO Legal Paper Online #77](#) "Wildlife law and the legal empowerment of the poor in Sub-Saharan Africa" (Cirelli and Morgera, 2009) – have also been cited where relevant.

Specific legal options are presented as additional tools for the assessment of the comprehensiveness and effectiveness of national legal frameworks, as well as more detailed guidance for amending or developing new wildlife management legislation based on existing international guidelines and best practices. These legal tools may assist national wildlife legislators in drafting national legislation that can support sustainable wildlife management and at the same time empower the poor.

### 9.1. International cooperation and transboundary issues

International legal instruments have had visible influence on the design of legal frameworks on wildlife management in Latin America. CITES and the Ramsar Convention have effectively encouraged the adoption of species- or area-based management planning requirements at the national level, while the more programmatic Convention on Biological Diversity has inspired a shift towards a more comprehensive, ecosystem-based approach in wildlife management legislation. As wildlife-related international agreements continue to evolve through the periodic adoption of

decisions by their conference of the parties, national wildlife legislation should be updated to reflect more detailed international standards and compliance with binding decisions related to particularly endangered species.

Furthermore, in accordance with Addis Ababa Principle 8, adequate management of transboundary or migratory species will require cooperative efforts (typically embodied in bilateral and multilateral agreements) between states to determine how resources will be used. Past experience shows that the absence of such agreements results in piecemeal management or illegal trade, which fails to prevent the over-utilization of a species.

### Recommendations:

- The specific obligations and general principles enshrined in international wildlife-related agreements should be reflected in national wildlife legislation when they direct the manner in which countries must regulate certain aspects of wildlife use and conservation, or when they call for the operationalization of specific principles, methods and processes for the conservation and use of wildlife (such as adaptive management, stakeholder involvement and incentive-based approach).
- Continue to develop transboundary arrangements for international cooperation when the distribution of wildlife populations or habitats span two or more nations.
- Continue to promote multinational technical committees, like the Vicuña Technical Committee, to prepare recommendations for the sustainable use of transboundary resources.
- Continue to engage in bilateral or multilateral agreements between or among the states for the sustainable use of migratory species.
- Take advantage of existing international initiatives and opportunities, such as the allocation of GEF funds for biodiversity, to attract resources to support wildlife management projects at the country and local level.

### Legal options:

- Require the managing authority to identify wildlife populations that migrate into neighbouring countries and engage in cooperation with those countries.
- Grant the managing authority the power to propose bilateral or multilateral agreements between or among the states for the sustainable use of transboundary wildlife resources, or alternatively making it the responsibility of the appropriate agency or agencies to establish formal and informal links with those countries to undertake joint management of the resource where necessary.
- Legally require that funding be made available to promote multinational technical committees to prepare recommendations for the sustainable use of transboundary wildlife resources.
- Strengthen the legal force of transboundary cooperation agreement and initiatives by explicitly recognizing and incorporating them by reference into domestic legislation.

### 9.2. General approach to wildlife legislation

Wildlife legislation reflects a variety of interests, including environmental sustainability, socio-economic development (particularly targeting local communities), customary use and traditional knowledge, gender equity, vulnerable and indigenous groups, and food security. A systematic, comprehensive approach to all these interlinked issues at the time of drafting legislation provides valuable opportunities for the generation of income to sustain local livelihoods through lawful use of wildlife resources. Outright bans on wildlife use or a focus on the potential for obtaining revenue through licensing procedures should therefore be avoided, unless they are specifically required by relevant international agreements for particularly endangered species. Addressing wildlife use in a holistic manner, as well as efforts to avoid over-regulation or loopholes in wildlife management legislation, are key ingredients for effective wildlife legislation. In some cases, however, it is only one step in the desired direction. In addition,



legislation should be adapted to the national context for law enforcement: to ensure compliance, legislation should provide for obligations that people can reasonably comply with, taking into account the capacity and resources of public authorities to enforce them.

### Recommendations:

- Consider the need for legal reform in countries with sectoral/fragmented regulations on wildlife management, to ensure the applicable legal framework is coherent and based on a holistic approach to wildlife management.
- When legislation is deemed adequate, adopt and/or publish updated versions of legislation (in a consolidated text including latest amendments) or compile explanatory documents on the legal framework for wildlife management, to enhance transparency, raise awareness and reduce potential for abuse.
- Unless so required by an international legal agreement, consider the regulation of wildlife use with an area-based approach or a species-based approach including the adoption and implementation of adequate management plans, as an alternative to an outright ban, as it may be more conducive to the empowerment of the poor and long-term conservation objectives.
- Design simple licensing procedures to promote sustainable management of species in accordance with species list-based legislation and/or area-based wildlife legislation.
- Engage in a realistic assessment of the country's capacity to implement and enforce legislation and consider simplifying legal requirements to allow sustainable wildlife use, especially by poor communities living in the proximity of wildlife resources.
- When evaluating legal reforms, consider market forces affecting the values and use of wildlife resources; and ensure new legislation provides incentives to sustainable wildlife use (Addis Ababa Principle 10).

- In drafting or reforming wildlife legislation take into account socio-economic, political, biological, ecological, institutional, religious and cultural factors that could influence the sustainability of management (Addis Ababa, Principle 9, Operational Guidelines).

### Legal options:

- When necessary changes to the legal framework have to face little implementation capacity, legal requirements could still be introduced in an incremental fashion, and be reviewed in time as capacity increases.
- Use "trigger" legal provisions to structure the law so as to create an immediate potential for wildlife use, but ensure that prerequisites first be met before rights may be exercised. For example, if community management of a trophy hunting concession is the desired goal, it may be useful to establish a legal requirement that trophy hunting will only be allowed where: scientific evidence demonstrates that a viable wildlife population exists to support such hunting; and the community has technical support from the state or relevant NGOs to implement and monitor sustainable management plans.
- Alternatively, use a "phase-in" approach that may be based on the use of "grace periods" where existing practices may continue for a specified period of time before some other requirement must be fulfilled. Thus the law may state: that hunting or other extractive practices in a given area may continue for a period of one/two years from the date the law becomes effective, after which a management plan covering the area and targeted wildlife must be in place; and that areas failing to meet the requirement will have hunting rights terminated until the requirement is fulfilled. This allows for the gradual implementation of the law in a manner more likely to receive compliance than an immediate obligation that neither government agencies, nor local communities are prepared to assume. The same may be done within management plans to improve sustainability through gradually including additional measures

such as wildlife surveys, the establishment of hunting quotas and the determination of hunting seasons and hunting methods, etc.

- Another option may be to use pilot experiences to test innovative legal solutions (such as area-based management for wildlife use, simplified licensing procedures and participatory management planning) within a restricted geographical area. In light of lessons learnt, national legislators may decide to widen the reach of legal tools that have demonstrated that they meet local circumstances and capacities.

### 9.3. Public participation in wildlife-related decision making

Experience has demonstrated that focusing exclusively on the control functions of government authorities related to natural resources law has a limited impact on social behaviour. The extent to which law encourages and enables positive behaviour may be more effective in ensuring sustainable wildlife management. Without the involvement of local people and the creation of a significant stake in the management of wildlife resources for them, the efforts of officials to protect and ensure the sustainable use of wildlife will often be futile. Absence of stake reduces incentives of local people to comply with the law and prevents them from instating on the compliance of outsiders, including government officials themselves. This is reflected in the Addis Ababa Principles and Guidelines, which call for “recognizing the need for a governing framework, consistent with international laws, in which local users of biodiversity should be sufficiently empowered and supported by rights to be responsible and accountable for the use of the resource concerned.”<sup>4</sup>

In Latin American countries, public participation in decision-making related to wildlife is often enshrined in legislation as a general principle or as a right, but often specific procedures for the realization of the principle or right are non-existent, although administrative practices have sometimes developed to fill the gap.

### Recommendations:

- Couple general principles on public participation with specific procedures for their implementation to limit the administration’s discretion and provide certainty to stakeholders.
- Examine existing mechanisms for public participation and identify the need to provide/enhance legal tools for stakeholder participation at *all* levels of wildlife-related decision-making (that is, at the level of design or reform of wildlife legislation, policies, programmes and plans, undertaking environmental impact assessments, listing of protected species, and creating and managing protected areas).
- Ensure that mechanisms for public participation allow and facilitate the participation of representatives of local and indigenous communities that use wildlife resources or live in their proximity, as well as the representation of other interests that may be affected by wildlife management decisions (farmers, conservation organizations, logging companies, etc.), providing for a balanced array of inputs to management authorities.

### Legal options:

- At a minimum, require regular admittance of the public to government meetings: the law may simply allow the public, or relevant stakeholders, to participate in government meetings called for wildlife-related decision-making.
- Require legally mandated consultations: with a more proactive approach, the law may establish a duty for public authorities to use a “public notice and comment” period prior to the adoption of a wildlife-related decision. These consultations may be convened at the central and/or local level, depending on the foreseen effects of the decision to be made. This will entail:
  - the publication of proposed rules or decisions;
  - publication of information on the process for receiving and reviewing comments at a reasonably early time;

<sup>4</sup> Addis Ababa Principles and Guidelines, practical principle 2.

- the obligation for public authorities to take into account the comments received and provide reasons in writing about the decision made, to allow public scrutiny over how comments have been taken into account.

#### 9.4. Institutional set-up and coordination

Wildlife legislation should at minimum clearly spell out the mandate of relevant institution(s) establishing mechanisms for coordination when several authorities are in charge of wildlife management regulation, in private and public lands including protected areas. Possibly, the law should provide some guidance to the exercise of public discretion in wildlife management (particularly when authorities award licences and permits), in order to increase their legitimacy and accountability, with a view to enhancing the accountability of wildlife authorities and avoiding conflict of interests.<sup>5</sup>

As wildlife legislation does not exist in a vacuum but must be coordinated with legislation in other relevant areas, wildlife authorities need to coordinate their activities with other line government agencies in related areas of work. There is therefore a need to institutionalize coordination with other public bodies, and clarify how and when inter-institutional coordination should be sought. This is particularly important when it is not possible, for political or other reasons, to have one main body responsible for wildlife management, so that relevant legal mandates are and will likely remain scattered among different institutions. Wildlife legislation in Latin America often addresses this issue by creating a permanent, multi-stakeholder advisory body.

#### Recommendations:

- Ensure that the mandates of institutions involved in wildlife management are clearly spelt in legislation, avoiding unlimited discretion in deciding on wildlife management (particularly, for the allocation of licences for wildlife use, and where relevant, the distribution of

benefits), and requiring transparent procedures.

- Ensure inter-institutional coordination involves all ministries with jurisdiction over wildlife extractive and non-extractive uses including protected areas.
- Facilitate/require communication and exchange of information at and among different government levels.
- Put in place effective means for communications between all stakeholders. Such communications will facilitate availability of the best (and new) information about the resource and enhance the effectiveness of sustainable management policies (Addis Ababa Principle 14, Rationale).
- When legislation creates multi-stakeholder advisory bodies, ensure that participation from a variety of stakeholders (in particular, marginalized and vulnerable groups) is required and transparent mechanisms for the appointment of stakeholders' representatives are included at all levels.

#### Legal options:

- The law should specify the criteria according to which powers of wildlife management institutions should be exercised (for example, by requiring that they are compatible with wildlife management plans, or with overall objectives for a particular type of wildlife).
- The law should ensure that the actions of public authorities are open to public scrutiny and that their decisions can be judged against measurable criteria, to avoid any abuse of authority.
- The law should spell out in detail in which cases or on which matters institutional coordination should be sought, and clearly define the scope, objectives and extent of legal requirements for inter-institutional coordination, also in the case of collegiate bodies that include stakeholders and government agencies.

<sup>5</sup> This is also encouraged from an ecosystem approach perspective: see CBD Decision VII/11 (2004) on the Ecosystem approach (hereinafter, CBD Decision VII/11), Annex, principle 1.6.

- The law should also define the procedures or mechanism through which coordination can be achieved, for instance by:
  - creating a duty to exchange information on matters of common concern, and/or request the prior consent or advice of inter-institutional government bodies;
  - setting up joint decision-making procedures,
  - creating a coordination body composed of government and possibly non-governmental representatives.
- When legislation establishes a permanent multi-stakeholder advisory body to allow ongoing public participation in wildlife decision-making as well as monitoring decisions implementation, it should provide precise guidance as to the body's composition, powers, and placement in the government structure. More importantly, the law should establish the obligation for the authority to consider and respond to the advice of this oversight body.
- Multi-stakeholder advisory bodies could effectively be established at the central and local levels with different functions. At the central level, functions usually entail providing advice concerning national plans, programmes and draft legislation. At the local level, advisory bodies may be more involved in local management planning and authorization processes.
- When the law establishes multi-stakeholder advisory bodies, it should provide for the representation of various stakeholders, particularly representatives of traditional users and indigenous and local communities, rather than solely environmental NGOs. Transparency in appointments should also be encouraged by requiring the advertisement of open positions and setting out self-selection criteria for stakeholder groups, rather than just allowing the relevant administration to choose in full discretion the members of the advisory body.

## 9.5. Funding and establishment of wildlife funds

Several countries in Latin America have created specific wildlife or environmental funds with a view to earmarking financial resources for sustainable wildlife management. The adequacy of legal provisions regarding the operation of funds is an indispensable precondition to the utilization of financial resources to finance sustainability and "empower the poor." Availability of funds, in the absence of adequate and transparent management procedures, may result in the distribution of funding among a small group of stakeholders, without contributing to sharing benefits to local communities that traditionally use or conserve wildlife, or without helping change established patterns of unsustainable use.

### Recommendations:

- Create a legal basis for the return of financial resources accrued through wildlife management to local communities living in the proximity of wildlife.
- In the case of wildlife funds, legislation should specify their objectives, beneficiaries and transparent governance system. Possibly, indigenous and local communities that contribute to conserve and/or use sustainably wildlife should be included among the beneficiaries of these funds, and even be given priority among other potential beneficiaries.

### Legal options:

- Transparency in the governance structures of funds should be ensured, as well as the provision for clear procedures for participation by local communities and stakeholders in decision-making regarding use of the funds.
- Legislation should clearly indicate that local communities are among the beneficiaries of funds for wildlife management projects and that local communities' involvement in wildlife management should be one of the objectives (or even a priority) of these funds.

- In addition, legislation should provide for technical and other assistance for disadvantaged people to submit proposals to these funds.
- Funds may be specifically utilized to facilitate an equitable participation among men and women in wildlife management.

### 9.6. Wildlife tenure and community-based wildlife management

The issue of wildlife ownership and of people's rights over wildlife is directly linked to the distribution of the benefits wildlife use and conservation generate, whether such benefits consist of financial or material advantages, or limitation of damage caused by wildlife. Users weigh the costs of access, including required licences and transaction costs of engaging in bureaucratic procedures, against the expected benefits from wildlife management. If costs are higher than benefits, they are likely not to engage in the activity and turn to other land uses like forestry or agriculture, or continue with unregistered activities in the 'black market' (Commission on Legal Empowerment of the Poor, 2008b, p.16).

In this regard, the studies have shown that besides very specific examples of the live-shearing of vicuñas – in highlands that are usually unsuitable to agriculture, most good examples of wildlife management benefiting poor communities actually take place within state-owned protected areas, rather than on private or community lands, which are instead usually used for more profitable activities like agriculture or forestry. This may be due to the fact that the poorest communities in Latin America most often do not own their lands, and to over-regulation of extractive practices which makes transaction costs outweigh the potential benefits of sustainable wildlife use also in private/community lands. In this respect, the region could benefit from successful examples of community-based wildlife management in other regions like Africa and Asia.

#### Recommendations:

- Define clearly tenure over wildlife and its relation to land ownership, so that access and management responsibilities are clearly allocated for both extractive and non-extractive uses.
- When the tenure system results in the marginalization of traditional wildlife users and/or local or indigenous communities, create a specific legal basis for community-based wildlife management, and/or for sharing among local and indigenous communities living in proximity of wildlife the benefits derived from wildlife use in state or private-owned areas.
- Avoid excessive bureaucratic requirements that place barriers to access by poor communities to sustainable wildlife management activities (Addis Ababa Principle 1, Operational Guidelines).
- In drafting wildlife legislation with the aim of "empowering the poor", it is important to consider customs governing land and possible discrimination of disadvantaged groups (for example women) resulting from them. All possible efforts to avoid the perpetuation of discrimination in the wildlife sector should be made. The new wildlife legislation would then have to be particularly clear in granting specific rights to targeted groups, thus, "bypassing" any ambiguities or inequities of other legislation or practices.
- Provide capacity building and targeted support to enable local communities to access national and international markets, reducing transaction costs and strengthening monitoring. Communities often need support to negotiate their share of benefits from sustainable wildlife use, and guidance in accessing international markets.

#### Legal options:

- When wildlife is considered as state property, define clearly any rights and obligations of landowners in respect to wildlife on their land.
- When wildlife is considered private property, require the development of a sustainable management plan and/or regular reporting to relevant authorities from wildlife owners.
- Evaluate the costs of access to wildlife against costs and benefits of engaging in alternative land uses, such as agriculture,

to ensure licensing costs are not too high to deter activities that conserve biodiversity through sustainable wildlife use.

- Ensure use rights are adequate to reflect traditional use practices of indigenous and local communities, when sustainable, enabling them to engage in lawful wildlife use.
- Provide a clear and relatively detailed basis for community-based management, requiring an agreement setting out communities' rights and obligations, and/or a management plan setting out activities to be undertaken, prohibitions, benefit-sharing arrangements, applicable conditions etc. Means to enforce the rights of communities vis-à-vis third parties should also be envisaged.

### 9.7. Wildlife management planning

While legislation can provide guidance – minimum standards and procedures – for decision-making, it cannot and should not try to make detailed wildlife management decisions itself. It should rather provide a basis for wildlife management planning so as to allow flexible and adaptive decisions to be made on the basis of changing circumstances, evolving international standards, and lessons learnt from the field. As for all natural resources, the management plan is the instrument in which all the ingredients for active management are described – which organizations will undertake actions to achieve what ends, and within which limitations. Management plans should not be developed in isolation, but rather in a participatory and inter-disciplinary way that ensures consistency with other natural resources plans, in particular within related ecosystems, such as forest and wetlands management plans.

#### Recommendations:

- Specify when management planning is required in relation to wildlife in both public and private lands, and/or ensure appropriate linkages with related legislation (such as protected areas or forest laws) in which broader management planning exercises may also include wildlife.
- Assign clear responsibilities for management planning, specifying information needed (both science- and traditional knowledge-based), public participation requirements, a logical sequence of steps in the process with timelines, and legal consequences.
- In planning, consider opportunities to delegate rights, responsibility, and accountability to those who use and/or manage biological resources.
- With a view to achieving adaptive management, require periodic monitoring, evaluation and updating of management plans.
- Enshrine in the legal basis for management planning participation by relevant stakeholders, in particular traditional users and local and indigenous communities, at all levels, and identify opportunities for community-based wildlife management so that impacts on livelihoods are taken into account in order to ensure benefits also accrue to those communities in close contact with the resources.
- Implement constructive programmes that benefit local communities, such as capacity building that can provide income alternatives, or assistance in diversifying their management capacities (Addis Ababa Principle 12, Rationale).
- Apply a precautionary approach in management decisions in accordance with principle 15 of the Rio Declaration on Environment and Development and respond quickly to unsustainable practices (Addis Ababa, Principle 4, Operational Guidelines).
- Ensure that negative impacts on wildlife from other land uses or harmful activities are appropriately covered by the general legislation on EIA, or by specific provisions in wildlife laws. Access to information and public participation in the conduct of EIAs should also be clearly backed up by legislation.

**Legal options:**

Wildlife laws should at minimum provide the basics for a system of continuous information-gathering, management planning, monitoring and updating on wildlife. Legal options include:

- Clearly defining which wildlife-related activities require management plans, and creating specific obligations to provide information on the basis of such plans to the government authority (as a general obligation, as a condition of licences and concessions, etc.).
- Tailoring the level of planning to the capacities of the agencies and communities involved. Management planning should be a practical tool – one that can be created in simple form and built upon over time. Appropriately designed legislation can assist in defining attainable goals.
- Clarifying how the information will be collected and records kept, and setting the criteria to be taken into account in the development of such records (so as to cover social, economic and environmental functions of wildlife, including impact on local populations).
- Specifying who at the government level is responsible for information gathering: which government entity should ensure the collection and analysis of information, the frequency and breadth of such collection and its analysis, and forms of inter-institutional cooperation as appropriate. This could entail assigning the responsibility for preparing periodic wildlife inventories or assessments covering the whole of the country's territory to a certain central government agency, and specifying how local government agencies can contribute with information gathered at the local level.
- Specifying how traditional knowledge can be integrated in the information gathering and analysis process, by facilitating the participation of local communities. In this respect, in accordance with the Addis Ababa Principles and Guidelines, the law should also ensure that the approval of the holder of traditional knowledge is sought before including such knowledge in wildlife assessments and inventories.
- Specifying how the larger public can access information on wildlife and contribute with additional information on a voluntary basis (Addis Ababa, principle 11.1).
- Identifying in detail the information to be included in management plans. This may include at a minimum:
  - a legal description of the area covered (whether national, provincial, local, or some other designation). Such description may include or officially recognize customary land boundaries and/or natural boundaries (e.g. rivers, river basins, mountain ranges, etc.);
  - the species covered by the plan;
  - the time period for which the plan is valid;
  - a brief statement of the wildlife management goals and objectives;
  - a description of habitat types, amounts, and plant composition (where possible);
  - a description of history of land use, habitat manipulation and wildlife management;
  - data on historical wildlife harvests where such information is available;
  - approved survey methods to be used for determining population density. Indicate date when current year's survey data will be submitted;
  - an approved method for determining harvest levels; and
  - recommendations for habitat conservation for the species.
- Clarifying the legal implications of management plans: who should comply with them, which legal tools should be in line with management plans (such as allocation of quotas and conditions for permits and concessions);
- Restricting the establishment of quotas for any area or species where there is no management plan in place;
- Specifically granting a court or other authority the power to stay any agency action for a given area where it is alleged and shown that there is no management

plan or that the plan does not meet adequacy requirements;

- Requiring that an instance for public participation, particularly for traditional wildlife users where applicable, be assured before the adoption of the management plan.
- Requiring updating of plans, in particular to take into account local hunting and traditional activities.

### 9.8. Environmental impact assessment

Wildlife conservation does not only entail the protection of species or of their habitats from activities directly affecting them (such as extractive practices), but also protecting them from activities that may have a negative indirect impact on them. This is the case of industrial developments, construction, tourism and mining operations that may result in a serious disturbance to wildlife species or in the destruction of their habitat. In addition, competing land uses (forestry or agriculture) also affect wildlife, and usually different pieces of legislation may regulate in different (and sometimes conflicting) ways their impacts on wildlife. This is in recognition of the fact that actual or potential effects of human activities may concern adjacent or other ecosystems.<sup>6</sup> Indeed, in accordance with the Convention on Biological Diversity, countries are required to identify and control all potential sources of adverse impacts on biodiversity, and to carry out environmental impact assessments of projects likely to have "significant adverse effects" on biodiversity (art. 14). Wildlife laws, therefore, should take these impacts into account when providing for the conservation of wildlife, by providing tools for the detection and mitigation of these impacts.

#### Recommendation:

- Ensure that negative impacts on wildlife from other land uses or harmful activities are appropriately covered by the general legislation on EIA, or by specific provisions in wildlife laws. Access to information and public participation in the conduct of EIAs should also be clearly backed up by legislation.

#### Legal options:

- If general environmental legislation already provides EIA rules applicable to wildlife, it may still be advisable for wildlife law to clarify the link with general rules on environmental impact assessment, to avoid legislative conflicts and difficulties in interpretation.
- Request the assessment of any processes that may be harmful on wildlife (usually through an environmental impact assessment), specifying all steps and minimum requirements (such as the need of considering all alternatives).
- Specify whether such assessment would be necessary for any economic, administrative or other activities directly or indirectly impacting on wildlife and their habitats.
- Allow public access to the findings of an assessment and its justification, and to submit information or comments.
- Specify the legal implication of these assessments; for example, whether expected negative impacts would impede the carrying out of the proposed activity altogether, or whether the activity would be carried out but only in accordance with specific requirements necessary to minimizing negative effects or remedy to them, or whether it is necessary impose restrictions on the types of activities that can be undertaken, prohibiting any activities that are likely to cause irreversible damage to the environment.
- To avoid duplicative requirements, activities subject to EIA procedures, that include the submission of management plans to mitigate potential negative impacts on wildlife, should be exempted from other licensing procedures requiring the presentation of similar management plans.

### 9.9. Requirements and conditions for wildlife use

Legal requirements and conditions for wildlife use in Latin America are generally aimed at controlling or banning extractive practices, and

<sup>6</sup> CBD Decision VII/11, Annex, principle 3.



not designed to channel benefits from wildlife utilization to local communities. When allowed, wildlife use is heavily regulated, unlike land use change – for example, turning wild pastures into agricultural. Enabling wildlife use, through clear and simple licensing procedures based on management plans, including where applicable quotas, season restrictions, etc., should be the objective of wildlife regulation, rather than outright bans on all types of uses, especially when black markets are well established. Bans should be retained for highly endangered species, or those where lack of information on their status requires a precautionary approach, as required by relevant biodiversity-related international agreements.

#### Recommendations:

- Avoid unnecessary and inadequate regulations of uses of wildlife because they can increase costs, foreclose opportunities, and may lead to unsustainable land or wildlife uses (adapted from Addis Ababa Principle 3, Operational Guidelines).
- Require that issuing permits for any type of wildlife use be based on management plans following minimum standards and procedures set out in the law, to reduce discretion and potential for corrupt practices and to increase transparency and predictability.
- Ensure that fees for licences for extractive and non-extractive uses of wildlife be uniform and made available to the public.
- Ensure that minimum controls are in place for non-extractive uses of wildlife, and that legislation provides for incentives to these kinds of uses.

#### Legal options:

- Based on sustainable management plans for specific species or areas, the law should clearly define different types of use of wildlife, both extractive and non-extractive, and establish minimum requirements thereof, including conditions for licences and concessions. The law should establish which government agency

will control and enforce compliance with said requirements.

- Wildlife laws should specify the rights and duties of hunting rights holders, with a view to creating a situation of shared responsibility among wildlife managers, users and authorities. Authorities should be responsible for ensuring the conditions (necessary legal and administrative action) under which managers and users can sustainably use wildlife resources, as well as provide technical advice when necessary. Users should be specifically called upon to respect certain social and environmental requirements in the exercise of their rights.
- The law should require demonstrable capacity as a prerequisite to obtaining hunting rights. To obtain a permit or a licence, the applicant should demonstrate his/her capability to respect hunting restrictions. For instance, legislation should require an exam to demonstrate knowledge of applicable regulations to obtain permits and ensure that individuals who have violated rules and regulations in the past no longer are eligible for licence/permit to hunt.
- Simplified procedures and requirements may be put in place to give advantage to local communities, with the concurrent goal of requiring the administration to technically support local communities in their gradual assumption of wildlife management responsibilities.
- Over-regulation can be avoided by:
  - creating a subsistence category for hunting by rural populations where licences are not required, but where seasons are limited or other techniques are used to prevent over-harvests, according to the status of each resource;
  - setting licensing costs at a level sufficient to cover the adequate distribution of licences;
  - tying the use of licences, where instituted, to specific penalties and fines sufficient to encourage use/discourage poaching.

- The law should also recognise non-consumptive uses of wildlife, while providing minimum requirements to ensure that such use does not negatively affect biodiversity or the environment (such as wildlife disturbance avoidance, cautions for eco-tourism, general obligation for operators to monitor and prevent negative impacts on the environment). Specific permitting requirements for operators involved in facilitating third parties' non-consumptive uses should also be provided, as well as incentives for sustainable practices that contribute to wildlife conservation; for example, requiring the presentation of management plans, but exempting them from the payment of fees.

### 9.10. Enforcement of wildlife legislation

Allowing stakeholders' participation in the enforcement of wildlife laws may be a useful tool for "empowering the poor", as it is a way of officially recognizing the role of local and indigenous communities' role as guardians of the sustainable management of the resources, and of allowing them to enjoy firsthand the benefits derived from the rule of law. In Latin America, legislation often allows members of the public to report violations of wildlife law or to serve as honorary wildlife guards, but rarely provides for incentives to this end.

Public access to wildlife-related information is a pre-condition for effective public participation in decision-making, management planning and law enforcement, and for multi-stakeholder or community-based wildlife management activities. Although most countries in Latin America provide for general principles on public access to information related to wildlife, there are few specific rules that guarantee that these rights are effectively exercised in practice.

Members of the public should also have access to administrative and/or judicial procedures to challenge acts and omissions by private persons and public authorities which contravene provisions of wildlife law. Usually, laws simply refer to the possibility to recur to the general means for dispute resolution, but there may be a need for more detailed provisions to ensure a fair and efficient process for resolving disputes not only between users, but also between users and government

entities. The latter would function as a public monitoring mechanism over the wildlife regulatory system, including a right to challenge government decisions at administrative and judicial levels.

### Recommendations:

- Provide a clear legal basis for public participation in wildlife law enforcement, recognizing formally honorary guards and other forms of collaboration with formal law enforcement agents, and possibly provide incentives to this end.
- Clarify the rights of the public to access relevant information, which is a precondition to their effective participation in decision-making, management planning and management activities themselves. Specific procedures should complement general statements of rights in this respect.
- Provide for access to justice related to wildlife law. Specific bodies may be created to ensure that a specialized approach is taken in this respect. Alternatively, providing capacity-building to existing enforcement bodies, especially at the local level, as well as to ordinary courts to address wildlife legislation disputes are key to strengthening the effectiveness of wildlife regulations and to provide incentives for legal/registered wildlife utilization.
- Make alternative dispute resolution mechanisms available to local communities engaging in legal wildlife utilization, including small claims courts, as well as arbitration, mediation, and conciliation, as these mechanisms have proven preferable for the poor because they are more accessible than courts, affordable, comprehensible and (often) effective (Commission on Legal Empowerment of the Poor, 2008b, p.25).

### Legal options:

- Local people or organizations, or any member of the public, may be called upon to report violations or carry out enforcement functions, such as requiring hunters to show licences.

- Communities managing resources should also be provided means and support to enforce their management rules.
- Those that significantly assist in the investigations of violation of wildlife law, and/or that prevent or detect violations, should receive by law a portion of fine revenues or other symbolic or non-monetary rewards (training or employment opportunities).
- Establishing a public right to access wildlife-related information as well as mechanisms by which concerned citizens can obtain upon request information in an easy, adequate and timely fashion. The law, therefore, should:<sup>7</sup>
  - spell out how the information should be requested (from which public authority information can be obtained or where the information is deposited);
  - provide for minimal fees or exemptions to fees to obtain the information,
  - specify the grounds for refusing information and maximum timelines for providing the information requested,
  - set penalties for improperly withholding information, and/or
  - create judicial mechanisms for challenging denial of requests.
- Creating a duty to inform the public: alternatively or in addition to the right to access information, the law can impose a duty upon wildlife authorities to inform the public. Thus, the law can require as a matter of routine the online publication of certain types of information whether or not requested by the public. In this case, the law needs to specify:
  - what kind of information should be made public,
  - in what forms and in what timeframes information should be made public, and
  - which public authority is responsible for informing the public.
- Ensure that regulations are presented in a single updated or consolidated version, as appropriate, that is available online or otherwise easily accessible and understandable to wildlife users.
- Clearly provide administrative procedures allowing public recourse for the review of decisions by relevant authorities (including at a higher level within the same ministry); and an appeal procedure to independent administrative courts;
- In accordance with national laws, for example on the recognition of arbitral awards, provide a clear menu of alternative dispute settlement procedures for wildlife users. For example, provide recourse to mediation, arbitration or use of traditional dispute resolution systems, including, where applicable, a right of appeal to judicial courts.
- Create a duty for public authorities to inform users, particularly local communities, of their right to appeal and the ways in which they may exercise this right. In this respect, the law should specifically require that information regarding an appeal is clearly indicated in any administrative decision subject to same – for example, in a fine, the rejection of an application or the suspension or cancellation of a licence.

### 9.11. Gender

References to gender issues are scarce in wildlife legislation. This may be particularly problematic when wildlife use is based upon traditional or customary systems in which women are disadvantaged.

#### Recommendation:

- Address gender equality issues in wildlife legislation, when it is necessary to provide opportunities of equal access and use of wildlife resources, and/or require equal representation of women and men on wildlife advisory bodies.

#### Legal options:

- Include gender equality among the objectives of sustainable wildlife management.

<sup>7</sup> Inspired by the Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters (Aarhus Convention), art. 4.

- Require the consideration of gender equity issues in wildlife management planning and decision-making.
- Grant special support to women that contribute to the conservation and/or sustainable use of wildlife.
- Create mechanisms ensuring women's representation in wildlife management bodies.<sup>8</sup>

### 9.12. Human-wildlife conflicts

Legislation can also contribute to the reduction of human-wildlife conflicts, thus alleviating the position of some of the less advantaged people in rural communities whose property (agricultural lands or livestock) may be threatened by wildlife. In the laws which have been examined, measures permitting the killing of "problem animals" are common, although there is a trend not to classify whole native species as 'problematic' or 'pests' and rather focusing on specific animals causing damage.

#### Recommendation:

- Provisions addressing "problem animals" could be improved by requiring some consultation over the adoption of relevant measures, while also obtaining people's support of any necessary restrictions.

#### Legal options:

- When discussing management plans for species known to be considered problem animals, ensure the participation of all stakeholders in decisions on management of such species, in order to consider:
  - Agreement on land use planning, preferably as part of larger land-use planning exercises, with the goal of preventing conflicting land uses and incidents of wildlife attacks;
  - Where possible, compensation, subject to certain conditions, e.g., fencing in certain ways, cultivation of certain crops, grazing in certain areas. Transparency in allocating compensation should be ensured – for example, by simply requiring the posting of requests and grants;
  - Cooperative surveillance arrangements;
  - Requirements for the administration to monitor the implementation of measures adopted in relation to human-wildlife conflicts;
  - Requirements for people to report conflict occurrences to management authorities in order to include relevant measures within management plans for species or areas;
- Where feasible, the legislation could also require recourse to mutual or private insurance schemes.

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<sup>8</sup> Inspired by "Gender", in FAO, "Law and Sustainable Development since Rio", FAO Legislative Study # 73 (2002), p. 257.

## PART II – COUNTRY STUDIES: OVERVIEW OF NATIONAL LEGISLATION

This section presents a series of brief reviews of wildlife legislation in eleven countries in Latin America, focusing specifically on legal tools that have an impact on the capacity of local and indigenous communities to sustain their livelihoods based on the conservation and extractive or non-extractive use of wildlife.

Each country study identifies all relevant legislation in the first subsection, starting with each country's constitution down to detailed wildlife regulations. Full references to each piece of legislation, including titles in the original language and websites, can be found in the bibliography section. The country studies describe: the main institutions dealing with wildlife in each country (subsection 2); legal provisions defining tenure over wildlife and user rights (subsection 3); wildlife management planning policies and requirements (subsection 4); and conditions and requirements for the extractive and non-extractive use of wildlife – in both private lands and protected areas (subsection 5). The country studies finally address law enforcement issues, as well as public access to information and justice (subsection 6). Examples of community participation in sustainable wildlife management have been highlighted throughout the text.

### 1. Argentina

#### 1.1. Overview of the legal framework

The **Argentine Constitution** recognizes the right of citizens to a healthy and balanced environment and imparts the duty to preserve it. It tasks authorities with protecting the rights to: a rational utilization of natural resources; the preservation of natural and cultural wealth and biodiversity; and to environmental information and education (art. 41).

Argentina is a party to all global **wildlife-related conventions** (the Convention on Biodiversity (CBD), the Ramsar Convention on Wetlands and the Convention on International Trade in Endangered Species (CITES)), as well as regional treaties and agreements including: the Vicuña Convention, the Agreement on the Conservation of Albatrosses and Petrels, the Memorandum of Understanding (MoU) for the Conservation of

Southern South American Migratory Grassland Bird Species; and the MoU for the Conservation of Ruddy-headed Goose (*Chloephaga rubidiceps*). Its legislation is considered to meet the requirements for CITES implementation (CITES, 2007).

As Argentina is a federal system, it has a **General Environment Law** (2002) that sets out the minimum country-wide standards and principles for environmental protection and includes a special section on public participation. Wildlife is specifically addressed by the **Wildlife Law** (1981) and **Wildlife Decree** (1997), while more detailed regulations are adopted by the provinces. In addition, several resolutions by the Secretary of Environment developed in conjunction with the relevant provinces, set out management plans for specific species. A **Resolution on hunting trophies** (2007) establishes criteria for exports of hunting trophies and **Resolution on hunting and trade ban** (2007) lists species of which hunting is prohibited.

Protected areas are regulated by the **National Parks Law** (1980, as amended) and related legislation such as Regulations on Constructions in National Parks (2007) and the Decree on Strict Natural Reserves (1990), which regulate all economic activities, including tourism, within national parks.

Argentina's legal framework for wildlife management at the federal level comprises institutions with clear jurisdiction and legal tools to regulate wildlife in private lands and protected areas. However, due to the federal structure of the government and a Civil Code that considers wildlife as *res nullius*, or subject to appropriation, provincial regulations may sometimes be contradictory. As a result, this can have the effect of limiting, to some extent, the possibility of effectively implementing the national legal framework. For the purpose of this brief review, only national level legislation will be described.

#### 1.2. Institutional setup and role of stakeholders

The Argentine Constitution grants the **federal government** jurisdiction to develop legislation that contains minimum standards of

environmental protection (including wildlife conservation), and in turn, the **provinces** have jurisdiction to dictate legislation that complements such standards (art. 41). The Constitution also states that provinces have original ownership over the natural resources that exist within their territories, entailing that provinces, rather than the federal government, are empowered to legislate on wildlife (art. 124).

The national authority in charge of wildlife regulation is the **Secretary of Environment and Sustainable Development** through its **Direction of Wild Flora and Fauna** (Wildlife Decree, art. 1). Coordination takes place within the Federal Council for the Environment (**COFEMA**), an organ established by agreement among provincial governments for the discussion and development of coordinated environmental policies between the federal government and the provinces (General Environment Law, Annex I, Constitutive Document for the Federal Council on the Environment).

Regulation of wildlife management within national protected areas is tasked to the National Parks Administration (**APN**), a decentralized agency under the aegis of the Secretary of Tourism of the Ministry of Production, which is responsible for regulating and administering national parks, natural monuments and national reserves. The National Parks Administration has a **Fund for National Parks Promotion** which consists of revenues from sale of entry tickets to national parks, fees from concessions granted for services within parks and fines established in accordance with the National Parks Law (National Parks Law, art. 25). Provincial or municipal protected areas are regulated by the relevant local authorities.

### 1.3. Wildlife tenure and use rights

Wildlife is considered *res nullius* according to the Argentine Civil Code; in other words, it is subject to appropriation by anyone. Wildlife found on private land, however, is presumed to be the property of landowner, whose authorization is necessary for any use of wildlife located on the property. Accordingly, landowners may determine the extractive and non-extractive uses of natural resources on their land, although both national and

provincial laws may establish conditions and requirements to perform economic activities.

Wildlife in national parks is considered to be under the ownership of the federal government, although animals that wander off the limits of protected areas regain their *res nullius* status (National Parks Law, art. 13). Wildlife in protected areas may not be utilized for extractive purposes, as the National Parks Law prohibits all economic activities in protected areas, except tourism (art. 4). Non-extractive uses are incorporated in the management plan for each protected area.

Specific species declared “natural monuments”, including the Andean deer (*Hippocamelus bisulcus* and *Hippocamelus antisensis*) and yaguaretés (*Panthera onca*), are subject to the National Parks Law and, therefore, awarded a high standard of protection at the national level. Management plans for the management of species declared natural monuments are adopted by the federal government in coordination with the relevant provinces.

Argentina is characterized by large rural estates. Indigenous and local communities are generally not landowners. Poor communities’ chances of participating in the implementation of sustainable management plans and earning benefits from lawful wildlife use are thus tied to specific projects incorporating these objectives. Otherwise, both structural poverty and lack of property rights over land of indigenous and local communities act as barriers to their participation in wildlife management and to obtaining economic benefits from sustainable wildlife use, as profits are generally captured by intermediaries in the commercial chain.

### 1.4. Wildlife management planning

The Secretary of Environment and Sustainable Development, through the national Direction of Flora and Fauna, in coordination with relevant provinces, adopts **management plans for CITES-listed species and other species of special concern**, including through the establishment of maximum extraction quotas and other measures (Wildlife Decree, arts. 8–9). Species subject to national management plans include the South American camelids guanacos and vicuñas, Andean deer, foxes and parrots (Secretary of Environment, 2009). The Direction of Flora and

Fauna also regularly adopts a **list of endangered species** for which hunting and interprovincial and international trade are forbidden (Resolution on Hunting and Trade Ban).

**National management plans** are designed to ensure the sustainable use of key species based on scientific findings resulting from studies and assessments of the status of species populations. Census of species is rare though, since wildlife surveys are costly exercises, and wildlife authorities have serious budget restrictions. For example, census were developed for camelids, in order to justify the incorporation of some vicuña populations in CITES Appendix II for the purpose of live shearing. In general, management plans are thus based on indicators of population abundance, including, among other considerations, capture effort and size and age of specimens taken. Indicators are designed and adapted to particular species and regularly updated to ensure their effectiveness in portraying a species status.

Even though the legislation does not provide guidance on the procedures for the design of management plans for endangered species, the federal organization of the government, in practice, requires consensus building among range provinces and stakeholders for a plan to be adopted at the national level. Such consensus building exercises usually take the form of workshops and provide a venue for the discussion of conflicts of interest between conservation and farming, for example, those conflicts related to species thought to compete with livestock, such as guanacos, pumas and foxes.

Management plans based on population studies are also required in private lands used as **recreational hunting ranches**, as set out in the Annex to the Resolution on hunting trophies (2007). Only hunting trophies originating in ranches registered by the national Direction of Wild Fauna and Flora are allowed to be exported.

The National Parks Administration approves activities and proposed works in protected areas in accordance to each **protected area's management plan** (National Parks Law, art. 18 and Regulation for Constructions in National Parks).

### 1.5. Requirements for, and limits to wildlife use

Each province is responsible for establishing the limits to wildlife use (hunting seasons, requirements for hunting licences, etc.). Except in specific cases of endangered species subject to national management plans or those included in the Resolution on Hunting and Trade Ban, hunting is regulated by each province and typically requires a **hunting licence** provided by national or provincial authorities. In addition, hunting in private lands requires authorization by landowners (Wildlife Law, art. 9). Landowners are required to use wildlife in a sustainable manner, in accordance with the limits as provided by law (art. 8).

Wildlife use within national parks is restricted to non-extractive uses. Hunting or any other action concerning wildlife in protected areas is forbidden, unless it is considered necessary for biological, technical or scientific reasons that justify the capture or reduction of specimens of certain species (National Parks Law, art. 5(f)). Access by the public is forbidden in those areas defined as 'strict natural reserves' (Strict Natural Reserves Decree, arts. 4–5).

An example of successful regulation of **community-based sustainable management** in Argentina is provided by the Elé project for the conservation of blue-fronted parrots. International concerns over the trade in blue-fronted parrots (*Amazona aestiva*) from Argentina surfaced in a CITES meeting in 1992, when a proposal was presented to include the species in Appendix I of the Convention, due to concerns over its unsustainable trade. Considering that such a listing would entail a ban on commercial trade, Argentina proposed establishing a zero quota for exports and developing a management plan for the species in order to allow the continuation of international trade based on sustainability standards (Banchs, R. and Moschione, F., 2006). Measures to improve provincial coordination were taken and led to the holding of a workshop in 1997 where provincial authorities agreed on harmonized criteria for conservation and management of parrots. The Agreement for the Conservation of *Amazona aestiva* in Argentina was thus signed by the nine provinces where the species is found and provided the basis for a national management plan for the species and the development of the Elé project to enhance

sustainable use of parrots for the benefit of indigenous and local populations.

Since 1997, the agreement among provinces regarding the management of this species is reflected in two types of regulation by the Secretary of Environment. One is adopted periodically establishing criteria for management, including seasons and modalities for extraction of birds and conditions for transport and identification. Another, adopted annually, establishes maximum quotas for extraction, seasons for harvest of specimens, and conditions for exporters (CITES, 2008).

In the example of the blue-fronted parrots, the ways in which animals are taken are based on the reintroduction of traditional practices by indigenous communities to remove birds from lands, without felling trees. These modalities also require that at least one offspring to be left in each nest. As a result of the implementation of sustainable management measures, indigenous and local communities received up to US\$ 27,6 per specimen from exporters of birds – an income seven times higher in absolute terms than what they obtained prior to the Elé project. Such success, however, has been recently tainted by prohibitions by the European Union on the import of birds due to avian flu. Even though avian flu does not occur in the Americas, such regulation has delivered a major setback to the habitat preservation undertakings of blue-fronted parrots that had been under way (CITES, 2008).

#### 1.6. Law enforcement, public access to information and justice

The General Environment Law sets out the minimum national standards for **public participation**. All citizens have a right to present their opinions on administrative proceedings related to environmental protection. Authorities should implement procedures to channel public consultations, which are compulsory when activities planned may cause significant adverse effects on the environment (arts. 19–20). Public participation must therefore be ensured in land planning processes and EIA procedures at the stages of design and evaluation of results (art. 21).

Despite the principle set out in the General Environmental Law, procedures for public participation in wildlife management are only

sometimes established in Argentina. Nonetheless, environmental protection is recognized as the area in which public participation procedures are most common, as a matter of administrative practice. In fact, national management plans for endangered species are discussed with the relevant provinces and stakeholders including farmers, NGOs and traders to come to a consensus.

The Wildlife Law sets out fines and prison sentences for violations of wildlife regulations, which are uniform nationwide (arts. 24–28). The federal government and provincial or municipal authorities have the responsibility to enforce national wildlife legislation within their jurisdiction (art. 16).

Regarding access to justice, the 1994 Constitutional reform added a legal proceeding to enable NGOs to defend collective environmental rights. The Constitution first recognized the existence of these collective rights, which may be claimed by any citizen without needing to prove a direct relationship with the environmental resource at stake. A summary '*amparo*' procedure is also available to grant standing to damaged parties, the ombudsmen and NGOs that represent environmental interests (art. 43).

## 2. Belize

### 2.1. Overview of the legal framework

The Constitution of Belize (1981, as consolidated in 2008) does not refer to wildlife or natural resources. The main piece of legislation governing wildlife in Belize is thus the **Wildlife Protection Act** (1981, as consolidated in 2000). **Wildlife Protection Regulations** (1980, as consolidated in 2003) govern hunting and licensing of protected species as listed in the Wildlife Protection Act, as well as antelope and birds. Several other regulations concerning single protected areas were also adopted under the Wildlife Protection Act.

Belize is a party to the CBD, the Ramsar Convention on Wetlands and CITES. Its legislation, however, is categorized as not meeting the requirements for CITES implementation, and, thus, it is included in Category III under the CITES national



legislation project (CITES, 2007). In this respect, Belize has drafted new legislation, which is expected to be submitted to the CITES Secretariat shortly (CITES, 2009).

The **National Parks System Act** (1981, as consolidated in 2000) protects wildlife in national parks and wildlife reserves. The **Forests Act** (1927, as consolidated in 2000) is also specifically relevant for wildlife management, given that the definition of “forest produce” includes wild animals found in forests and any products from them (art. 2). Furthermore, the **National Lands Act** (1992, as consolidated in 2003) and the **Land Utilization Act** (1981, as consolidated in 2000), as well as the **Protected Areas Conservation Trust Act** (1996, as consolidated in 2003) provide for conservation of the natural environment in certain state lands and, thereby, affect the conservation of wildlife as well.

Other wildlife-related legislation includes the **Environmental Protection Act**, (1992 as amended in 2000), which provides the framework for the protection and rational use of natural resources, explicitly including wildlife (art. 2), and the Environmental Impact Assessment Regulations (1995, as consolidated in 2003).

## 2.2. Institutional setup and role of stakeholders

The **Ministry of Natural Resources and Environment** oversees the Forest Department of Belize and the Department of Environment. The **Forest Department** is the governing body for national forests. The **Game Warden**, who is responsible for enforcement of the Wildlife Protection Act, is an official of the Forest Department (Wildlife Protection Act, art. 10). Pursuant to the Wildlife Protection Regulations, the Game Warden regulates trade in wildlife and is responsible for licensing. The **Department of Environment**, headed by the **Chief Environmental Officer**, was established by the Environmental Protection Act, to oversee the implementation of the Act (art. 3). There are cross-references between the Forests Act and the Wildlife Protection Act; however, specific provisions on inter-institutional coordination were not found in the review of legislation (Wildlife Protection Act, art. 4; Forests Act, art. 5).

The mandate of these governmental bodies does not include a general obligation to ensure **public participation in decision making**. One exception is the legislation on EIA. Under the Environmental Impact Assessment Regulations, developers are to provide an opportunity to meet with interested members of the public, especially those community members affected by the development (art. 18). The developer must record the concerns of the local community (art. 18). At any time, the Department of Environment can invite written comments and questions and require the developer to respond to them (art. 18). Another exception concerns the establishment of specific protected areas, although it is not enshrined in general legislation on protected areas (see Section 2.5). Local communities were consulted by the Land Utilization Authority prior to the development of two protected areas – the Monkey River and Two Mile Corridor according to their legal acts of establishment (Land Utilization (Monkey River Special Development Area) Regulations, 1991; Land Utilization (Two Mile Corridor Special Development Area) Regulations, 2001). Nevertheless, the scope and the procedure for consulting with local communities were not detailed in the relevant regulations.

The **Protected Areas Conservation Trust Act** establishes a trust to conserve biodiversity and promote the natural and cultural resources of Belize (explicitly including fauna) and involves non-governmental stakeholders on the Board of Directors (art. 2). The Protected Areas Conservation Trust Board may buy land to further its goal of promoting the natural and cultural resources of Belize and maintaining biodiversity (Protected Areas Conservation Trust Act, art. 16). Among its eleven members are: a representative from a community-based organization chosen by the minister, a representative from the Belize Alliance of Conservation Non-Governmental Organisations, a representative from the Belize Audubon Society and two representatives from the tourism industry (art. 4). Pursuant to the Act, the Trust is funded by the collection of a conservation fee per visitor and a 20 percent commission from cruise ship passenger fees (art. 33). Beneficiaries of the Trust may be registered management organizations of protected areas, non-governmental organizations, community-based organizations and governmental agencies that are involved

in the conservation and management for sustainable use of Belize's natural resources (art. 35). The Trust has funded successful research projects regarding national park management, assessment programmes for freshwater fish and sustainable management for Mayan regions ([www.pactbelize.org](http://www.pactbelize.org)).

In addition, a **Consolidated Revenue Fund** was created under the Wildlife Protection Act. Any proceeds of sales from seized wildlife, or products from same, and fees for violating the National Parks Systems Act are to be paid into the Fund (arts. 18 and 22). The legislation does not set out conditions for the use of these funds.

### 2.3. Wildlife tenure and use rights

Legislation in Belize does not clearly assign property rights for wildlife. Based on the Constitution of Belize, the **general ownership of wildlife** arguably rest with the state (art. 17). Hunting is regulated by the Wildlife Protection Regulations, and the issuance of hunting licences is subject to the discretion of the Game Warden (art. 6). The **right to capture or kill wildlife** that is threatening or causing material damage to crops or domestic animals is afforded to landholders, land occupiers and owners of crops or domestic animals under the Wildlife Protection Act (art. 5). This right is limited by reasonable necessity and is coupled with a requirement to report killing or capturing of a wild animal to the nearest game ranger within one month of the act (art. 6).

### 2.4. Wildlife management planning

Existing legislation does not require surveys of the status of wildlife populations or the management planning of wildlife generally, or for specific species, in private lands. However, the protection of wildlife from harmful activities is considered in legislation on the EIA. In performing EIAs for projects that may significantly affect the environment, developers must consider the **effect of development on fauna** (Environmental Protection Act, art. 20).

Wildlife in protected areas (PAs) is subject to PA management plans. Pursuant to the National Parks Act, upon declaration of a wildlife sanctuary, the Chief Forest Officer must provide a **management plan** for the area, which is subject to approval of Minister of Natural Resources (art 9). The **National Parks**

**Act** provides for the declaration of **state parks and wildlife sanctuaries** by the Minister of Natural Resources. The minister may also revoke these acts or alter boundaries of parks and sanctuaries without consultation with the public (art. 3).

### 2.5. Requirements for, and limits to wildlife use

Special protection of certain species of wildlife is also provided for in Schedule III of the Wildlife Protection Act (art 3). None of the species listed in Schedule III may be hunted, molested or captured (art. 3). Other species of wildlife may be hunted pursuant to a hunting licence and certain restrictions as enumerated below (art. 3).

**Hunting** in private lands is governed by the Wildlife Protection Act, which also establishes methods and purposes of hunting (arts. 3 and 11). Hunting licences may be issued at the discretion of the Game Warden or by a person authorized by the Game Warden (assumedly a game ranger) (arts. 10 and 13). Overall, hunting is subject to the following licences: dealer's licence, visiting-hunter licence, local-hunter licence and annual game licence (Wildlife Protection Regulations, art. 6). Local hunters are afforded preferential treatment in the fee schedule (art. 6).

**Dealer licences** may be issued to import, export, process, buy or sell any wildlife of any species or part or product thereof (Wildlife Protection Act, arts. 2 and 7). Issuance of such a licence is subject to approval of the Game Warden and the approval of the minister (art. 13). Issuance of a dealer licence must be consistent with the Act, the regulations under same, and with the principles of good wildlife management (arts. 7 and 13), although the latter remains undefined. Notwithstanding any act, the minister can prohibit the import or export of any wild animals and products from national forests (Forest Act, art. 5). The Act also allows the minister discretion to regulate the fees regarding wildlife dealing (art. 5).

As for wildlife-related **activities on national forests or land**, the Wildlife Protection Act specifically prohibits hunting or the possession of wildlife or hunting weapons in national forests (art. 4), while the power to regulate activities in forests rests with the minister (Forest Act, art. 5).

Extractive practices are prohibited in protected areas. No person can hunt or carry a hunting weapon in National Parks (National Parks System Act, art. 6). The extraction of any wild animal or destroying the egg of bird or reptile is expressly prohibited (art. 4). In the parks and sanctuaries, activities are limited to non-extractive practices including observation of flora and fauna for education, recreation and scientific research (art. 4). There does not appear to be specific rules regarding eco-tourism.

There are also **special protected areas** in which the conservation of wildlife is addressed and limitations placed to extractive and non-extractive uses of wildlife. The Cockscomb Basin Wildlife Sanctuary, for example, was created to prohibit the hunting of wildlife in the area (Cockscomb Basin (closed Area for Hunting) Regulations, 1984, as consolidated in 2003, art 3). Similarly, the Sarteneja (Closed Area for Hunting) Regulations, 1990, created a **wildlife sanctuary** in which hunting is specifically prohibited.

Customary usage rights or rights of indigenous peoples, as well as breeding, do not seem to be addressed in current legislation.

## 2.6. Law enforcement, public access to information and justice

The Public Services Commission can appoint a Game Warden and as many game rangers as the minister may deem necessary to ensure performance of the Wildlife Protection Act (art. 10). Any person that suffers loss or damage resulting from violation of the Environmental Protection Act may in a Court of competent jurisdiction sue and recover costs for it (art. 40). Furthermore, under the Act, an individual can seek an injunction preventing environmental loss or damage (art. 40). As wildlife is included as an element of the environment pursuant to the Act, this could provide an avenue for justice in cases where a community seeks to prevent negative environmental impacts on wildlife by developers.

## 3. Bolivia

### 3.1. Overview of the legal framework

The new **Bolivian Constitution** (2009) recognizes the right to a healthy, protected and balanced environment, empowering any person or community to bring legal actions to defend such right (arts. 33–34). The Constitution also has a specific section on “Biodiversity, Coca, Protected Areas and Forest Products” that grants indigenous communities rights to co-manage protected areas overlapping on their traditional territories (Chapter VII).

Bolivia is a party to all main wildlife-related conventions, including the Vicuña Convention (see Table 1). Its legislation is categorized as meeting some, but not all, of the requirements for implementing CITES, resulting in it being included in Category II (CITES, 2007).

The legal framework for wildlife regulation is based on the 1975 **Law on Wildlife, National Parks, Hunting and Fishing**, and two supreme decrees: one Decree Banning all Uses of Wildlife (1990); and another Decree on Exceptions for Approved Sustainable Management Plans (1999) creating exceptions to the ban for products resulting from nationally approved sustainable wildlife management plans. The Supreme Decree on Mechanism for Vicuña Fibre Commercialization will also be reviewed (2006, as amended in 2007).

The **Environmental Law** (1992) creates the National Protected Areas System and sets out a common normative regime that applies to all protected areas in the country, recognizing several different categories of management and levels of administration. The **Protected Areas General Regulation** (1997) establishes six management categories for protected areas and defines activities allowed in each. There is also a specific **Regulation on Tourism Operations in Protected Areas** (2006).

Bolivian legislation places a strong emphasis on community resource management and its new Constitution raises the bar in terms of recognition of indigenous and community rights. Being such a novel instrument, the Constitution will require several amendments to existing laws to be fully implemented.

### 3.2. Institutional setup and role of stakeholders

The institution in charge of wildlife management in Bolivia is the Ministry of Rural and Agricultural Development and the Environment, through the **General Direction of Biodiversity and Protected Areas**. The General Direction implements wildlife and protected area regulations, develops management plans and determines hunting quotas, seasons and bans, as well as oversees the implementation of CITES regulations. Activities in protected areas are implemented jointly with the **National Protected Area Service (SERNAP)**, an independent entity under the aegis of the same Ministry, created by Supreme Decree No.25.158 (1998), to coordinate and ensure the integrated management of the national protected area system (**SNAP**).

A **Wildlife Advisory Council** advises the General Direction on Biodiversity on the approval of management plans for wildlife species. The Council is a consultative organ integrated by national wildlife authorities and national CITES authorities, as well as national herbaria and fauna museum collections, and those provincial or local authorities relevant to the species under consideration. One seat is reserved for a representative of environmental non-governmental organizations through the *Liga de Defensa del Medio Ambiente* (LIDEMA) (Decree allowing an exception for national sustainable wildlife management plans, art. 5).

Two entities involving community participation deal with the management of vicuñas: the **National Committee for the Trade in Vicuña Fibre** and the National Association of Camelid Producers (**ANAPCA**).

The Protected Area Regulation establishes that each protected area will have a Management Committee (renamed **Management Councils** by the Management Councils Decree, 2000) to provide an instance for participation to indigenous people, communities, municipalities and provinces, as well as private institutions and social organizations (art. 47). These Councils have a say on all proposed activities within protected areas, support control and enforcement of regulations and oversee the implementation of management plans (Management Councils

Decree, art. 3). The protected area director will perform an evaluation of the different socio-cultural groups in the area, as well as municipalities, provinces and other public or private institutions involved in the protected area's management, in order to identify stakeholders that should be represented in the council. The director will then require these stakeholders to name a representative (art. 50).

### 3.3. Wildlife tenure and use rights

The new Bolivian Constitution establishes that biodiversity is part of the state's natural wealth (art. 381), reaffirming the notion that wildlife is state property that may be transferred to private parties or communities (Wildlife Law, art. 2).

Protected areas are also owned by the state (Environment Law, art. 61), although the new Bolivian Constitution establishes that those protected areas that overlap with traditional indigenous territories ("*territorios indígena originario campesinos*") will be co-managed according to the procedures and regulations of the indigenous communities ("*naciones y pueblos indígena originario campesinos*"), while respecting the objectives of the creation of the protected area (art. 385 II). This Constitutional clause, while not expressly changing tenure rights over protected areas, provides some recognition of traditional indigenous territories by granting communities co-management rights.

The regulation on protected areas, which predates the new Constitution and will have to be adapted to comply with it, also established that protected area authorities may conclude co-management agreements with private or public entities, as well as indigenous peoples and communities with recognized legal personality (Protected Areas General Regulation, art. 75).

### 3.4. Wildlife management planning

The Bolivian Constitution establishes that the state will restrict extractive uses of biodiversity to ensure its conservation (art. 383). This is reflected in the Decree Banning all Uses of Wildlife, which prohibits all taking of wildlife except for scientific purposes on private lands and protected areas. Notwithstanding the general ban, wildlife management takes place

as an exception authorized by the Decree on Exceptions for Approved Sustainable Management Plans that allows national authorities to enact ministerial resolutions with management plans for specific communities, areas and species (art. 1). Such resolution requires the support of the Wildlife Advisory Council (arts. 2–5).

In practice, those sustainable management plans are, in the vast majority of cases, implemented by local communities, while private projects are a rare occurrence. Most approved management plans concern the commercial use of reptiles for the production of leather and the live shearing of vicuñas. Each plan is elaborated by communities, usually funded and aided by either NGOs or universities, and presented to the national authority. Plans are then evaluated and, if adopted by the General Direction of Biodiversity and Protected Areas, form the basis upon which the competent authority issues a biannual quota for a specific community to use wildlife in a particular area and for a particular species.

Within protected areas, wildlife management must conform to the requirements of one of the six general management categories for protected areas defined in the Protected Areas General Regulation (art. 19) as well as to specific management plans adopted for each area (Environment Law, art. 61). The Protected Areas Regulation also details activities that are allowed or restricted in each category and establishes zoning criteria, with permitted and restricted activities, that may be applied when defining management plans for each type of protected area (art. 31).

Management of protected areas will be financed with resources obtained, in part from income generated by the areas, which may not be utilized for other purposes (Protected Areas General Regulation, art. 5). It also states that income from tourism activities in protected areas shall be used to fund the management of such areas (art. 111).

### 3.5. Requirements for, and limits to wildlife use

As noted above, a general ban on all uses of wildlife, except those of a scientific nature, was imposed in 1990; therefore, **commercial wildlife use** is only allowed for specific species

with approved management plans. Any use of wildlife is subject to a permit to be issued by national authorities, through a ministerial resolution, based on studies and inventories (Decree on sustainable wildlife management plans, art. 1). Such resolutions specify conditions and requirements for wildlife use and determine two-year quotas (arts. 2–5).

Non-extractive uses of wildlife are outside the scope of the general ban on wildlife taking, and are, therefore allowed in both private and public lands. SERNAP and the General Direction of Biodiversity authorize activities within protected areas, all of which require licences.

The regulation on protected areas also sets out guidelines for tourism operations (Protected Areas General Regulation, arts. 99–100), requiring operations to take place in areas that have a management plan, in accordance with the applicable zoning restrictions of said plan, and subject to a fee (art. 104). In addition, other non-extractive uses must be awarded a concession upon satisfaction of several requisites including: a positive assessment of the relevant national or departmental authority in the protected area; confirmation that activities conform to the protected area's management plan and zoning provisions; confirmation that the uses proposed are consistent with the areas' objective; and an environmental licence (art. 142). A regulation on Tourism Operations in Protected Areas further details the national or departmental authorities in charge of issuing **tourism operation licences** and determining fees for such operations (arts. 9–10). It assigns responsibilities for control and day-to-day management to each Protected Area Director (art. 11). The Regulation determines tasks to be performed by the Protected Area Management Committees, which, for example, must promote tourism projects with direct benefits that engage local communities, and help in identifying violations to existing regulations (art. 12). Furthermore, the regulation subjects all tourism activities in protected areas to a prior environmental impact assessment (art. 19). It defines tourism activities, to include, for instance, photography and bird watching, noting the approval of tourism licences may include restrictions or limitations to specific activities. Detailed procedures for the issuance of tourism licences

are described in the regulation (Chapter II), along with requirements for development of infrastructure (building hostels, etc.) and rights and obligations of tourists in protected areas (Chapter IV).

An interesting example of **community-based wildlife management** is in place in Bolivia with regards to vicuñas. Specific regulations hands over 'in custody' to communities vicuñas found on each community's recognized territories, according to population studies on the abundance of species. Communities then perform live shearing according to regulations, receiving directly the total proceeds from the sale of vicuña fibre. Each kilo of vicuña fibre may sell at US\$ 300–500, which rendered benefits to communities amounting to US\$ 207 000 in 2008, through a one-off sale for export, among eight communities (Ministry of Biodiversity, 2008). Discussions are reportedly taking place at present regarding the government's intention to impose a tax on such profits, as currently only 10 percent of the proceeds from selling of vicuña fibre go to national or provincial authorities, which then must channel the funds to the monitoring and control of live-shearing operations (Supreme Decree on mechanism for vicuña fibre commercialization, art. 18). It is important to note that only local communities may register a live vicuña shearing operation, although they may decide to develop their plans and activities in collaboration with private parties or non-governmental organizations (NGOs) (art. 3).

### 3.6. Law enforcement, public access to information and justice

The Environment Law recognizes the right of all individuals to participate in environmental management (art. 92), and the right to make a formal complaint and receive pertinent information on environmental protection issues. It also establishes that petitions and initiatives must be responded to within 15 days from their submission, further to a public hearing. Decisions challenged may be suspended through an appeal (arts. 93–94). These procedures are reported to create several difficulties for the approval of new decisions on species management by national authorities as they are not effective in resolving conflicts at the design stage and provide a

*de facto* veto power to anyone opposing to regulatory change.

Wildlife control and enforcement is usually performed by local authorities and tribunals that are reported to lack specific expertise on wildlife issues. The new Bolivian Constitution, however, creates agro-environmental tribunals that may help to address this problem, as they will be specialized and have jurisdiction over claims related to violations of wildlife legislation (art. 186).

Public participation in enforcement takes place, for example, through the organization of communities to protect vicuñas from poachers. Experiences in **organized community control** in the San Pablo de Lipez Area have been highlighted by national authorities in their annual report to the Vicuña Convention, noting the need to further support community control mechanisms and to ensure prompt response by authorities to claims and reports by communities regarding illegal activities (Bolivia, 2008, p.16).

## 4. Brazil

### 4.1. Overview of the legal framework

The **Brazilian Federal Constitution** (1998, amended in 2005) lists flora and fauna among environmental assets of the state and prohibits activities that place fauna and flora's ecological functions at risk, provoke the extinction of species, or submit animals to cruelty (art. 225 §1° VII). It also establishes that the federal union, states, federal district and municipalities have the duty to protect the environment, combat pollution and preserve forests and fauna (art. 23).

Brazil has ratified the CBD, the Ramsar Convention on Wetlands and CITES, but not the Convention on Migratory Species (CMS). It has, however, ratified the CMS-related Agreement on the Conservation of Albatrosses and Petrels and signed the MoU on the Conservation of Southern South American Migratory Grassland Bird Species and Their Habitats. Its legislation is considered adequate to implement CITES (CITES, 2007).

Wildlife use is very restricted in Brazil, with the **Fauna Law** (1967) forbidding most wildlife

uses, with the exception of captive breeding regulated by a **Ministerial Resolution on captive breeding** (1997). The **Law on the National System for Nature Conservation Units** (SNUC, 2000) regulates protected areas, called “federal conservation units.” Its Regulation for the Design of **Participatory Management Plans** (2007) sets out requirements for management plans. Other related norms applicable to wildlife include the **National Environmental Policy Law** (1981, as amended), the **Environmental Impact Assessment Resolution** and related regulations (1986), the **Resolution on Public Hearings** (1987) and the **National Tourism Policy Law** (2008).

As the Brazilian legal framework for wildlife bans all extractive uses for commercial purposes, it does not allow *in situ* wildlife use, but does encourage *ex situ* captive breeding, for example through several ministerial resolutions on Yacare Caiman Skin Trade (1992), on Yacare Caiman Ranching (1990) and on Turtles (1992). As these examples show, only in exceptional cases do communities have appropriate instruments to engage in lawful sustainable extracting practices, in the case of specific sustainable management projects implemented or supported by the government. Legal reform would be necessary to create an enabling environment for sustainable wildlife management by poor communities in Brazil. In fact, pressure is mounting to reform Brazilian wildlife legislation, in order to clarify the jurisdiction of different government agencies, address sustainable management of wildlife, take account of local communities’ needs and culture, and allow them to participate in decision making and benefit from biodiversity conservation.

#### 4.2. Institutional setup and role of stakeholders

The **Ministry of Environment** plans and coordinates national environmental policy, including conservation and sustainable use of biodiversity. Under its aegis, the Brazilian Institute of the Environment and Natural Resources (**IBAMA**) is tasked with monitoring and enforcing federal environmental regulations. Similarly, the Chico Mendes Institute for Biodiversity Conservation (**ICMBIO**) manages protected areas and is tasked with promoting greater efficiency and

effectiveness in the implementation of national policy in these units.

The National Environmental Policy Law creates the National Environment System (**SISNAMA**) - a tool for inter-institutional coordination among different federal and state organs. The System is integrated by institutions in states, the federal district, and municipalities that implement or control activities with a potential to cause environmental degradation.

Other entities integrating SISNAMA include the National Environment Council (**CONAMA**), created by the National Environmental Policy Law, which adopts national standards for environmental quality, environmental licensing and regulations on wildlife and protected areas. CONAMA is a collegiate consultative body that includes representatives of federal and state entities and has wide stakeholder participation, including non-governmental organizations, indigenous organizations, civil society and environmental associations, the private sector and workers unions. Another relevant collegiate body is the National Biodiversity Commission (**CONABIO**), created by Decree No. 1.354/1994, and tasked with articulating programs, projects and activities related to the implementation of the national biodiversity policy. Environmental NGOs participating in CONAMA are elected by all NGOs registered with the National Council of Environmental Entities (CNEA). Information relevant to the election of representatives is available online ([www.mma.gov.br](http://www.mma.gov.br)).

Brazilian legislation does not establish a specific fund for protected areas but determines that income generated by each protected area will be reinvested in the management of such area (SNUC, art. 35). As the law is otherwise silent on the issue of funding of wildlife management, proceeds of environmental licences issued by IBAMA for the establishment of breeding centres or the transport of species are reportedly channelled to the central government’s budget and do not return to IBAMA directly. Fees are uniform and set out in detail in the Annex to the Environmental Policy Law.

#### 4.3. Wildlife tenure and use rights

According to the Fauna Law, the Federal Union has legal ownership of all wildlife, which

is considered a public asset. Wildlife may not be used for extractive purposes: both commercial hunting and trade in wildlife products are expressly forbidden in Brazil. The federal government may, however, authorize hunting in regions where it is a traditional activity (e.g. subsistence hunting), or in regions where animals are considered harmful to agriculture or public health (arts. 1–3).

The SNUC includes two types of protected areas: sustainable use units, and integral protection units, the latter encompassing five types of areas including wildlife sanctuaries and biological reserves (arts. 7–8). Wildlife sanctuaries aim at protecting natural environments and may be established on private lands, while biological reserves are natural areas subject to public ownership. In both cases, only non-extractive uses are allowed, subject to the unit's management plan and administrative regulations (arts. 10 and 13).

Use of fauna for non-extractive purposes in private lands, such as tourism, is allowed without permits. Non-extractive uses in private lands, particularly ecotourism, are promoted in Brazil by the Tourism Federal Agency (EMBRATUR), in cooperation with IBAMA. Captive breeding operations must be authorized by IBAMA and require permits for any movement of fauna within the country (IBAMA Resolution on Captive Breeding, art. 16).

#### 4.4. Wildlife management planning

Since use of wildlife in the natural environment is forbidden in Brazil, management planning at the national level is very limited and generally pertains to captive **breeding** operations. Brazil is implementing a new information system – “Sisfauna” – that will allow the **traceability** of all legal wildlife products from their production in breeding centres to their export. Some of the experts consulted expressed hopes that the new traceability system, added to positive results of pilot projects for sustainable use of alligators and turtles in the wild, may generate the needed political will to undertake a legal reform to promote sustainable use of wildlife products that benefit local communities.

Currently, a **wildlife management plan** is only required in private lands prior to the granting of

environmental licences for development projects that may impact on wildlife in accordance with the Environmental Policy Law (IBAMA Regulations on wildlife-related procedures for environmental licensing and impact assessments, 2007). In addition, captive breeding operations leading to exporting CITES-listed species must present a management plan to IBAMA showing that such exports would not be detrimental to the survival of the species in the wild, in accordance with CITES criteria.

Since 1997, the Chico Mendes Institute of Biodiversity Conservation is responsible for developing and implementing participatory management plans for extractive and non-extractive uses within protected areas (Federal Conservation Units). Local communities participate in the development of wildlife management plans in protected areas, classified as extractive reserves (*reserva extrativista*) and sustainable development reserves. These reserves are generally created to preserve forests and traditional livelihoods, allowing the extraction of non-timber forest products by local communities, subject to the Regulation for the design of Participatory Management Plans (2007). In these cases, each federal conservation unit has a deliberative body, chaired by IBAMA and with representatives of public institutions, civil society and traditional populations (residents in the area and users). Inhabitants in the reserve are especially considered, in decisions regarding management plans, infrastructure development that may impact on the unit and conflict resolution.

#### 4.5. Requirements for, and limits to wildlife use

As noted above, Brazil does not allow extractive uses of wildlife for commercial purposes either on private or public lands. The Fauna Law does instead encourage the creation of **captive breeding centres** that are originally populated with specimens obtained from procedures used to combat illegal wildlife trade. For example, the Quelônios da Amazônia project supports conservation efforts regarding Amazonian turtles through capacity building with local populations by providing guidance regarding captive breeding of these species to reduce pressure on wild species. The breeding of turtles is regulated by a Ministerial Resolution on Turtles, which allows



breeders to obtain 10 percent of the offspring of *Podocnemis expansa* and 20 percent of *P. unifilis* within the project's areas and use them in commercial breeding centres managed by local communities ([www.icmbio.gov.br](http://www.icmbio.gov.br)). Breeding centres require an authorization by IBAMA to operate, and must record all their activities related to movements of specimens in the "Sisfauna" information system via the Internet.

Other extractive practices, such as hunting for population control within approved management schemes or to eliminate dangerous animals, have specific requirements set out in the Fauna Law (arts. 2–3), including a permit by IBAMA.

Even though extractive uses of fauna are generally prohibited, the 1967 Fauna Law was drafted to allow exceptions to this rule. Therefore, it bans commercial hunting (art. 2), but at the same time requires all hunters to obtain hunting licences issued by relevant authorities (art. 13). It also prohibits specific methods of hunting and establishes areas where hunting is prohibited, as in protected areas, and requires the Federal Union to annually publish a list of species that can be subject to extractive practices, detailing seasons and daily quotas of species (art. 8). Certain provisions of the Fauna Law (art. 8(h)) also regulate recreational hunting. The interpretation of these contradictory provisions by IBAMA authorities is, however, clear and uniform countrywide, in the sense that hunting is prohibited as a general rule, except for those cases expressly authorized by IBAMA for scientific reasons, to limit populations in accordance with management plans or to eliminate animals causing damage to agriculture or public health.

The Fauna Law does not provide for community participation in setting limits to wildlife use. IBAMA, however, does subject proposed legislation to comments by civil society through its website and has included the participation of local communities in the design and management of specific projects.

The "*Jacaré do Pantanal (Caiman crocodillus yacare)*" case provides another example of ranching in protected areas. It is regulated by specific legislation that allows collecting eggs from the wild and using them for breeding and commercialization. These activities are based

on several **ministerial resolutions on Yacare Caimans**. The Mamiraua project, for example, provides valuable resources to communities and, similar to the Quelonios turtles project described above, is an exception to Brazil's restrictive policy towards extractive wildlife management practices ([www.mamiraua.org.br](http://www.mamiraua.org.br)).

#### 4.6. Law enforcement, public access to information and justice

Participation by civil society also takes place in development projects that may impact wildlife and trigger the need for an **environmental impact assessment**. CONAMA's Environmental Impact Assessment Resolution establishes that EIAs are public, even while subject to technical consideration, and public audiences may be organized when considered necessary (art. 11). The Resolution of Public Hearings further requires that public hearings be organized when interested parties express an interest in being informed of the EIA underway. For instance, public hearings may be requested by environmental associations, or a group of at least 50 citizens (art. 2).

IBAMA also encourages citizens to report violations of wildlife regulations through a toll-free phone number, "*Linea Verde*." Reports received through *Linea Verde* are analyzed through an administrative proceeding by IBAMA. They may lead to the imposition of fines or commencement of criminal prosecution, depending on the subject matter.

Enforcement of wildlife regulations is ensured by federal and state authorities, including specialized environmental police at the state and federal levels, the environmental prosecutor and IBAMA delegations throughout the country.

## 5. Chile

### 5.1. Overview of the legal framework

The **Chilean Constitution** (2005) establishes that the state should ensure the preservation of nature and may restrict rights in order to protect the environment (art. 19(8)). Chile has ratified all global wildlife-related conventions, including the Vicuña Convention and the agreement on the Conservation of Albatrosses

and Petrels. It also participates in the MoU on the conservation of High Andean Flamingos and the MoU on the Conservation of the Ruddy-headed Goose. Its wildlife legislation has been classified as not meeting all the requirements to implement CITES, thus, it is included in Category II under CITES national legislation project (CITES, 2007).

Laws regulating wildlife in Chile date back to the first **Hunting Law** of 1929, which has been modified several times, most recently in 1996. In 1998, a list of Chilean wildlife species, the status of their conservation, as well as a list of species that may be hunted with applicable quotas, was established by the **Regulation to the Hunting Law** (the list was further modified in 2004).

The **Protected Areas Law** (1984) designates the national system of protected areas under the leadership of the National Forestry Corporation (CONAF). The relevant legal framework is completed by the **General Environment Law** (1994, as modified in 2007), which establishes criteria for the performance of EIAs, as well as for public participation.

Chile's legal framework is based on landowners' property rights over wildlife on their land and the categorization of species according to their conservation status. Successive reforms have allowed the sustainable use of wildlife in private lands and protected areas, while establishing clear limitations to wildlife use with applicable countrywide and transparent criteria to ensure species conservation.

## 5.2. Institutional setup and role of stakeholders

The Ministry of Agriculture, through its **Agriculture and Livestock Service (SAG)**, has jurisdiction over wildlife management and regulation, including granting permits for hunting and wildlife use. SAG's regional offices both regulate and control the enforcement of wildlife regulations on public and private lands.

Protected Areas are under the jurisdiction of **CONAF**, an agency with independent legal personality under the aegis of the Ministry of Agriculture. CONAF also manages vicuñas and implements the Vicuña Convention. Wildlife management in protected areas is

**financed**, at least in part, from the proceeds of non-extractive uses of wildlife, including the sale of tickets to visitors and tourism concessions granted within these areas. CONAF has several sources of income to fund the work of the organization and a specific budget independent from that of the Ministry of Agriculture. The Protected Areas Law states that resources obtained through fees and concessions in protected areas may be used solely for the purposes of administering and controlling protected areas (Protected Areas Law, art. 11).

The National Environment Commission (**CONAMA**) advises directly the President on environmental policy, promoting public participation and regulating EIAs (General Environment Law, art. 69). Its Executive Council is composed of ministers from all areas related to the environment, including the ministers of economy, agriculture, health, transport and mining. Since CONAMA is policy-oriented, and integrated by representatives of all relevant ministries related to wildlife management, most of inter-institutional coordination takes place within this forum. For example, the new categorization of species according to their conservation status is drafted by CONAMA and adopted as a regulation by SAG.

CONAMA is supported by the **National Advisory Council** and **Regional Advisory Councils**, whose members are representatives of academia, scientists, NGOs, business and labour unions (General Environment Law, art. 78). Thus, these advisory bodies, at different government levels, allow for public participation in decision-making.

## 5.3. Wildlife tenure and use rights

Chilean legislation on wildlife tenure and use rights was originally based on its Civil Code, whereby wildlife is considered private property of landowners. The legal regime, however, evolved towards a greater level of government control; thus, at present, the Civil Code still requires authorization by the landowner to hunt on private land, but also establishes that hunting is subject to legislative regulation (art. 609). Legislation regulating hunting categorizes all Chilean species according to their status of conservation and only allows **extractive practices in private lands**, in

limited cases, subject to the issuance of hunting permits by SAG. **Non-extractive uses on private land**, however, continue to be a prerogative of landowners, as they are not subject to Hunting Law.

**Extractive uses in protected areas** are forbidden by law. CONAF has jurisdiction to establish the details of protected areas management plans, and also determines the conditions and issues concessions for **non-extractive uses in protected areas**, including tourism (Protected Areas Law, arts. 11–14).

#### 5.4. Wildlife management planning

The General Wildlife Law establishes that public entities in charge of regulating wildlife use, in private or public areas, must require **users** to submit and comply with **management plans** to ensure species conservation. Among other criteria, these plans must address the protection of species as categorized in danger of extinction, vulnerable, rare or with insufficient information available (art. 42). These requirements do not apply to those activities in protected areas that require an EIA.

The Protected Areas Law establishes that CONAF must elaborate a **management plan for each protected area** establishing four management categories (art. 3–7 and 13). The General Environment Law also requires **EIAs** for all activities in protected areas and sets out the procedures for public participation in the review of, and comment on, EIAs presented (arts. 10 and 26–31).

The Hunting Regulation categorizes wildlife according to its conservation status and sets general criteria and conditions for the use of wildlife in each category. Wildlife is classified according to the following **categories**: beneficial for agriculture; with reduced population density; beneficial for ecosystem balance; in danger of extinction; vulnerable; rare; with insufficient information; and not in danger.

In practice, SAG categorizes species according to **census information**, but only certain species, for example, guanacos, vicuñas, pumas and grey foxes. For most species, quotas are set based on historical

extraction levels, as population studies are unavailable.

#### 5.5. Requirements for, and limits to wildlife use

The Hunting Law determines that extractive uses of wildlife require permission of the landowner, as well as a **hunting permit** issued by the SAG, pursuant to payment of a fee and **successful completion of an exam** (art. 8).

Public participation is not provided for in SAG proceedings, through which wildlife use conditions are determined and permits issued. The Hunting Law prohibits the hunting of species that are classified as: in danger of extinction, vulnerable, rare, beneficial to agriculture or to ecosystems, and/or those that are reduced in population density (art. 3). It also enables authorities to establish hunting seasons, quotas and areas where hunting is permitted or restricted. Hunting is prohibited, for example, in national parks and other protected areas (art. 7).

The Regulation to the Hunting Law determines maximum **quotas per day and per hunter**, in the different areas of the country, and hunting seasons for species for which hunting is allowed (art. 5). When a **hunting ranch** is established, a specific EIA is required to determine the effect of the proposed activities on the ecosystems (art. 27).

In exceptional cases, SAG may allow the **hunting of protected species** for the sustainable use of such species (Regulation to the Hunting Law, art. 9). In that case, a request for an authorization by SAG must include a population study or census, by competent professionals providing scientific backing to the project, methodologies for extraction and management of the species (art. 18).

#### 5.6. Law enforcement, public access to information and justice

The General Environment Law tasks regional environmental commissions and CONAMA with establishing the mechanisms to ensure informed participation by the community in the process of reviewing the application for EIAs presented. It specifies the information that must be made public, grants civil society organizations and affected individuals access to all information presented and establishes

deadlines for submission and consideration of civil society arguments (arts. 26–30). The SAG, the authorities in charge of protected areas and the police are in charge of enforcing the Hunting Law (art. 39). Criminal tribunals have jurisdiction to address infractions of the Hunting Law, including determining monetary and detention penalties (arts. 29–30). Access to justice is available to all citizens, who may report violations of the Hunting Law and its Regulation (art. 45).

The Hunting Law also allows the SAG to designate **honorary wildlife inspectors** among civil society organizations, including wildlife breeders associations, hunting clubs, associations for the protection of animals and environmental institutions, to aid in controlling wildlife trade (arts. 40–43). The legislation does not provide remuneration or incentives for these activities. Among tasks that honorary wildlife inspectors may perform are requiring hunters to show their permits and identification and presenting claims to relevant authorities for violations or crimes observed during the exercise of their tasks.

An example of local community participation in wildlife enforcement is provided by three female members of the native community in the Rapa Nui National Park in Easter Island (a World Heritage Site by UNESCO), who participate in the park's management as park rangers. This percentage of female rangers is yet unmatched in the rest of the protected areas service in Chile (CONAF, 2008).

## 6. Costa Rica

### 6.1. Overview of the legal framework

Costa Rica's **Constitution** (1949, as amended) recognizes the right to a healthy and balanced environment (art. 50). Costa Rica has ratified all wildlife-related conventions and its legislation is considered adequate to implement CITES.

The **Wildlife Conservation Law** (1992, and amendments) and its Regulation (2005) include detailed provisions on wildlife use, as well as classification of species according to their level of conservation. The **Regulations for hunting outside protected areas and fishing in protected areas** (2009) set forth the

requirements and conditions for hunting in Costa Rica. The **Organic Environmental Law** (1995, and amendments), the **Biodiversity Law** (1998), and its Regulation (2008), complete Costa Rica's legal framework for wildlife management.

The legal framework addresses all uses of wildlife, allowing local communities to obtain licences for subsistence hunting. Wildlife use for commercial purposes is only allowed in captive breeding operations; therefore the potential for local communities to maintain their livelihoods through sustainable wildlife use is quite limited.

### 6.2. Institutional setup and role of stakeholders

The Ministry of Environment, Energy and Communications, through the National Conservation Areas Service (**SINAC**), is in charge of the management of wildlife and protected areas in Costa Rica (Wildlife Conservation Law, arts. 6 and 17). SINAC is also the CITES management authority (Wildlife Regulation, art. 130).

The National **Environment Council** is integrated by ministers in areas related to activities that may impact the environment. The Council advises the President of Costa Rica on issues related to environmental policy, including the mechanisms to conserve "environmental elements" and the means to integrate them into the sustainable development process with the organized participation of communities (Organic Environmental Law, arts. 77–78).

Regional Conservation Areas Councils (*Consejos Regionales Ambientales* or **CORAC**) and their representatives in the National Conservation Areas Council advise the Minister of Environment on the management of each specific conservation area (Biodiversity Regulation, arts. 30–31). They were created by the Organic Environmental Law, under the aegis of the Ministry of Environment, as decentralized organs for the assessment, discussion, monitoring and control of environmental projects and activities (art. 7). CORACs are integrated by representatives of local community organizations and non-governmental organizations, public institutions and municipalities present in each

conservation area. A public call for those organizations interested in registering for participation in a CORAC is required prior to its constitution, and each sector elects its members (Biodiversity Regulation, arts. 30–31).

Funding for SINAC is secured through several sources, including a **Wildlife Fund** that administers the proceeds of wildlife fees collected for authorizations, permits and licences (Wildlife Conservation Law, art. 11), and a **Protected Areas Trust Fund** that includes all resources generated by the national system of conservation areas (Biodiversity Law, arts. 36 and 38). The former was created to finance ordinary administration costs of implementing the Conservation Law, whereas the latter was established to fund the conservation and development of the protected areas system. Regulations do not include among potential beneficiaries of these funds non-governmental stakeholders, as said funds have been set up to cover regular management costs for authorities.

### 6.3. Wildlife tenure and use rights

Wildlife is considered part of the state's natural wealth and is owned by the state. The Wildlife Conservation Law establishes public ownership of wildlife and declares activities related to its sustainable use of public interest (art. 3). The Organic Environmental Law also declares sustainable use as activities of public interest (art. 42). The national government, therefore, regulates all uses of wildlife in public and private areas, including subsistence hunting.

Wildlife sanctuaries (*refugios de vida silvestre*) may be of public, mixed or private ownership, each category subject to different management conditions as set by the Wildlife Conservation Law and implemented by the Ministry of Environment (art. 82).

### 6.4. Wildlife management planning

The Wildlife Regulation lists all native species in Costa Rica, according to their conservation status, and determines restrictions applicable to each category. Due to budget restrictions, the conservation status of species is not based on population studies, but rather on adaptive management strategies, drawing from the opinion of collegiate bodies and experts, as

well as findings from universities, NGOs and international organizations. As an administrative practice, input from communities with interest in particular species is requested, although not through a formalized process.

Wildlife use for commercial purposes is only allowed in captive breeding centres, which must present a management plan following the detailed specifications in article 46 of the Wildlife Regulation, for approval by SINAC subregional offices. Such specifications do not require the consideration of the interests of local communities.

The Organic Environmental Law establishes seven management categories for protected areas (art. 32). The Ministry of Environment authorizes activities in protected areas, including those by private parties in wildlife sanctuaries of mixed or private ownership. The Wildlife Conservation Law requires the Ministry to follow strict conservation and sustainability criteria when evaluating proposed activities, further to the presentation of an EIA by the proponents (art. 82).

### 6.5. Requirements for, and limits to wildlife use

Extractive uses of wildlife, other than those included in the Regulations for Hunting outside Protected Areas and Fishing in Protected Areas, are only allowed as a result of authorized captive **breeding** operations (Wildlife Law, arts. 1 and 14). Once approved, captive breeding projects must be publicized in newspapers, allowing a week for the presentation of objections (Wildlife Regulation, art. 45). SINAC regional offices will then determine maximum quotas for commercialization according to the technical criteria and inventories presented (Wildlife Regulation, art. 87; Wildlife Conservation Law, arts. 14 and 25).

Conditions for recreational and subsistence hunting, specifying seasons, areas and subject species, are set out in detail in the Regulations for Hunting Outside Protected Areas and Fishing in Protected Areas. **Recreational hunting** licences are issued by SINAC and regional offices, pursuant to the payment of a fee and the successful completion of an exam on hunting regulations (Wildlife Conservation Law, art. 41).

Non-extractive uses, including **ecotourism**, are not addressed by the law, which focuses on prohibiting extractive practices. Regulation of non-extractive uses may, however, fall under the jurisdiction of the Ministry of Environment, through SINAC, however, as it has the mandate to define activities allowed within protected areas.

## 6.6. Law enforcement, public access to information and justice

Monitoring of compliance is ensured by the Environment Ministry, as well as the environmental prosecutor (Organic Environmental Law, art. 102). The Wildlife Conservation Law enables the Environment Ministry to designate wildlife inspectors to assist in law enforcement, which may consist of **ad honorem inspectors and natural resource control committees** (COVIRENAS) (art. 15).

Costa Rica's Constitution provides all individuals standing to report violations of environmental rights and claim compensation from authorities (art. 50). The Biodiversity Law also enables any person to present a report or claim regarding the violation of biodiversity regulations (art. 105). In addition, all citizens in Costa Rica are guaranteed free access to information from authorities regarding issues of public interest (Constitution, art. 30).

# 7. Ecuador

## 7.1. Overview of the legal framework

The Ecuadorian **Constitution** (2008) recognizes the right to live in a healthy and balanced environment and declares public interest in ecosystem and biodiversity conservation (art. 14). It also requires the state to take precautionary measures to prevent the extinction of species or destruction of ecosystems (arts. 72-74) and recognizes the duty to respect Mother Nature or "Pacha Mama." The Constitution also sets out principles to guide environmental policy, including the active and permanent participation of affected people and communities in the planning, execution and control of all activities that result in environmental impacts (art. 395(3)).

Ecuador has ratified all **wildlife-related conventions** including the Vicuña Convention and the Agreement on the Conservation of Albatrosses and Petrels (see Table 1). Its legislation is not considered as meeting all the requirements to implement CITES; thus, it is included in Category II (CITES, 2007).

The legislation applicable to wildlife includes the **Environmental Management Law** (1981, codified in 2004), which harmonizes existing regulations, clarifies the environmental jurisdiction of state entities and establishes participatory mechanisms for communities. The **Law on Forestry and Conservation of Natural Areas and Wildlife** (1981, as codified in 2004 – hereinafter Forestry Law) defines jurisdiction over wildlife and protected areas. The regulations codified in Title IV of the **Unified Ministry of Environment Legislation Decree** (2002, as amended – hereinafter Biodiversity Regulations) set out the detailed conditions for wildlife use. The **Criminal Code** includes sanctions for the extraction of wildlife in contravention of existing laws. Ecuador also has a **Special Law for the Galapagos province** (1998), which sets out a management scheme for the Galapagos Island Reserve.

Wildlife legislation in Ecuador is in a process of codification and updating, which is expected to ensure an enabling environment for sustainable wildlife management. It has a strong focus on community participation that, if accompanied by needed resources, may promote the improvement of livelihoods through sustainable wildlife management projects.

## 7.2. Institutional setup and role of stakeholders

The Environmental Management Law establishes that the **Ministry of Environment** is the national authority in charge of maintaining and coordinating the **National Decentralized Environmental Management System**. The System is the mechanism for transectoral coordination and cooperation among the different levels of environmental and natural resources management, subject to the technical guidance of the Ministry of Environment (art. 10). The System is directed by a commission, headed by the Minister of Environment, with a wide representation, including representatives of: the national

planning and development agency, provincial and municipal councils, environmental NGOs (CEDENMA), the council for the development of nationalities and peoples of Ecuador, black and Afro-Ecuadorian people, the armed forces and the National Superior Education Council (art. 11).

The central government has jurisdiction over protected areas and natural resources (Constitution, art. 261). The Ministry of Environment is in charge of planning, management, administration and control of wildlife in private lands and protected areas (Forestry Law, arts. 5(f), 39, 76, 43, 66–68). The Ministry of Environment may establish **Protected Area Management Committees** to support the management of each protected area, with participation by all interested parties, including local communities represented by their traditional chiefs (Biodiversity Regulations, art. 169).

A special **Forestry Fund** was created by the Forestry Law, which includes all resources accrued from forestry and wildlife use licences and concessions. However, resources do not necessarily return to those resources that generate them (arts. 75–77). The Special Galapagos Province Law has a specific fund, where all proceeds from tourist entry fees to the Galapagos Island are channelled and used for the conservation of this unique ecosystem (art. 11).

### 7.3. Wildlife tenure and use rights

According to the Constitution, biodiversity and genetic wealth are property of the state (art. 261). The Forestry Law specifies that wildlife is owned by the state, with the Ministry of Environment maintaining jurisdiction over its conservation, protection and administration (arts. 1 and 73). Thus, the Environment Ministry issues all licences for wildlife uses in private and public areas. The Forestry Law further clarifies that protected areas belong to the state, which must conserve them unaltered, formulate plans for management of same (arts. 66–68).

The Constitution also recognizes ‘nature’ as entitled to rights, namely to a right to redress, which is distinct from the rights to compensation of affected individuals. It further states that individuals, communities, peoples

and “nationalities” also have the right to benefit from the environment, and that environmental services may not be subject to appropriation but must be regulated by the state (arts. 72–74).

### 7.4. Wildlife management planning

Wildlife use in private lands and protected areas requires a permit by the Ministry of Environment (Forestry Law, art. 74). Species for which hunting is allowed are determined by the Ministry of Environment, based on technical studies and in consultation with hunting and fishing clubs and associations (Biodiversity Regulations, art. 82).

Protected Areas are categorized in the Forestry Law and require a management plan for each area (art. 68). Existing management plans are available online ([www.ambiente.gov.ec](http://www.ambiente.gov.ec)) and identify non-extractive activities allowed in each area, including eco-tourism, bird watching, etc.

The Special Galapagos Province Law (art. 37) includes a sustainable management regime, whereby a **management plan** for the island is developed by an inter-institutional management authority. The authority is headed by the Minister of Environment and composed of ministers or their representatives from the defence, trade, industrialization, fisheries and tourism agencies, as well as the Galapagos provincial tourism chamber, the Galapagos’ artisanal fishing sector and the conservation, science and education sector of Galapagos (arts. 13–14).

The Constitution of Ecuador states that all activities that may impact the environment are subject to consultations with relevant **communities**, which should be widely and timely informed (art. 398). It also calls upon the state to promote the participation of communities, peoples and “nationalities” in their administration and management of lands in protected areas that were inhabited since ancestral times (art. 405). It grants communities the right to participate in the use, benefits, administration and conservation of renewable natural resources found on their lands (art. 57). This concept, translates in practice, into activities implemented by the Ministry of Environment for the sustainable management of wildlife and the legalization of

unregistered wildlife operations by local communities.

### 7.5. Requirements for, and limits to wildlife use

The Ministry of Environment controls hunting and other extractive practices and develops non-extractive activities (Forestry Law, art. 73). Commercial hunting is not allowed in Ecuador; however **subsistence hunting** and **recreational hunting** are permitted with prior authorization (licence) by the Ministry of Environment in all areas, except protected areas, protection forests and roads (Biodiversity regulations, art. 78). Licences for hunting have a differential price for nationals and foreigners and are free for subsistence hunting (art. 86).

**Endangered species** for which hunting is prohibited are listed in Annex I to the Biodiversity Regulations. The Biodiversity Regulations also establish hunting seasons, methods of hunting and types of wildlife for which recreational and subsistence hunting are allowed (arts. 80–81).

**Commercial wildlife use** is only allowed as a result of captive **breeding**, authorized by the Ministry of Environment, and requires a management plan (Biodiversity Regulations, art. 126). Breeding operations have been authorized, for example, for black caiman, boas, insects, butterflies and toads.

**Non-extractive wildlife uses** in protected areas are defined in each area's management plan. Tourism in protected areas, however, is regulated by the Special Regulation on Tourism in Protected Areas, contained in the **Unified Ministry of Environment Legislation Decree**, which requires that management plans include mechanisms to monitor the impact of tourism in these areas (art. 15).

### 7.6. Law enforcement, public access to information and justice

The Constitution requires the state to take precautionary measures to prevent the extinction of species or destruction of ecosystems (arts. 72–74) and recognizes rights to respect Mother Nature or “Pacha Mama.” Individuals, communities and peoples have standing to request public authorities the

respect of such right (art. 71). In addition, every citizen or group of citizens has a right to be heard in civil or criminal proceedings that arise from violation of environmental laws, even if their own rights have not been affected (Environmental Management Law, art. 42).

## 8. Guatemala

### 8.1. Overview of the legal framework

The **Guatemalan Constitution** (1985, amended in 1993) establishes that fauna should be used rationally and its depredation prevented (art. 97). It also tasks the state with the creation of national parks, reserves and wildlife sanctuaries (art. 64). Guatemala is a party to the CBD, CITES and Ramsar conventions but is not a party to the CMS. Its legislation is considered to meet the requirements for CITES implementation (CITES, 2007).

The **Protected Areas Law** (1989, as amended) and its Regulation (1990, amended in 1992) set out the framework for the regulation of wildlife management in protected areas, as well as on private lands. In addition, the **List of Endangered Species** identifies Guatemala's flora and fauna according to three levels of conservation status (LEA, CONAP, 2006). The **General Hunting Law** (2004) establishes the detailed requirements for recreational and subsistence hunting.

Other laws with bearing on wildlife management include the **Environment Protection and Improvement Law** (1986, as amended), which sets out general environmental principles, and the **Access to Public Information Law** (2008), which allows individuals to access information regarding wildlife decisions by authorities.

Guatemala's legal framework is better articulated with regard to protected areas than with regard to wildlife use on private lands. A few examples of wildlife management involving communities exist, including co-management of protected areas. Nevertheless, the permitting system for all types of wildlife use, including subsistence hunting, is complex and may facilitate corrupt practices or the criminalization of activities that support the



livelihoods of the poor, who encounter serious obstacles in obtaining permits.

## 8.2. Institutional setup and role of stakeholders

The main authority in charge of wildlife management in Guatemala is the National Council on Protected Areas (**CONAP**), an independent agency created by the Protected Areas Law. The **Ministry of Environment** has incorporated the mandate of the former National Environment Commission (CONAMA). CONAP is directly accountable to the President of Guatemala, and tasked with the coordination and implementation of Guatemala's Protected Areas System. CONAP is led by an Executive Secretary appointed by the President, and composed of representatives of: the Ministry of Environment, the Centre for Conservation Studies, the National Institute of History and Anthropology, environmental NGOs registered with CONAP, the National Association of Municipalities, the Guatemalan Institute of Tourism and the Ministry of Agriculture, Livestock and Food (MAGA) (Protected Areas Law, arts. 60-63). Resources for CONAP include income generated by concessions and entry fees in the Protected Areas system.

The Hunting Law establishes a specific **wildlife fund** (*Fondo Privativo de Protección y Fomento de la Fauna Silvestre*) managed by CONAP to finance activities in protected areas and reproduction sites, with the proceeds originating from hunting licences and fees issued by CONAP (arts. 17–18). Similarly, the Protected Areas Law establishes that proceeds from fines for violations of the law will be channelled to a special CONAP account to finance capacity-building activities for its staff on the management, conservation and control of protected areas (art. 83 bis).

## 8.3. Wildlife tenure and use rights

Wildlife on private land is the property of landowners, who must authorize any use of wildlife on their lands. Use is also subject to authorization by CONAP which set forth permitted uses and relevant prohibitions and restrictions. All wildlife extractive uses, in both private and public areas, thus, require a permit issued by CONAP and permit holders must also comply with the classification of wildlife in the List of Endangered Species, so public

inputs are left to the non-governmental stakeholders that are integrated in the Council (see section 8.2).

According to the Guatemalan Constitution, national parks, reserves and wildlife sanctuaries are inalienable public property (art. 64). Wildlife in protected areas is, therefore, considered property of the state and wildlife management decisions are made by CONAP. Most protected areas are managed solely by CONAP. There are instances, however, in which CONAP co-manages protected areas with: municipalities and communities according to their customary rights; or with NGOs. Co-management with private landowners takes place in private natural reserves (CONAP, 2004). In this case, areas are managed according to the Guatemalan Protected Areas System but property remains with the landowner (Protected Areas Law, art. 10).

Tenure conflicts in protected areas are a source of concern in Guatemala, as invasions of protected areas are common both by communities displaced by armed conflict who search for new agricultural lands and by *narco-ganaderos* – powerful individuals who take control of these areas for livestock farming and illegal drug-related activities. These situations are raising serious concerns over the future of some key protected areas, including archaeological sites like the Mayan ruins of Tikal (CONAP, 2009).

## 8.4. Wildlife management planning

CONAP publishes regularly the **List of Endangered Species** (LEA) in Guatemala, classifying all native species according to three categories. No formal instances for public participation are required by CONAP in developing the list of endangered species.

CONAP's LEA sets forth the limits to extractive uses of wildlife. Species in category I include those in danger of extinction and their trade in specimens or products from the wild is prohibited. As to category II-III species, their commercial use must be regulated through management plans approved by CONAP to guarantee their sustainable use. In addition, the use of category II species in protected areas, for scientific, breeding, or commercial reasons requires an EIA (LEA, CONAP, 2006).

The Hunting Law requires CONAP to base regulations on hunting seasons and quotas on scientific information obtained from **field studies** (art. 20).

Guatemala's legislation requires a management plan for captive **breeding** operations. These plans require a detailed description of activities to be developed but do not require the consideration of interests of local communities (Protected Area Regulation, art. 62).

The Protected Areas Law regulates wildlife management in protected areas in Guatemala, and establishes seventeen different **categories of management** for these areas (art. 8). All protected areas in Guatemala must have a "master management plan" and annual operative plans approved by CONAP, in accordance with the activities allowed for the relevant category of protected area (art. 18). No specific procedures are contemplated for public or community participation in the determination of master management plans, although these must be submitted by those entities managing the areas, which in some cases include communities and private parties as co-managers (Protected Areas Regulation, arts. 22-23). CONAP has also recently created a unit for coordination with indigenous peoples and civil society.

Participation in decision-making regarding wildlife management by local communities is not formally required in Guatemala. However, as a matter of administrative practice, and based on the constitutional protection granted to indigenous communities (arts. 66–67), CONAP implements public participation procedures for decision making regarding management of species or protected areas. For example, the public can participate in discussions on revisions of the hunting law and its regulation. Most wildlife regulations are initially drafted by a technical consultant, hired by CONAP, and draft proposals are then discussed internally and through several workshops with NGOs and affected communities. Once the consultations are over, regulations approved by CONAP are submitted to the national Congress. In the case of the list of endangered species, for instance, the update process is expected to take three years.

## 8.5. Requirements for, and limits to wildlife use

All wildlife extractive uses, in both private and public areas, require a permit issued by CONAP (Protected Areas Regulation, art. 47). CONAP regularly publishes the lists of species that may be hunted for recreation or subsistence, including restrictions regarding hunting seasons, hunting areas, hunting methods or sex of the specimens (Hunting Law, art. 6). CONAP also establishes requirements to obtain hunting licences and fees as well as all other relevant regulations applicable to this activity. Contrary to international standards, the Hunting Law also includes an 'inverse' precautionary principle, which establishes that lack of knowledge on population densities or the reproductive dynamics of populations will not be a reason to deny subsistence or recreational hunting permits (art. 32).

**Recreational hunting** requires a general hunting licence as well as specific licences depending on the species and areas where hunting will take place (Hunting Law, arts. 9–12). **Subsistence** hunters are also required to have a licence issued by CONAP, but they are exempted from paying a fee (Protected Area Law, art. 46).

Regarding protected areas, CONAP awards all concessions for use both extractive – in those categories allowed – and non extractive, in accordance with the master management plans for each area (art. 19). **Extractive practices in protected areas** are evaluated on a case-by-case basis, in accordance with the area's categorization and master management plan. In all cases, a specific licence issued by CONAP is required (Protected Areas Law, art. 49; Hunting Law, art. 41). For example, hunting is permitted in multiple use areas and buffer zones for certain types of protected areas (Hunting Law, art. 31). In addition, all activities in protected areas, including tourism, require: private parties to sign a contract with CONAP based on an EIA; the contract to conform with the management plan for the protected area; and the contract to be approved by the Environment Ministry (Protected Areas Law, art. 20). Furthermore, CONAP has published guidelines for non-extractive uses of wildlife in protected areas, including a **code of conduct regarding bird watching and eco-tourism** (CONAP, 2000).

Non-extractive wildlife uses in private lands are not regulated in Guatemala.

One successful example of a **community-based wildlife management** includes a project that supports two communities, the Uaxactún Community Forestry Concession and Carmelita community, who are responsible for managing wild turkey (*Meleagris ocellata*), and can proceed with the international sale of recreational hunting permits of male turkey specimens during specific seasons (CITES, 2005). The management plan, based on the Addis Ababa Principles and Guidelines on Sustainable Use of Biodiversity, reportedly allowed the communities to earn US\$ 41 525 in 2005.<sup>9</sup>

## 8.6. Law enforcement, public access to information and justice

The Protected Areas Law establishes sanctions, including the suspension of licences, fines and prison sentences for violations of wildlife regulations, such as wildlife trafficking (arts. 81–82). There are no legal tools to allow public participation in law enforcement.

Guatemala has a law regarding access to information that allows all citizens to request environmental information from authorities and establishes that citizens should receive a response within 10–20 days, depending on the complexity of the matter (Access to Public Information Law, art. 42).

# 9. Guyana

## 9.1. Overview of the legal framework

The **Constitution** of Guyana (1980, including 1996 reforms) establishes that the state will take all appropriate measures to make rational use of its land, mineral and water resources, as well as its fauna and flora (art. 36). Guyana is a party to the CBD and CITES. Its legislation has been categorized as not meeting all the requirements for the implementation of CITES, thus it is included in Category II (CITES, 2007).

The **Environmental Protection Act** (1996 as consolidated in 1998) is the main piece of

legislation concerning the environment and wildlife in Guyana. It provides for the conservation, protection, and sustainable use of Guyana's natural resources and is applicable to wildlife, given that the definition of natural resources specifically includes animals (arts. 2 and 4). Pursuant to the Act, **Species Protection Regulations** (1999) regulate the import, export, breeding, and protection of enumerated species of wildlife as set forth in a series of Schedules to the Regulations. In addition, the **Wild Birds Protection Act** (1919, as consolidated in 1998) focuses on prohibiting the wounding, killing or sale of wild birds.

Prior to the Environmental Protection Act, draft wildlife regulations, similar to the Species Protection Regulations, were prepared in 1987, and subsequently revised in 1995, to expressly address Guyana's requirement under CITES. These regulations remain under discussion and have not been adopted to date.

The **Forests Bill** (2009) was recently passed by the Guyana legislature and provides for sustainable forest management to conserve biological diversity. However, the Bill does not explicitly address substantive aspects of wildlife management.

## 9.2. Institutional setup and role of stakeholders

The **Wildlife Unit of the Office of the President** is established under the Species Protection Regulations and is comprised of the **Wildlife Management Authority** and **Wildlife Scientific Authority** (art. 3). The Management Authority is comprised of members appointed by the minister whose duties include devising measures for the protection of endangered species, promoting public awareness of endangered species, formulating plans for the sustenance of endangered species, regulating trade in those species listed in the Schedules to the Regulations, and advising the minister on international trade in endangered species (arts. 3 and 5). In turn, the Management Authority is given the task of nominating the members of the Scientific Authority (arts. 3, 6). The Scientific Authority advises the Management Authority on issues regarding critical habitats for endangered species, the establishment of quotas, and effects of import and export of species (arts. 6–7).

<sup>9</sup> Personal interview, CONAP, 2009.

The Environmental Protection Agency, as created under the Environmental Protection Act, established the Natural Resources Management Division, which in turn created the National Biodiversity Advisory Committee. The Guyana Forestry Commission, established under the Guyana Forestry Commission Act, is the governing body for state forests. The National Parks Commission Act provides for the establishment of a National Parks Commission, which creates laws governing the taking or hunting of animals in national parks.

Although under the Environmental Protection Act the minister may create regulations to facilitate the involvement of local communities (particularly indigenous communities) that may be adversely affected by development, it is not clear whether regulations have been enacted with this purpose. However, indigenous communities may be considered in the procedure governing EIAs for development projects that may have significant impacts on the environment (Environmental Protection Act, sec. 11). Typically, there are public meetings which are held to develop the terms of reference of the EIAs and occasionally include special awareness sessions with Amerindian communities.

Public involvement is limited under the Species Protection Regulations; however, the Wildlife Scientific Authority must consider written requests from members of the public recommending that an animal specimen be included or removed from Schedules I, II, III, and IV to the Regulations (Species Protection Regulations, art. 7). In addition, registers of permits issued by the Management Authority are open to inspection by the public (art. 2).

Similar access to the public is permitted in the EIA provisions. Documents regarding an environmental assessment impact process are available for inspection by the public (Environmental Protection Act, art. 11). In addition, the developer of a project must publish a project summary in a daily newspaper and allow twenty-eight days for the public to respond with questions to the Environmental Protection Agency (art. 11). The Agency will consider the public questions and responses in establishing the scope of the environmental impact assessment (art. 11).

### 9.3. Wildlife tenure and use rights

**General ownership of wildlife** rests with the state in Guyana. Although Guyana's legislation does not clearly assign property rights for wildlife, it is construed in a manner whereby **general ownership of wildlife** seems to rest with the state. For example, the progeny of any wild animal bred in captivity for scientific research or exchange remains the property of the state (Species Protection Regulations, art. 9).

**Customary usage and hunting rights** seemed to be acknowledged periodically in legislation, in particular with reference to exemption of Amerindians from certain acts, as well as the allowance for self-governance regarding hunting regulations in Amerindian villages or areas. **Amerindians** are designated land under the Amerindian Act. The Village Council of the designated Amerindian area or village may prohibit certain methods of trapping and may implement rights and restrictions regarding the development of agriculture and livestock (art. 23). Furthermore, Amerindians are exempted from the Wild Birds Protection Act (art. 7).

### 9.4. Wildlife management planning

Under the Environmental Protection Act, one of the functions of the Environmental Protection Agency is to coordinate the establishment and maintenance of a wildlife protection management **programme** (art. 4). The Wildlife Scientific Authority must submit an **annual report** on any wildlife specimen that is endangered, threatened, vulnerable, extirpated, and extinct or at risk (Species Protection Regulations, art. 7). The report must also contain a status on the enumerated species contained in Schedules I, II, III, or IV to the Regulations (art. 7). In addition, the National Biodiversity Management Committee issues a **national biodiversity action plan** in which strategies for biodiversity conservation are proposed.

The Guyana Forestry Commission is responsible for the administration and management of all state forest land. According to the **forest management plan guidelines** for the Commission, one of the objectives of the forest management plan should be to protect the forest's wildlife and biodiversity in general (art. 1). In this vein, provision must be

made in forest management plans for the creation of biodiversity reserves (art. 12.4), which represent examples of the full biodiversity of the productive forest types.

The conservation of endangered species is delegated to the Wildlife Management Authority, which is to undertake necessary measures for the protection of endangered species of animals against over-exploitation through international trade (Species Protection Regulations, arts. 5–6). Along with regulating trade of animals, the Wildlife Management and Scientific Authorities identify critical habitats for species and formulate plans to provide for their sustenance (arts. 5–6).

The National Parks Commission maintains the Kaieteur Fall National Park and any other national parks which may eventually be created. The Kaieteur National Park Act prohibits the hunting, shooting, and disturbing of animal species and fauna in the Park (art. 2). The Commissioner may **prohibit hunting, taking, disturbing of creatures or vegetation in the parks** (art. 13). However, the Act recognizes the rights of Amerindians living in the vicinity of the Park to continue to fish, hunt and forage in a manner consistent with sustainable management of forests and wildlife in the area (art. 3).

The Iwokrama International Centre for Rain Forest Conservation Preserves is an Act by which 360 000 hectares of tropical rain forest are set aside to be preserved by the government of Guyana for research and protection of biodiversity. The Centre maintains a survey of over one thousand animal species in the area. Hunting, except for household use by Amerindians, is prohibited there ([www.iwokrama.org](http://www.iwokrama.org)).

The protection of wildlife from harmful effects of development is also regulated in the provisions regarding environmental impact assessments in the Environmental Protection Act. Each assessment must be carried out by an independent person as approved by the Environmental Protection Agency and the person must consider the **effect of the proposed project on fauna and species habitats** (Environmental Protection Act, art. 11).

## 9.5. Requirements for, and limits to wildlife use

While current legislation does not seem to provide for the regulation of recreational and subsistence hunting or issuance of hunting licences, it does address extractive practices for commercial purposes.

**International wildlife trade** is regulated by the Species Protection Regulations 1999, which regulate trade in enumerated wildlife species through a system of permits and licences. The Wildlife Management Authority requires permits for: 1) breeding; 2) importing and exporting of animals; and 3) trapping or dealing in animals on a commercial basis (arts. 28–29). In deciding whether to issue an export or import permit, the Management Authority, upon the advice of the Scientific Authority, must be satisfied that, among other conditions, the import or export is in the best interest of Guyana and is not in contravention of any treaties (art. 14). In the case of importation, the import cannot be for purposes that are detrimental to the survival of the species (art. 14).

The Wild Birds Act prohibits the killing, wounding, sale or export of any bird as listed in the First Schedule of the Act (art. 3). The Act exempts killing birds for food (10 miles from any plantation) and exempts any Amerindian from the Act (art. 3).

The Wildlife Management Authority has established closed seasons as follows: birds (April 1 - August 1) and mammals (May 1 - July 31). During these seasons, commercial sale of wildlife on the local market is not allowed. Export is only allowed if the animals were in the exporter's possession before the season closed. Furthermore, there is a national annual export quota for certain species.

The export of wildlife pets and gifts is limited to ten per cent of the national quota and two pets per person. The export is also limited to certain classifications of Guyanese residents.

**Breeding operations** must be registered with the Management Authority (art. 9). The import or export of an animal bred in captivity is prohibited without a permit or certificate (art. 9). Furthermore, the animal must originate from a registered breeding operation and be permanently marked in a manner to render

alteration or modification by unauthorized person as difficult as possible (art. 11).

The Animal (Movement) and Disease Prevention Act concerns the export and import of diseased animals, the movement of same, the establishment of infected zones, and gives power to the minister to prohibit, restrict or regulate the export and import of animals (art. 24).

### 9.6. Law enforcement, public access to information and justice

The Environmental Protection Act requires any person causing pollution to restore the natural environment and **rescue all animals affected** (art. 19). An individual may seek an injunction from the High Court of Guyana, when the person believes loss or damage will be suffered as a result of the foreseeable violation of the Act (art. 48). As animals expressly fall within the scope of the Act, this could provide an avenue for justice in cases where a community seeks to prevent negative environmental impacts on wildlife by developers. Furthermore, any person that suffers loss or damage to property resulting from violation of the Act may sue the offender in the court, in which the offender was convicted, for compensation (art. 40).

## 10. Mexico

### 10.1. Overview of the legal framework

The **Mexican Constitution** (1917, as amended in 2008) recognizes the right to an environment adequate for development and human well-being (art. 4). It also recognizes indigenous peoples as a priority in the use and enjoyment of natural resources found in the sites they inhabit or occupy, unless the sites are declared strategic areas (art. 2(A)(vi)). Mexico has ratified the **CBD**, the **Ramsar Convention on Wetlands** and **CITES**, but not the CMS. Its legislation was assessed as adequate to implement CITES (CITES, 2007).

Mexico has two main laws regulating wildlife use and conservation: the **General Wildlife Law** (2000, as amended) and the **Ecological Balance Law** (1988, as amended). Mexico's legal framework regarding wildlife management is construed with an area-based

approach that enables authorities to register environmental management units, placing vast areas of private property as well as protected areas and their buffer zones, under sustainable management planning criteria. Private lands subject to management plans (*Unidades de Manejo para la Conservación de Vida Silvestre* - UMAs) currently encompass more than 20 million hectares (which is almost equivalent to the number of protected areas in Mexico). The Mexican Government is currently assessing the impact of this policy, which since the enactment of the Wildlife Law in 2000, has led to the approval of more than 9 000 UMAs with quotas for sustainable use of wildlife and annual reporting requirements.

Although enforcement is undoubtedly complex in a large country, uniform national legislation and a centralized mechanism to obtain permits for wildlife management (available online) create an enabling legal framework for sustainable use of wildlife in Mexico. This arrangement may promote pro-poor management, when local and indigenous communities are the holders of wildlife management units.

### 10.2. Institutional setup and role of stakeholders

The Mexican ministry in charge of wildlife management and protected areas is the Secretary of Environment and Natural Resources (**SEMARNAT**) through its General Direction of Wildlife. SEMARNAT has under its aegis a research institution, the National Institute of Ecology (**INE**), which supports SEMARNAT in the generation of scientific and technical information on environmental issues and the training of human resources. It is also aided in implementing regulations and monitoring compliance by thirty-one federal delegations, a national commission on protected areas and by the Federal Prosecutor for the Protection of the Environment (**PROFEPA**) (a special agency for the enforcement of regulations on environmental protection) (SEMARNAT, 2009).

An interagency cooperation institution, the National Commission for the Knowledge and Use of Biodiversity (**CONABIO**), also promotes applied research and information on biodiversity. CONABIO is comprised of a variety of representatives from the ministries of agriculture, social development, economy,

public education, energy, finance, foreign relations, health and tourism.

Two consultative organs with stakeholder participation advise SEMARNAT. A **National Technical Council for the Conservation and Sustainable Use of Wildlife** presents opinions and recommendations on endangered species and critical habitats, and the National Commission on Protected Areas (**CONANP**) advises SEMARNAT on the management and conservation of protected areas. Both councils are integrated by public administration officials, representatives of research institutions, NGOs, business and producers, and social organizations. Council members are elected by representatives of the different stakeholder groups, and conditions for participation as representatives of each group are published in the SEMARNAT website (SEMARNAT, 2009b).

The Mexican Wildlife Law establishes that SEMARNAT will promote public participation of all individuals and sectors involved in the formulation and implementation of conservation measures and sustainable use of wildlife (art. 15), but does not set out any additional procedure for public participation. Nonetheless, SEMARNAT has a public participation portal in its webpage, providing information on issues subject to public consultations and relevant procedures in each case ([www.semarnat.gob.mx](http://www.semarnat.gob.mx)).

Mexico has developed with the support of the GEF, a specific **private fund**, the Fund for Protected Natural Areas (FANP), to strengthen conservation and sustainable use of biodiversity in selected Mexican Protected Areas (FANP, 2009). Management of the fund is tasked to a private institution, the Mexican Fund for the Conservation of Nature (FMCN), which has established an agreement with CONANP and been successful in fundraising from a wide donor base to sustain their conservation activities. This project has facilitated: a process of prioritization of areas for protection; the construction of a broad network of civil society, private sector and governmental actors working together to conserve Mexico's most critical areas; and the demonstration of a long-term model for sustainable financing of conservation (World Bank, 2008). The FANP supports the implementation of basic activities within protected areas including: zoning, awareness

raising and protection and monitoring of key species. The Fund does not support projects, and small community projects within these areas should obtain funding from other sources (FANP Operative Manual, 2008).

Proceeds from licences for the concession of services in national parks are not assigned to these funds but to the general treasury. The Ecological Balance Law, however, provides that revenue received by the Federation from the issuing of licences, authorizations and permits in protected areas will be channeled towards preservation and restoration activities within the areas that generated the resources (art. 75 bis).

### 10.3. Wildlife tenure and use rights

The state has the power to allocate ownership over land and water to private parties, with certain restrictions established by the Constitution, for example to respect traditional lands occupied by indigenous communities. The state retains the power to establish conditions for natural resource use, including the regulation of the use of wildlife, with the aim of equitably distributing public wealth, ensuring conservation, and improving rural and urban livelihoods (Constitution of Mexico, art. 27).

Landowners are granted the right to use wildlife in a sustainable manner, including use of parts and derivatives in their private property (Wildlife Law, art. 18) subject to the general principle that prohibits any action implying wildlife destruction and establishes the obligation of all citizens to conserve wildlife (art. 4). The law specifies that those using wildlife should contribute to preserving its habitat, and will be responsible for damage caused to the conservation status of such wildlife and its habitat (art. 18).

Landowners or those in legitimate possession of land, seeking to **use wildlife in private lands** should apply to register such land as a management unit for wildlife conservation or UMA (Wildlife Law, art. 39). UMAs constitute the basic element through which the Mexican Government promotes conservation in private lands. Their objectives are to conserve the natural habitat, promote biodiversity conservation and ensure wildlife use is sustainable through the adoption of management plans for these areas.

**Wildlife use in protected areas** is regulated by the Ecological Balance Law, which allows such use only to communities or landowners living or owning these lands prior to their establishment as protected areas, and requires an agreement with SEMARNAT to determine the type of uses allowed and ensure sustainability (arts. 47–47 bis).

#### 10.4. Wildlife management planning

At the national level, SEMARNAT promotes the development of a national system of UMAs in the areas of influence of protected areas, in order to reinforce buffer zones and give continuity to ecosystems. UMAs are also promoted within protected areas to involve local communities in the management of wildlife with priority given to non-extractive uses (art. 47).

Registration of an UMA requires a **management plan** designed by a registered technician. Management plans must include specific objectives and indicators for success, methodology for collecting information, a calendar of activities, and measures to manage habitat, population and specimens, as well as control and contingency measures. Specific population studies are not required, and technicians may present management plans based on different approaches and methodologies. However, SEMARNAT may request that management plans be developed based on different methodologies, and will evaluate periodic reports including indicators on the sustainability of activities to be undertaken (arts. 39–41).

The Ecological Balance Law requires that activities in protected areas must conform to zoning **plans** developed by federal, state or municipal authorities, as applicable, for each protected area. Ten different PA categories are included in the law, for both core zones and buffer zones, each defining limitations to extractive and non-extractive uses in protected areas (art. 46). Extractive uses are generally very restricted, although within buffer zones sustainable wildlife use activities, including subsistence hunting, are allowed as long as they maintain or increase populations of species utilized and are contemplated within the management plans authorized by SEMARNAT (art. 47 bis).

In addition, the Ecological Balance Law requires **environmental impact assessments** for several types of activities that could have impacts on wildlife conservation, although it does not specifically mention wildlife. These include, for example: mining operations; forestry in tropical forests; land use changes in forests and drylands; works and activities in wetlands, mangrove swamps, lakes, lagoons and rivers and their coasts; agricultural activities that may pose threats to the conservation of one or more species or harm ecosystems; as well as works and activities within protected areas (art. 28).

#### 10.5. Requirements for, and limits to wildlife use

The federal government has the power to regulate wildlife use and conservation, including the approval of UMAs, and granting permits for wildlife use, including recreational hunting (Wildlife Law, art. 9). The Wildlife Law assigns SEMARNAT the task of establishing limits to wildlife use, including hunting seasons, protected species, etc. (art. 71). Currently, for example, extractive use of native parrots (*psittacids*) is forbidden in Mexico. The Wildlife Law and its corresponding regulations are therefore applied consistently throughout the country, although some districts have agreements with the federal government to perform specific attributions (such as control or granting of UMAs) (Wildlife Law, art. 11).

In all cases, extractive and non-extractive uses of wildlife, including eco-tourism (art. 99) and recreational hunting, require the issuance of permits. Besides having to register an area as an UMA, extractive uses of wildlife require a specific hunting or extraction permit (Wildlife Law, art. 83). **Permits for extractive uses** in private lands need to justify extraction levels on the basis of the management plans previously approved for the area and population studies presented by applicants (art. 87). Permits are issued by SEMARNAT upon consideration of evidence that proposed extraction levels will not affect natural renovation of populations (art. 84). These permits will establish the quotas and period for which authorization for extractive use is valid. They apply to activities such as collection of specimens, capture and hunting.

Extraction for **subsistence** purposes generally does not require a permit, and national



authorities are tasked with supporting communities in complying with the legal requirements established. Subsistence hunting, however, can be prohibited if the existence of a species is endangered by these practices (Wildlife Law, arts. 92–93).

In the specific case of **recreational hunting**, SEMARNAT establishes restrictions regarding hunting methods and seasons when evaluating management plans and granting permits (art. 94). In addition, recreational hunting is forbidden, *inter alia*, with poison or automatic weapons, during the night, or when targeting visibly pregnant females or offspring (art. 95). Foreigners engaging in recreational hunting in Mexico must contract an authorized operator, who must own an UMA and have all permits required by the law (art. 96).

A specific instance of **community-based wildlife management** in Mexico is implemented in the Mesoamerican Biological Corridor. The Mesoamerican Biological Corridor is the result of a project, financed by the World Bank and the GEF that engages communities from Mexico's southern states in sustainable management of wildlife through the establishment of a regional biological corridor involving Mexico, Guatemala, Belize, El Salvador, Honduras, Costa Rica, Panama and Nicaragua. The objective of the Mesoamerican Corridor is to connect the North American and South American ecosystems through the Central American Isthmus, uniting natural or unaltered ecosystems, as well as areas subject to sustainable use of its natural resources. The Corridor is based on the following zoning system integrated by four types of areas: a) core areas exclusively devoted to the conservation of ecosystems and species, where human activities are forbidden; b) buffer areas that allow restricted uses; c) the corridors that help facilitating the movement, dispersion and migration of species, while allowing low-impact human activities; and d) multiple-use areas that may include areas dedicated to agriculture, forestry, livestock, etc. (CONABIO, 2009).

The project works with 412 rural and indigenous communities. It has established a national council and state councils with representatives of the federal, state and municipal governments, as well as representatives of research institutions, NGOs, private sector, and civil society (CBMM, 2009).

Council membership rules are established in the operative manual of the project, which requires that representatives of civil society and NGOs be elected by representatives of their sectors through an open and transparent procedure, and that at least one civil society representative should belong to indigenous communities (CBMM, 2009c).

Most of the communities in the project are indigenous communities, who sustain their livelihoods through multiple uses of their biological resources, generally based on resources derived from plants, but also including birds and reptiles. These uses have been found to conserve biodiversity and have been incorporated into the plan of action for each of the states involved (Toledo, 2003). Specific programmes finance, for example, the participation of women in the conservation and sustainable use of biodiversity (CBMM, 2009b).

Another interesting initiative is the *Borrego Cimarrón* project, which allows the grant of exceptional hunting permits to benefit conservation research and sustain the livelihood of a local community. The Seri, an indigenous community living in Tiburón Island, sustain their livelihood through the registration of their land as an UMA and the issuance of permits for recreational hunting of *borrego cimarrón* (*Ovis canadensis*) that are then sold to foreigners every year. Usually, these permits are auctioned in the US and may be worth up to US\$ 200 000. *Borrego cimarrón* (*Ovis canadensis*) is an endangered species in Mexico (included in CITES Appendix I). Their trophies generate income for the community, as well as employment for local community members in conservation, population studies, etc. The project further provides funds for conservation and ecosystem research, and repopulation of *borrego cimarrón* in the island.

## 10.6. Law enforcement, public access to information and justice

**Law enforcement** pertains to official authorities. Thus, the law does not specify procedures for concerned individuals to support enforcement activities, other than by presenting claims or reports of illegal activities to PROFEPA. Citizens do not need to be affected in order to be able to present a report. Claims or reports may give rise to compensation for damages to affected

individuals, as well as rehabilitation of the environment. When rehabilitation is impossible, compensation of damages to the environment will be channeled to fund activities for conservation, species recovery and awareness raising (Wildlife Law, arts. 106–109).

The Ecological Balance Law also recognizes the right of all citizens to obtain access to information in approved EIAs and to request public consultations regarding activities that require EIAs (art. 34). This law also establishes that the federal government should promote the participation of society in the planning, implementation, evaluation and control of environmental and natural resource policy (art. 157).

## 11. Peru

### 11.1. Overview of the legal framework

The **Peruvian Constitution** (1993) recognizes the right to a balanced environment (art. 2(22)). It devotes an entire chapter to the environment and natural resources, which establishes that natural resources are property of the state, and determines the conditions for their use and enjoyment through organic laws (art. 66). Peru has ratified all **wildlife-related conventions**. The CITES Secretariat has proposed to the CITES Standing Committee to upgrade Peru to Category I under the CITES National Legislation project as, in light of recent reforms, its legislation is now considered adequate to implement CITES. The Secretariat's new assessment acknowledges that Peru's legal reforms have strengthened the country's capacity to enforce CITES (CITES, 2009).

Its framework on natural resource utilization is built upon several legal instruments. The **Organic Law for the Sustainable Use of Natural Resources** (1997) establishes the national government's rights over natural resources and its power to determine the conditions upon which these may be utilized. The **Environment and Natural Resources Code** (1990) sets out the main objectives of environmental policy, as well as requirements for environmental impact assessment and regulations on protected areas.

The **Forestry and Wildlife Law** (2008, as revised in 2009) and its Regulation to the

Forestry and Wildlife Law (2009) set out the specific requirements and conditions for wildlife management. The legal instruments, however, have a strong bias towards forestry activities and do not target effectively the promotion of sustainable wildlife management. Their high degree of complexity may create legal impediments for poor communities to sustain their livelihoods through lawful wildlife management activities.

The **Law on the Sustainable Use and Conservation of Biological Diversity** (1997), the **General Environment Law** (2005) stating principles for environmental policy and public participation in environmental planning and management, the **Protected Areas Law** (1997), as well as a **Supreme Decree on Protected Areas** (2008), add to the – already crowded – legal regime. Due to the multiplicity of overlapping regulations, this brief analysis will focus on those legal tools that were singled out as most relevant by national authorities in charge of wildlife management interviewed for this study.

It should be noted from the outset that, at the time of writing, Peru's legal framework for wildlife management is undergoing a substantive reform spurred by environmental requirements put in place by the recent Free Trade Agreement between Peru and the United States. As a result, the former National Institute for Natural Resources (INRENA) has been split between the Agriculture Ministry, which absorbed jurisdiction over its economic-related activities (including granting permits and concessions on wildlife use), and the newly created Ministry of Environment that was allocated the limited mandate to manage protected areas. In addition, wildlife management activities, including the granting of permits for wildlife use in private lands, and approval of management plans, are in the process of being delegated to regional governments. Accordingly, it is still unclear whether the revisions to the legal framework will contribute to empowering poor communities in ensuring sustainable wildlife management.

### 11.2. Institutional setup and role of stakeholders

The new **Environment Ministry**, created by Legislative Decree 1013 of 2008, is in charge of protected areas. The National System of

Protected Areas (**SINANPE**) **Coordination Council** acts as an advisory body for protected areas. It was created by the Protected Areas Law and tasked with advising on the management of protected areas. It includes governmental and research institutions, as well as business representatives, but does not include local community representatives (Protected Areas Law, art. 9). A special Fund for Protected Areas (**PROFONANPE**) administers funds from donations and international cooperation for the support of Peru's protected areas system ([www.profonanpe.org.pe](http://www.profonanpe.org.pe)).

The Protected Areas Law tasks the Ministry of Environment (former INRENA) with promoting participation of civil society, and in particular local communities in the management and development of protected areas (art. 8.I). Local communities, however, are not included in the advisory council on Protected Areas or in the management organs for protected areas, created by the same law.

The **Ministry of Agriculture**, through the Direction of Wildlife and Forestry, is in charge of designing wildlife policy and coordinating the implementation of the wildlife law with regional authorities. Control and enforcement of wildlife regulations, including granting authorizations and concessions for wildlife use, are in the process of being decentralized to **regional governments**, but at present are still performed by the Direction of Wildlife and Forestry in the Ministry of Agriculture (Regulation to the Wildlife Law, art. 5).

A **Subcommission for Forestry and Wildlife** was established by the Wildlife and Forestry Law in 2009 to advise the Minister of Agriculture on matters relating to wildlife regulation. It is to be comprised of professionals, specialists and civil society representatives of recognized expertise in the matter. At the time of writing, however, the Subcommission, has not been formally created (Wildlife and Forestry Law, art. 12).

The Constitution tasks the national government with promoting the conservation of biodiversity and determining environmental policy (arts. 67–68). It also establishes that regional and local governments share the duty to implement national regulations on environmental matters (arts. 192 and 195). National and regional wildlife authorities, as

well as the Environment Ministry are required to coordinate their action by the Regulation to the Wildlife and Forestry Law (art. 11). There is, however, no specific mechanism for coordination.

### 11.3. Wildlife tenure and use rights

The Constitution and other legal instruments forming the legal regime applicable to wildlife in Peru reaffirm the principle that the national government has original ownership over all natural resources including wildlife. The government grants usage rights through specific legislation, in exchange for an economic benefit that is stipulated in each particular case according to the value of the resource (Wildlife and Forestry Law, arts. 14 and 18). This applies to wildlife in both private lands and protected areas.

The regulation to the wildlife law further clarifies that all *in situ* wildlife belongs to the patrimony of the state and is not subject to private property (art. 43). Thus, wildlife use in Peru, whether on private or public lands, requires an authorization or concession respectively, which in each case defines the rights of use, and is subject to a fee that is established considering economic, social and environmental criteria (Organic Law art. 20; Wildlife and Forestry Law, art. 14).

### 11.4. Wildlife management planning

All concessions and authorizations for hunting require a management plan approved by relevant authorities prior to commencing the hunting or harvest season (Regulation to the Wildlife and Forestry Law, arts. 227 and 254–256). According to sources consulted, there have been no **concessions** for wildlife use granted to date, as the whole legal framework is in the process of being reformed. It is clear that some species of wildlife, like Taruca – an Andean deer – could provide valuable income for communities if adequate management plans were set up. Currently, they are hunted illegally with no incentives for their sustainable management.

Wildlife use in protected areas requires specific permits to be granted by the management authority for each protected area.

According to the Regulation to the Wildlife and Forestry Law, regional wildlife authorities may

grant authorizations and concessions for any type of wildlife use, as long as legal requirements are complied with. Approval of a management plan, for example, requires the presentation of **population studies** backed by local scientific institutions (art. 236). The national Direction of Wildlife and Forestry then sets the fees for permits (art. 227).

The use of wildlife in communal lands for commercial or industrial purposes by indigenous and rural communities requires the approval of a **management plan**. These communities may request the assistance of authorities for the design of the plan (Wildlife and Forestry Law, art. 15). Authorities expect new regulations to legalize the situation of poor communities currently hunting to supply local restaurants with wildlife meat for human consumption. This activity, if undertaken sustainably through registered operations, could increase the benefits arising from wildlife use for these communities.

#### 11.5. Requirements for, and limits to wildlife use

Although legislation refers to wildlife use in general, without differentiating between extractive and non-extractive uses, most of the clauses in the law pertain to extractive practices. The national authority establishes seasons for hunting, and regional authorities issue permits for recreational hunting and commercial capture.

Hunting or capture for commercial purposes requires a hunter's licence and an authorization for wildlife use granted by the Regional Wildlife Authority, which require payment of a fee to the national government (Regulation to the Wildlife Law, art. 253). The National Direction of Wildlife and Forestry determines the fees to be paid for wildlife use as well as calendars and prohibitions regarding the extraction of particular species (Regulation to the Wildlife Law, art. 191).

Native communities and farmers are allowed by the Organic Law to benefit freely, without the need for a licence, from natural resources for **subsistence or ritual purposes** in areas adjacent to their land (art. 17). However, this is a non-exclusive right and cannot prevail over conflicting rights of third parties. The right may in fact be terminated when the government assigns the resources to another entity

(art. 17). Within their own lands, communities must be given preference in the sustainable management of natural resources, except for express reservations by the state or the existence of exclusive rights of other parties (art. 18).

Any activity that may cause intolerable damage to the environment, in public or private areas, must also undergo an **environmental impact assessment** (intolerable damage is not defined by regulation). The legislation does identify some activities that must always present environmental impact assessments, including activities in protected areas (Environment and Natural Resources Code, arts. 8–15).

Traditional live shearing of vicuñas (*Vicugna vicugna*), a wild camelid with one of the most valuable types of fibre in the world, was highlighted as one of Peru's best examples of **community-based wildlife management**. These traditional practices of Peruvian indigenous communities were recovered after many decades of vicuña hunting that decimated the species, and have given communities the opportunity to produce substantive revenues through an exception to the listing of vicuñas in CITES Appendix I. Vicuña management is regulated by specific legislation – the **Vicuña Law** (1995) – based on the Vicuña Convention and CITES, which includes the specific requirements to allow the selling of vicuña fibre, establishes sanctions for hunting, and recognizes indigenous and farmers' communities as the owners of this natural resource. The law sets out a common entity, the National Society of Vicuna Breeders of Peru ("*Sociedad Nacional de Criadores de Vicuña del Perú*" (SNV)) to represent those communities, as the sole institution authorized to develop activities linked to rational handling and commercialization. The Vicuña Farmers' communities were organized in Communal Committees, which make up the nine Regional Associations representing those farmers in the SNV. These Andean communities capture vicuñas communally by surrounding them and leading them to move towards a funnel shaped mesh. The process, called *chakku*, draws on methods practiced by the Incas. Once in the funnel, vicuñas are taken one by one, shorn and then released (Lichtenstein *et al.*, 2002).

This successful case of wildlife management was, therefore, not the result of general wildlife

laws, but of a tailor-made government program and regulations for vicuñas. As a result, the Lucanas Community managing a population estimated in 5 215 free ranging vicuñas has earned an average of US\$ 200 000 per year (Peru, 2008). An international consortium that consists of one Peruvian and two Italian companies has bought all the fibre produced so far. The consortium processes the fibre and sells finished goods. As vicuña fibre is a luxury product, the main markets are overseas. The main sales so far have been to Japan, Italy and to a lesser extent other European countries (Lichtenstein *et al.*, 2002).

The report presented by Peru to the Vicuña Convention in 2008 notes that the current redesign of the environmental institutional framework, and delegation of wildlife management to regional authorities are generating serious coordination problems. They are also creating conflicts with the communities managing vicuñas, which claim their participation in the management of vicuñas is being restricted (Peru, 2008).

#### 11.6. Law enforcement, public access to information and justice

The General Environment Law defines the public information duties of all authorities in charge of environmental matters, requiring that transparent mechanisms be established to guarantee the right of access to environmental information (art. 42).

The legal framework for wildlife management also establishes in general terms that public participation must be guaranteed by authorities, including the right to file individual or community reports on non-compliance with regulations. There is, however, no specific participatory mechanism in this regard. The General Environmental Law, further calls upon authorities to foster mechanisms for dispute settlement including **conciliation and arbitration** to resolve environmental conflicts (arts. 151–152).

Sanctions for the violations of wildlife regulations are specifically described in the criminal code (Criminal Code, as modified by Law 29.263, arts. 308–309). There are no legal tools for public participation in law enforcement.

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