# **REGIONAL REPORT** IMPLEMENTATION OF THE PROGRAM OF WORK ON PROTECTED AREAS 2011-2015 AMAZON BIOME REGION





CONVENTION ON BIOLOGICAL DIVERSITY THIRTEENTH CONFERENCE OF THE PARTIES

**DECEMBER 2016** 

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# Foreword

This report gathers the efforts of a large number of public and private institutions which, under the leadership of Redparques and thanks to their commitment with the Amazon Vision Initiative, have devised a joint working path in the spirit of building a shared vision to manage and to strengthen the protected areas in the amazon biome, based on the most important international guidelines on biological diversity in a world under continuous transformation, tested by the global change factors inherent to the Anthropocene.

This is an effort of more than 130 collaborators of the Protected Areas Systems of the countries that make up the biome, of an editorial work team led by the FAO with technical support from the WWF, IUCN and UNEP, as well as from experts and collaborating institutions that have contributed their knowledge for an effective communication of this second version of the Regional Report on the Implementation of the Program of Work on Protected Areas of the Convention on Biological Diversity (PoWPA-CBD), updated for the period 2011 – 2015, and whose first results were presented to the Convention Secretariat in 2010.

The document seeks to guide decision-making with regards to the specific needs to move forward in achieving the objectives on biodiversity conservation, using as reference the past version's structure and content with added value in respect of the coordination of instruments and initiatives at biome level; although many of the general characteristics of the biome are taken up in the document, the fundamental focus is to characterize the steps forward and challenges with regards to the adoption of measures to achieve the international conservation goals, particularly of the PoWPA (Program of Work on Protected Areas) and Goal 11 of Aichi, taking into account the new global political agenda post-2015 and based on important data already surveyed in 2010. We are certain that this exercise definitely contributes to generating venues for dialog among the sectors, to reflecting on the implications of the public policies being implemented in the region and to managing new development models for the Amazon that are more respectful of and harmonious with the natural environment that supports life on Earth.

Our thanks to everyone who contributed in the technical comments, group exercises and facilitation of information, but especially, in generation of future work prospects under an inspiring approach given the capacity of the biome to provide many of the vital services for the planet, which today have an opportunity to strengthen their ecological structure and resilience through adequate management and governance of the protected areas and other conservation strategies.

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#### Acknowledgements

- Directors, specialists and other personnel of the national protected area systems of Bolivia, Brazil, Colombia, Ecuador, Guyana, French Guyana, Peru, Suriname, and Venezuela
- Ex-directors Moara Menta Giasson, Claudio Maretti, Rômulo Mello (RIP) (Brazil), Jose Ricardo Coello (Bolivia) and Francisco Prieto (Ecuador).
- European Union
- Secretariat of the Convention on Biological Diversity - CBD
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**Citation:** REDPARQUES. 2016. Regional report implementation of the program of work on protected areas 2011 - 2015: Amazonian biome region. 115 p. Bogota Colombia.

This publication has been developed with the support of the European Union. Its content is the sole responsibility of Redparques and the Amazon Vision, and does not reflect the position of the European Union.

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# Acronyms

АСТО	Amazon Cooperation Treaty Organization
ARPA	Amazon Region Protected Areas
CBD	Convention on Biological Diversity
COICA	Amazon Basin Indigenous Organizations Coordinator
CSF	Conservation and Strategy
CU	Conservation Unit
FAO	Food and Agriculture Organization of the United Nations
GDP	Gross Domestic Product
GEF	Global Environment Facility
IAPA	Integration of Amazon Biome Protected Areas Project
IBCA	Important Bird Conservation Areas
ICMBio	Instituto Chico Mendes para a Biodiversidade do Brasil
IDB	Inter-American Development Bank
IMC	Minimum Investment for Conservation
Inparques	Instituto Nacional de Parques de Venezuela
IP	Indigenous Peoples
IT	Indigenous Territories
IUCN	International Union for Conservation of Nature
KfW	Credit Institute for Reconstruction or Credit Bank for Reconstruction
MAE	Ministry of Environment of Ecuador
METT	Management Effectiveness Tracking Tool
NASCC	Protected Areas, Natural Solutions to Climate Change Project
NPA	Natural Protected Area
NPAS	National Protected Areas Systems
PNN	National Natural Parks of Colombia
PoWPA	Program of Work on Protected Areas of the CBD
RAISG	Amazon Socio-environmental Georeferenced Information Network
Redparques	Latin American Technical Cooperation Network in National Parks, other protected areas, flora and fauna
SERNANP	National Service of Natural Areas Protected by Peru
SERNAP	National Protected Areas Service of Bolivia
SIG	Geographic Information System
SPDA	Peruvian Society for Environmental Law
UNEP	United Nations Environment Program
UNFCCC	United Nations Framework Convention on Climate Change
UNPD	United Nations Program for Development
USD	United States Dollars
WCPA	IUCN's World Commission on Protected Areas
WCS	Wildlife Conservation Society
WDPA	World Data Base on Protected Areas (of the World Conservation Monitoring Centre)
WWF	World Wildlife Fund



# Presentation

Although the Conference of the Parties to the Convention on Biological Diversity held in Nagoya – Japan (2010), Decision X/31 puts forth strategies to strengthen the enforcement of the Programme of Work on Protected Areas (PoWPA) at all levels; it highlights actions that require more attention such as sustainable funding, climate change, restoration of ecosystems and habitat in protected areas, and the appraisal of costs and benefits of the protected areas. It also provides guidelines to present progress reports on the implementation of the PoWPA and suggests alignment of the goals and deadlines of the Programme with the Aichi targets indicators. It is necessary to highlight in this process, the institutionalization and strengthening of the region´s Protected Areas Systems, a factor that has enabled the States to fulfill the commitments made at the referred Conference of the Parties.

The Action Plan 2010-2020 of the PoWPA for the Amazon biome established under the framework of the Regional Ecosystemic Vision for Conservation of the Biological and Cultural Diversity of the Amazon Biome, has made it possible to move forward in the implementation and fulfillment of all the commitments made, advocating at the same time through clear messages for the importance of biodiversity and conservation through protected areas and other methods, i,e, adaptation and mitigation of the effects of climate change and fulfillment of the Millennium Development Goals.

This report summarizes the implementation of the agreements of the PoWPA between 2010 and 2015 for the Amazon biome countries, the challenges and opportunities for the purpose of continuing to work more closely through regional strategies that allow us to fulfill our international commitments and that contribute to the pursuit of the strengthening process of the protected areas national systems for the conservation of the protected areas of the Amazon biome.

> Pedro Gamboa Moquillaza Redparques Regional Coordinator

# **Executive summary**

The protected areas have been one of the most effective strategies in the conservation of the assets and benefits/services of the biological diversity components, as well as of the ecological, socio-cultural processes and the socio-ecological systems that they shape. Nonetheless, the loss of biodiversity continues and has accelerated in many geographic spaces. The foregoing is due in many cases to factors such as the incomplete representation of ecosystems, low participation of ethnic populations and local communities in the creation and management of these geographic spaces and to deficiencies in management and funding.

Furthermore, regarding the effectiveness in the management and equitable governance of the protected areas, there are other reasons such as development models, territorial zoning, historical conflicts and inequality around access to and use of land, the lack of compatibility between the public policies and the low governance of the States in remote regions. The foregoing implies that the protected areas cannot be managed without involving their social, political and economic contexts.

Management's success depends on the territory in which the protected areas are located: the conservation areas of the Amazon are no stranger to this reality.

As a result of the Conference of the Parties to the Convention on Biological Diversity signed in Nagoya – Japan (2010), Decision X/31 puts forth strategies to strengthen the enforcement of the Program of Work on Protected Areas (PoWPA) at national, regional and global level; similarly, it highlights actions that require more attention such as sustainable funding, climate change, restoration of ecosystems and habitat in protected areas, and the appraisal of costs and benefits in the protected areas. It also provides guidelines to present progress reports on the implementation of the PoWPA and suggests alignment of the Program's goals and deadlines with the Aichi goals indicators.

In this regard, the Amazonian countries continue to move forward in the implementation of the strategic actions outlined in the 2010-2020 Action Plan of the Amazon PoWPA established in the framework of the Regional Eco systemic Vision for Conservation of the Biological and Cultural Diversity of the Amazon Biome, aimed at supporting the countries in an effective implementation of the PoWPA from a regional perspective and that urges the countries to advance in the appraisal processes of ecosystem services. As well as in terms of costs and benefits of the protected areas, not only as strategy to raise funds that contribute to financial sustainability, but also as means to formulate clear policies and directives to reduce the impact on the biodiversity of the protected areas. Also to advance the awareness raising processes on the importance of biodiversity and of its conservation through the protected areas and other conservation means, the adaptation and mitigation of climate change effects, attention to other factors of global change and to the Sustainable Development objectives.

This report accounts for the progress made in the implementation of the PoWPA between 2011 and 2015 for the amazon biome countries, as well as the challenges and opportunities, with the purpose of consolidating regional strategies geared at achieving the international goals and that contribute to the strengthening of the national systems of protected areas for the effective management and governance of the protected natural sites, as well as their contribution to biodiversity conservation across the biome.

# CHAPTER 1.

# CONTEXT AND BACKGROUND: FUNDAMENTAL ASPECTS OF THE BIOME AND OF THE REDPARQUES AMAZON VISION INITIATIVE

## Amazon biome description

Brazil, Bolivia, Colombia, Ecuador, Peru, Venezuela, Guyana, Suriname and French Guyana are the 8 countries and territories that share the amazon biome, whose surface covers approximately a total of 6.851.583,24 km<sup>2</sup>.

For the purpose of the analyses of this report and more amply, of the

Amazon Vision, reference is made to the amazon biome as an area of tropical rainforest that includes savanna vegetation, flooded forests, grasslands, swamps, bamboo and palm groves. It covers a little beyond the Amazon basin towards the north, including even more territory in the Guiana Shield, based on ecological criteria different from those of the river basin–the latter may even include other ecosystems, in a proportion different in relation with the coverage of the Guyana-(Woodshole Institute, 2005).



Figure 1. Amazon biome

Source: Prüssmann et. al (2016)

It contains the largest area of tropical rainforest left on the Earth, with a great biological diversity– 5 of the 9 countries with territory in the Amazon are deemed mega diverse according to the United Nations<sup>1</sup>-, housing more than 400 towns and indigenous nationalities (COICA, 2016).

These characteristics show its importance worldwide, as one of the most important ecosystems that contribute to the regulation of the climate at all levels. This explains why the countries have come together around a set of strategies that allow them to act against the threats to the ecosystems, strengthening this way their governance and seeking to establish common guidelines to conserve the use of the soil, improve planning in the area and achieve a shared vision with regards to development. Below there is a brief outline of the details of the main characteristics of this biome<sup>2</sup>.

## Geographic coverage

The amazon biome, in addition to being referred due to its biological diversity, must be understood as a region with a great political – administrative network given its large expanse, equivalent to twice the size of India; if it were a country in itself, it would be the seventh largest in the world, after Australia.

Extension of the Amazon (km²)			Tabal anuation	Deveretere hu		
Country	Ecological boundaries (Biome)1	Hydrographic boundaries (Basin) <sup>2,3</sup>	Political-Administrative boundaries (Extended)"	Political-Administrative extension poundaries (Extended) <sup>6</sup> (km²)		Percentage of extension of Amazon in each country (%)
Bolivia	410.421,12	656.983,30	657.531,12	994.371,89	5,99%	41,27%
Brazil	4.054.223,98	3.677.765,58	4.995.495,58	8.203.533,21	59,17%	49,42%
Colombia	543.895,34	364.247,60	546.084,93	.292.127,80	7,94%	42,09%
Ecuador	119.853,18	137.660,10	137.660,10	257.609,95	1,75%	46,53%
Guyana	240.275,81	14.125,81	240.275,85	241.070,05	3,51%	99,67%
French Guyana	91.498,34	113,94	91.498,34	94.190,11	1,34%	97,14%
Peru	771.865,54	937.168,23	937.168,23	.247.724,88	11,27%	61,86%
Suriname	160.898,39	103,87	160.898,39	165.851,53	2,35%	97,01%
Venezuela	458.651,54	58.310,75	458.651,54	1.091.652,00	6,69%	42,01%
TOTAL	6.851.583,24	5.846.479,19	8.225.264,09	13.588.131,42	100,00%	-

Table 1. Extension of the Amazon under different boundary criteria (2015).

Source: WWF, from 1. Olson & Dinerstein (1998), 2. Lehner et al. (2006), 3. Lehner & Grill (2013), 4. UNEP & ACTO (2009) and 5. IUCN & UNEP (2015)

#### a) Protected Areas according to IUCN categories,

#### Figure 2.

b)

b) Indigenous Territories of the Amazon Biome (2015)



Source: Prüssmann et. al (2016)

1 See http://www.pnuma.org/AcercaPNUMA.php .

<sup>2</sup> There are various studies on the state of each one of the components of the Amazon biodiversity, including those referenced in Ruiz, 2010. Here are some synthetic data as reference to the importance of the biome.

This, and its bio-physical characteristics, have an impact on its management and conservation. Territorial wise, the Amazon represents an important portion for each one of the countries that comprise it, which can be seen in detail on Table 1; moreover, it contains around 168.000 km<sup>2</sup> under some protection category, particularly protected areas under the definition of the CBD<sup>3</sup> (Figure 2).

## Fauna and Flora

The Amazon's fauna and flora represent a large part of its biodiversity and its trend, since 2010, continues to be positive, despite the large number of endangered species. The Amazon is one of the zones with the greatest amount of forest, which has important photosynthetic capacity worldwide. The area has the largest amount of living matter per hectare, between 160 and 510 tons per hectare approximately (Ruiz, 2010). Its dense tropical rainforests are home to thousands of species, 75% being endemic.

In the past decade (1999-2013) alone 1.661 new species of plants and invertebrate were documented in the Amazon of which 40 were mammals, 34 were birds, 274 amphibians, 341 were fish and 895 were plant species (Maretti, 2014). This also has a fundamental effect on the survival of the communities that inhabit the territory, and at the same time it poses challenges with regards to monitoring and control. Surprisingly, a number of new species similar in proportion was documented between 2014 and 2015, as follows:



**79** Birds

(16, 62, 1)

Source: Charity et.al, 2016.

**65** Mammals

(**39**, **6**, **20**)

It is also noted that the region has the largest amount of freshwater fish on the planet, some of which involve border management due to the large migrations (for example El dorado or *Brachyplatystoma rousseauxii*, which travels thousands of kilometers from the Atlantic Ocean to the Andes to lay its eggs).

### Importance of the water

Among other core ecosystem services<sup>4</sup> of the biome such as the provision of 20% of the Earth´s oxygen, rivers have played an important role in defining the diversity of the region´s ecosystems: the world's mightiest river is located in the biome. With 220.000 m<sup>3</sup> / sec. water poured into the Atlantic Ocean, the discharge of the Amazon river is equivalent to 15% of the total contribution of freshwater of all the rivers in the world that flow into oceans, which has helped consolidate the Amazon as a great freshwater reserve. The countries with the highest water contributions to the basin are Brazil, Peru and Colombia (see Table 2).

# Table 2. Main water contributions to the Amazon basin

Country	Discharge percentage
Colombia, Ecuador and Peru	30%
Madeira River (Peru, Bolivia y Brazil) y Rio Negro (Brazil)	30%
Brazil*	40%

\* Some indirect contributions of lower percentage are generated in the Orinoco river between Colombia and Venezuela and the one in the Mamoré River in Bolivia

Source: Own elaboration based on data from UNEP and ACTO (2009)

The Amazon forest plays a key role in ensuring the water balance among the land and the aquatic ecosystems, serving the full cycle of water regulation<sup>5</sup>.

## Inhabitants of the biome

The inhabitants of the Amazon depend on a vast majority on the resources of the Amazon territory to satisfy their different needs and livelihoods. Its resources are used for nutrition, building of housing,

112 Reptiles

2010-2013 2014-2015

<sup>3</sup> Area geographically defined, designed, regulated and managed to achieve specific conservation goals; the IUCN (Dudley, 2008) expands this concept in terms of legal recognition and of the provision of ecosystem services.

<sup>4</sup> In some cases, this term is not officially used. For example, in Venezuela reference is made to the contributions and benefits provided by ecosystems, which must be taken into account throughout the document.

<sup>5</sup> For more information http://www.gwp.org/.

making of tools and utensils; for the industry (textile, crafts, pharmaceutics, bio-technology, timber, dye works, perfumes, resins, rubber, oils, etc.) and also in ceremonies and rituals.

The number of inhabitants in the Amazon is defined by the territorial expanse and the existence of longstanding Indigenous Peoples and local communities. The estimated population by 2011 is 34 million, of which 70% is located in Brazil and 11% in Peru (Charity et. al, 2016).

The Amazon is characterized by its very high cultural and population diversity, as it is mainly inhabited by indigenous people, settlers, afro-descendants<sup>6</sup> and riverbank communities. Most of its inhabitants conserve a close relationship with nature defined by a particular view of the world, as well as by actions based on knowledge and cumulative practices (Ruiz, 2010). Among the more than 400<sup>7</sup> indigenous communities of the Amazon there exist different beliefs, customs and language groups.

The knowledge of the tropical forest that said communities have is of incalculable value, and this traditional knowledge is especially important with regards to the management of the region´s natural resources, including historical adaptation to climate change. Some of the most numerous Indigenous communities are the wayapi, u'wa, quichua, guaunano, huitoto, shuar, tikuna, kayapó, yanomámi, moxeño, tsimane, asháninka, yagua, arawak, kalinha, pemon and piaroa, among others (COICA, 2016).

## Threats to biodiversity

Fast changes are observed in the amazon biome affecting its capacity to stabilize and regulate climate changes in the world.

According to RAISG, accumulated deforestation to 2013 corresponds to 13,3% of the original forest cover of the Amazon, and it is estimated that the largest loss of original forest cover (9.7%) occurred mainly between 1970 and 2000, while between 2000 and 2013 the remaining 3,6% occurred.

The trend towards deceleration in deforestation that occurred between 2000 and 2013 has a clear correlation in Brazil, Bolivia and Ecuador. In Colombia, Peru, Suriname, French Guyana and Guyana, there were spikes in intermediate periods or evidences of stabilization. Agricultural activities and infrastructure works, such as highways and hydroelectric dams, are among the factors that exert more pressure on forests throughout the region. However, there are pressures and threats that are specific to each country, including illegal mining, hydrocarbon exploitation and illicit crops, among others (RAISG, 2013).

Similarly, according to the WWF 2016 report, 31 *de-forestation fronts* have been identified reducing the possibility to maintain their inhabitants<sup>-</sup> livelihoods and the ecosystem services on which they depend.

Likewise, it is projected that an additional 21 to 27% will be lost by 2030 if joint actions are not undertaken (Charity et.al, 2016), reason why the Amazon Vision Initiative is very important not only at regional but also at global level, if one considers the role of the ecosystems contained in the biome.

Currently, there are more than 250 projects to build dams that involve the risk of seriously altering the water systems of the entire biome, with catastrophic effects on unique species of fish and other migratory organisms of the Amazon basin, in addition to the impact on ecologic processes and socio-ecological dynamics.

Up until 2012 there were 417 hydro-electric power plants in the Amazon; 171 in operation or under construction/development, of which 120 with <30 MW capacity (Small Hydro-electric Power Plants– SHPP-) and 7 with >300 MW capacity; 246 have been planned in the national energy plans; most of them (179 in total) were SHPP. Most of them were located in the southern Amazon, followed by others in the eastern and western areas, very few were located in the central and northern zones (RAISG, 2012).

Moreover, there are more than 20 projects to build huge highways, putting pressure on natural forests. Experience shows that this accelerates urbanization and the expansion of the agricultural frontier. At the same time, mining and extraction of fossil fuels are a latent threat if one takes into account the number of exploitation permits granted within the protected areas, around 800 according to the WWF report. The waterways and adaptation of some sectors of important rivers also imply transformation of the hydro-biological dynamics; this must be especially considered for future planning and zoning processes.

<sup>6</sup> This is particularly so in the case of Guyana, French Guyana and Suriname.

<sup>7</sup> Including more than 60 isolated ones (COICA, 2016).

Country*	Under study (potential)	Projected	Under construction/development	In operation
Bolivia		Х		Х
Brazil	Х	Х	Х	Х
Colombia			Х	
Ecuador			Х	Х
French Guyana				Х
Peru		Х		Х
Suriname				Х
Venezuela				Х

#### Table 3. Phases of the hydro-electric power plants per country of the amazon biome

\*Without information for Guyana Source: RAISG, 2012

More specifically in 2012, there were in total 52.974 zones with mining interests over an area of 1.628.850 of km<sup>2</sup>, representing 21% of the Amazon territory, most of them being in a request process (50,8%), followed by the zones in exploration (30,8%)<sup>8</sup>. The surface covered by the requested areas represent 10,7% of the Amazon (827.142 km<sup>2</sup>), while the areas under exploration cover 6,5% (502.085 km<sup>2</sup>) (RAISG, 2012). The Amazon has 20,3% of its surface under mining zones.

Category	# mining areas	Area (Km²)	% of the area per phase	% area of the Amazon
Potential	2.529	164.999	10,1	2,1
Request	30.411	827.142	50,8	10,7
Exploration	9.828	502.085	30,8	6,5
Exploration/ Exploitation	4.711	25.383	1,6	0,3
Exploitation	5.482	109.202	6,7	1,4
Without information	13	40	0,0	0,0
Total	52.974	1.628.850	100,0	21,0

# Table 4. Mining interests in areas of the amazon biome

Source: RAISG, 2012

In summary...



the amazon biome

34

million people live in the Amazon region





10%+ of the biodiversity of the planet is in the Amazon region



40% of the biome has been affected by deforestation



15% of all the world's clear water is discharged into the Amazon River



of the Amazon surface is under mining zones

# National contexts in relation with biodiversity and development

Despite having policies, legislations and political-administrative systems in many cases different, the countries of the amazon biome are governed mostly by very similar socio-economic and political trends; with some exceptions in Bolivia and Venezuela, the predominant economic models compete strongly with the needs to preserve environmental assets and services, even though great efforts are made to consolidate national policies and laws that guarantee a minimum protection of the natural resources, essential for the development of nations.

8 Information reported by the government bodies No information on illegal mining was included

According to the national reports on biodiversity presented by the CBD secretariat<sup>9</sup>, all the countries of the biome have biodiversity policies established and carried out through different strategies; similarly, there are protected areas systems formally recognized (World Database of Protected Areas - WDPA), although at different levels of development, makeup and expanse (see Table 10).

On the other hand, national and local governments in Brazil, Bolivia, Colombia, Ecuador and Peru move forward in the implementation of development plans that include driving engines such as monoculture-based agriculture, extensive cattle farming, mining and extraction of hydrocarbons, which at the same time generate massive migrations and effects on the makeup of families. Basically, these policies are aimed at generating niches of growth, employment and higher income for the countries inhabitants, which may be the result of inter-sector negotiations that involve different action fields in the pursuit of benefit of the common interests of society. In this regard, there is a great opportunity for the protected areas in order to guarantee the services they provide to society.

Given the evident implementation of large projects that may have great impact on the biodiversity values but that are determinant for the planning of aforementioned development, it is worth highlighting that in the biome countries, the aspects related with natural resources and biological diversity are closely linked within the intersectoral planning instruments, as outlined on the following table:

Country	Name and Period	Components related with natural resources / biodiversity
Bolivia	2010-2015 National Development Plan.	Bolivia Productive - Transformation of the natural resources, basis of the strategic sectors
Brazil	Mais Brasil 2012-2015 plan	Environmental field – Sustainable use of the natural resources and expansion of the infrastructure
Colombia	olombia 2014-2018 National Development Plan. Chapter x. Green Growth and priorities for territorial management	
Ecuador	National Plan for Good Living 2013 – 2017	Objective 7. Guarantee the nature´s rights and promote territorial and global environmental sustainability
Guyana	National Development Strategy	Volume 3. The social sectors Volume 4. The productive sectors
French Guyana	N.D	N.D
Peru	Strategic Plan for National Development – 2011 -2021	Strategic focus 6 Natural resources and environment
Suriname	N.D	N.D
Venezuela	Social Plan for Economic and Social Development of the Nation 2013 - 2019	Objective V. Preserve life on the planet and safe the human species

#### Table 5. Biodiversity in the Development Plans of the Amazonian countries.

Sources: CNPE, 2011; ARBV, 2013; DNP, 2014; NDP, 1997; De Oliviera, 2015; PND Bolivia; SNPD, 2013.

It is in this context that, in the pursuit of social welfare and good living, and taking into account the different national perspectives in terms of what development represents, the mechanisms to conserve the biological diversity are coordinated to a greater or lesser extent with the sector policies aimed at generating said development, considering that many of these plans highlight the value of nature as core element to achieve the objectives linked to the progress in economic production, reduction of poverty, education, health and all other development areas of the States.

<sup>9</sup> https://www.cbd.int/reports/analyzer.shtml.

Lastly, it is very important to highlight that all the biome countries are signatories of the United Nations Framework Convention on Climate Change (UNFCCC), and have generated political and institutional instruments to tackle the effects of this global phenomenon, especially, through the protected areas as an adaptation strategy. It is necessary to consolidate programs in which the capacity of the protected areas for the the ecosystems resilience is closely involved, although there is already significant progress in terms of environmental policies related to the mitigation and adaptation to climate change variability (Vergara, 2015).

## Amazon Vision for Conservation of Biodiversity with an ecosystem focus

This initiative was promoted by the Latin American Technical Cooperation Network in National Parks, other protected areas, flora and fauna- Redparques, which is a mechanism comprised by the public institutions of 19 Latin American countries in charge of the national protected areas systems, and whose objective is to promote technical cooperation among its members, foster the training of human resources, strengthen the technical capacity for the conservation of ecosystems and in respect of the management of protected areas, promote trust between the countries and achieve the institutional development necessary to respond to the conservation challenges. In this context, the first meeting was held in 2008 in Bogotá to achieve a shared vision regarding the development and conservation of the amazon biome aimed at ensuring its sustainability.

The main players of this initiative are the protected areas systems in the Amazonian countries and the French Guyana territory, as well as the collaborating institutions which historically have promoted the development of these topics in the region such as the IUCN, WWF, UNEP, FAO as Technical Secretariat of the Redparques and the Secretariat of the Convention on Biological Diversity (SCBD), among others.

This initiative is the result of historical information that explains and evidences how a common result was obtained:

History	Description
II Latin American Congress on National Parks and Protected Areas – Declaration of Bariloche (2007).	<ul> <li>Develop ecologic networks and Protected Areas systems</li> <li>Fragility in respect of the effects of climate change and the need to develop conservation strategies integrated with Protected Areas.</li> <li>A common political agenda is required in matters of the Protected Areas.</li> </ul>
Strategic Planning of Redparques (2008).	<ul> <li>Develop sub-regional conservation priorities exercises.</li> <li>Resume work of ARPAS - Amazon Region Protected Areas System- ARPAS (1997- 2000).</li> </ul>
Decision IX/28 COP of the CBD (2008).	<ul> <li>Specific invitation pertaining to the implementation of regional initiatives integrating the protected areas within the most extensive countries, iden- tifying conservation gaps and effective management tools of the protected areas.</li> </ul>
Resolution 073 of the World Conservation Congress (2008).	<ul> <li>Support from the IUCN and its members to develop the work agenda of the Amazon States establishing the importance of consolidating the progress of this Amazon initiative in a regional report that supplements the national reports.</li> </ul>
Memorandum of understanding between Redparques, CBD, IUCN and WWF (2009).	<ul> <li>Support the implementation of Resolution 073 of the IUCN, joining technical and financial efforts to promote the Amazon Vision's work agenda.</li> </ul>

#### Table 6. Amazon Vision Initiative background

Source: Own development, IAPA Project, 2016

The result is the **2020 Vision**, which seeks to consolidate an ecosystem-focus shared vision of biological and cultural conservation of the amazon biome, that contributes to the effective administration and management of the national systems of protected areas and the maintenance of the ecosystem's assets and services<sup>10</sup>, the integrity, functionality and resilience of the biome in respect of the effects of natural and anthropic pressures in a context of global change. Worth highlighting is the integration of the results and the intended awareness on the consequences in the natural and physical processes of the human being's actions, with a common objective related with resilience and sustainable development.

The guidelines were thus formalized for the Building of a Regional Vision for Conservation of Biological and Cultural Diversity of the Amazon Biome, managing to establish a work plan recognized by all the stakeholders involved in the process. The work was coordinated around the following themes, which in turn, are contained in the strategic actions suggested by the PoWPA : (i) conservation goals and priorities defined by the countries for the Amazon region; (ii) monitoring and assessment of the effective management of the Amazon protected areas; (iii) prevention of development impact on the protected areas and financial sustainability, and (iv) relation between cultural diversity and social participation in the protected areas systems.

"The Protected Areas are the main strategy for in situ biodiversity conservation of our countries and provide essential environmental assets and services associated to the strategic ecosystems represented within; therefore, it is important to promote their adequate management in order to achieve global goals, such as the reduction of poverty, sustainable development of our countries, and in general improvement of the quality of life of the local communities that inhabit the surrounding areas or zones of influence in terms of the opportunities to find a balance between conservation and sustainable use<sup>11</sup>" (Redparques, 2008).

The specific themes that have been addressed in the framework of the initiative are:

- Goals and priorities of the biome's conservation.
- Framework that integrates information on the biome's effective management and facilitates monitoring through common indicators.
- Financial sustainability, indicating the importance of having common strategies in all the countries.
- Exchange of knowledge and experiences related to the shared management of the protected areas with the communities and inhabitants of said areas.

In 2010, in order to consolidate the results of the development of the work agenda for the building of the Vision, as well as the progress in the regional implementation of the PoWPA goals, a commitment was undertaken by the Amazon Vision countries and the Initiative partners with the purpose of building a progress report on the implementation of the PoWPA, this was a collective effort in which the representatives of the protected areas systems were responsible for the editorial process. The four elements of the PoWPA are highlighted below:



<sup>10</sup> It is important to clarify that this document and in general the Amazon Vision are respectful of the conceptual development and diverse opinions regarding the ecosystem services in the region's countries.

11 Memories: https://www.parquesnacionales.gov.co/PNN/portel/libreria/pdf/MemoriasTallerAmazonaRedparques2008-PDF.pdf.

Governance,

Goal 2.1: To promote equity and benefit-sharing

Participation, Equity

and Benefit Sharing

It is worth mentioning that as explained below, the initiative prioritizes the progress of some of the goals that correspond to these elements, which are reflected below:

#### Table 7. Goals of the PoWPA collected in the Ecosystem Vision for Conservation of the Amazon Biome.



Program

Element

Source: Own development based on the PoWPA , IAPA Project, 2016

The 2010 – 2020 Action Plan of the Amazon Vision, which is developed as integral part of the Regional Report on the Implementation of the 2010 PoWPA<sup>12</sup>, is a tool that allowed for the generation of actions and projects to guarantee an ecologically healthy amazon biome, that maintains its environmental and cultural contribution for the local communities, the indigenous peoples, the countries of the region and the world. This plan supplements other activities in the region. Seven fundamental aspects of the Plan are presented below, allowing explaining the progress of the Program throughout this report.

- 1. Maintenance and resilience of the biome's ecosystems.
- Consolidation of the portfolio of priority conservation sites.

- **3.** Identification of pilot processes for selected sites in which planning, creation, consolidation and effective management are promoted.
- 4. Development and implementing a monitoring and modeling model of the impact of the most important drivers and threats (infrastructure, climate change, agriculture, mining, etc.).
- **5.** Promotion of the involvement of the indigenous and local communities for effective management and conservation.
- **6.** Performing an effective management analysis at different levels to identify strengths and weaknesses.
- **7.** Development a financial sustainability strategy at regional level based on the priority conservation areas identified.

<sup>12</sup> Subsequent adjustments were made, incorporating essential aspects of Decision X/31 and the Aichi Goals.

#### Table 8. Projects of the Ecosystem Vision for Conservation of the Amazon Biome from Redparques<sup>13</sup>

Name	Objective	Players involved
2014 - 2018 Project Integration of the Amazon Protected Areas –IAPA- (2014-2018) Support project to implement the Conservation Vision in the Amazon Ecosystem in benefit of the local communities for the maintenance of the ecosystem services.	<ul> <li>By 2020, the NPAS in the amazon biome will increase the ecosystem's resilience to the effects of climate change and maintain the provision of goods/services in benefit of biodiversity, communities and local economies.</li> <li>Systems strengthened and integrated at regional level.</li> <li>Achievement of the Aichi Goals.</li> </ul>	Funded by the European Union. Implemented by the FAO. Implementing Partners: WWF, IUCN and UNEP.
Protected Areas, Natural Solutions to Climate Change– NASCC.	By 2016, the protected areas systems will be an integral part of the strategies to tackle clima- te change in the amazon biome, they will be recognized and included in the development plans at national and regional level, as well as at international events thanks to the provision of ecosystem services and their contribution to a better way for the local communities to adapt to climate change.	Funded by the Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety (BMUB) and WWF. Implementer: WWF.

Source: Own development, IAPA Project, 2016

As a result of the work to advance the Action Plan to implement the PoWPA of the 2010 – 2020 vision and of the Donors meeting process held in Lima in 2010, the following projects are will be implemented in the framework of this initiative.

As further promotion to guarantee the long-term sustainability and visibility of the initiative, in November 2013 a Second LifeWeb Donors Meeting for the Amazon Vision was held in Paracas (Peru), co - sponsored by the Secretariat of the CBD, the SERNANP and Redparques, at which the interest was renewed for the strengthening of the Amazon Vision, whose purpose is to continue positioning the initiative in order to generate additional support from the international donors that have adhered to the platform.

Similarly, to consolidate the Vision's agenda, a series of technical events have been held to define the scope and to advance in specific developments, with participation from directors, experts and other collaborators of the NPASs (more than 80 participants at the various events). For this document specifically, the following are highlighted:

- ✓ Regional Workshop "Building Resilience in the Amazon Biome" (Cali, August 2015), where the technical guidelines were worked to analyze vulnerability, resilience, ecosystem services, management effectiveness and conservation priorities.
- ✓ Regional Workshop of the Amazon Vision Work Groups (Bogotá, November 2015), the delegates for conservation, governance and management effectiveness opportunities established guidelines for future work and the content of the report.
- ✓ Workshop of the Financial Sustainability Work Group (La Paz, April 2016).
- ✓ Editorial Workshop of the Regional Report for the implementation of the PoWPA in the amazon biome (Lima, July 2016), whose results contributed to supplement and focus the report according to the guidelines of the biome countries.
- ✓ Meeting of Directors of National Systems of Protected Areas of the Amazonian countries (Bogotá, September 2016), where contributions were made regarding the perspectives of the Amazon Vision, from the leadership of the national coordinators of Redparques.

<sup>13</sup> There are countless projects within the biome with which the consolidation of this Vision contributes. This document only lists those that are a direct result of the work of Redparques to consolidate the initiative, although there is awareness of ongoing projects that seek to systematize the different undertakings in the region.

# CHAPTER 2.

# IMPLEMENTATION OF THE PROGRAM OF WORK ON PROTECTED AREAS IN RELATION TO INTERNATIONAL TECHNICAL AND POLITICAL GUIDELINES



The PoWPA as a technical-political move of the countries has become essential in the creation of policies, agreements and regulations on the protected areas within the biome countries. In light of the negotiations following its adoption and as a supplement for its operationalization, other global guidelines have been structured that are reflected within the PoWPA elements and that are fundamentally important in a future implementation scenario of the program, such as the Aichi Goals and the Innovative Approaches of the Promise of Sidney. The decisions and recommendations that influence directly the future of the PoWPA and the success of its implementation, in the framework of the international agenda post-2015 are listed below.

## 2011-2020 Strategic Biodiversity Plan or Aichi Goals

The conservation of nature and the values associated to protected natural spaces is today a priority within the political agendas of the countries, due to the need to strengthen the socio-ecosystems through the protection of those areas of particular importance for biological diversity and the ecosystems services. With this purpose, in 2010 the 2011-2020 Strategic Plan for Biological Diversity of the CBD was approved. It contains 5 strategic objectives and 20



specific<sup>14</sup> goals (Annex 1). These global goals became the basis for the countries to establish own goals and to adapt action plans geared at achieving them. These goals are set out in the National Biodiversity Plans and Strategies (NBSAPs), which should also be reported to the SCDB.

The 2011-2020 Strategic Plan presents in turn an important reference for the collective building of the Sustainable Development Objectives, taking into account that i) nature provides fundamental elements for human survival, ii) species and ecosystems have a limited capacity to adapt to change which is a challenge to reduce the vulnerability with regards to global change factors; and iii) nature must be taken into account in the decision-making and the formulation of public policies.

In relation with the protected areas in particular, Goal 11 establishes that "by 2020, at least 17% of the land zones and continental waters and 10% of the marine and coastal areas, especially those of particular importance for biological diversity and ecosystems services, will be conserved through effectively managed protected areas systems and equitable governance, ecologically representative and well connected through other effective area-based conservation measures, and are integrated into the most extensive land and marine landscapes".

This implies that:

- The protected land and marine areas must increase.
- The areas included must be rich in biological diversity or very rich in species or with threatened species, or very important for the provision of ecosystem services.
- ✓ The areas must be ecologically representative.
- ✓ The areas should be managed effectively and governed equitably, that is to say, with planning measures to conserve their regions, participation of the local inhabitants and the indigenous communities, and costs and benefits shared fairly.
- The areas must be well connected.

This Goal is related with all the others of the Plan and particularly with Goal 5 on the loss of natural habitats, Goal 12 on the extinction of threatened species, Goal 14 on the restoration of ecosystems and safeguarding of their services, Goal 15 on the capacity of the ecosystems to mitigate and adapt to the effects of climate change and Goal 16 on access and benefit-sharing derived from the use of genetic resources.

To achieve this goal, it is useful to take advantage of the fact that the countries promote protection, recovery and conservation of habitats which have virtually disappeared. Clearly, this change will require greater effort, commitment and investment, as well as more efforts with regards to representativeness, effective management, connectivity and integration of more extensive landscapes and equitable governance, by recognizing other effective measures.

In addition, Decision X/31 of the CBD on protected areas sets forth the strategies to strengthen the implementation at national, regional and global level, as well as the aspects that require special attention. The following table summarizes the main actions at these three levels to which the signatories of the Convention are invited and that are closely related with the thematic developments of the Amazon Vision.

Subsequently, Decision XI/24 was adopted at the 11th Conference of the Parties to the CBD, leading to the following suggestions, relevant for the future of the Amazon Vision:

- Generate the instruments necessary to adopt and incorporate the action plans of the protected areas that guarantee the implementation and funding of the PoWPA.
- Connect the objectives of the Program to achieve Goal 11 of Aichi.
- Recognize the communities' steps and achievements.
- Align the approved protected areas projects with other projects of different funding.
- Establish communication and work with networks at regional and sub-national level within the countries, in order to compile good practices and recognize the progress in the implementation of the action plans.

<sup>14</sup> https://www.cbd.int/sp/targets/

	At national level At regional level		At regional level	At global level		
•	Increase coverage, quality and re- presentativeness of the protected areas; improve their connectivity.	•	Formulate regional plans of protected areas based on the na- tional plans.	•	Generation and consolidation of capa- bilities, especially for Element 2 of the Program.	
•	Define protected areas in the fra- mework of an ecosystem.	•	Develop a legal and institutional framework that facilitates the	•	Support the networks that work with the protected areas to exchange knowledge	
•	Increase awareness and recognition of the NPAS.		tries, especially in bordering areas.		and technical support on (i) ecologic res- toration; (ii) assessment and monitoring	
•	Take into account the presence of indigenous groups in the protected areas and the United Nations guide- lines in relation thereto.	•	Promote the use and strengthe- ning of the existing guidelines or tools to facilitate cooperation among the countries.		of biodiversity in the protected areas; (iii) governance of the protected areas; (iv) con- servation corridors; (v) management tools and (vi) initiatives to adapt and mitigate climate change.	

# Table 9. Actions suggested by Decision X/31 of the CBD related with the PoWPA goals addressed by the Amazon Vision.

Source: own development, IAPA Project, 2016

## Sustainable Development Objectives – SDO

#### **OBJETIV**S DE DESARROLLO SOSTENIBLE



The SDOs are product of a worldwide effort to advance in the achievement of the Millennium Development Goals, at a crucial moment at which the need to generate more robust policies related with the different critical areas for human survival is evident. They were approved by the United Nations General Assembly in 2015 and put forth a sustainable development agenda until 2030. The focus of the SDOs is people, the planet, prosperity, peace and partnerships. The latter provide the necessary means for all the development players to work around one same objective. The declaration contains 17 general objectives with 169 goals. There is a clear connection between the Aichi Goals and the SDOs. From a conceptual framework standpoint, one must take into account that biological diversity is the basis for sustainable development<sup>15</sup>, considering that:

- ✓ The biological diversity and the ecosystems provide essential elements for human health such as air, nutrients, clean water and plague control.
- ✓ The production of clean and safe water depends on the biological diversity, especially on the natural structure of the forests, wetlands and healthy soils.
- The role of biological diversity must be highlighted to mitigate the effects of climate change and to promote this way adaptation, contribution to reducing the carbon footprint and manage the risks.
- Biological diversity is a vital resource of the world and local economies.
- The production of food depends on the biological diversity and the services provided by the ecosystems.
- ✓ The biological diversity is the basis of sustainable livelihoods; which is directly related with the reduction of poverty.

<sup>15</sup> https://www.cbd.int/development/doc/sdg-feb2014-info-es.pdf .

- ✓ By rescuing the traditional knowledge associated to biological diversity, a possible impact is created on those who depend on such knowledge daily, and this may benefit the industry and modern agriculture.
- ✓ The cities, which in turn contain green urban areas, also benefit from biological diversity.

### The Promise of Sydney



The VI IUCN World Parks Congress was held in 2014 in Sidney (Australia) with 3 specific objectives:

 Coordinate the vital role of the protected areas in the conservation of nature by providing essential ecosystem services

- 2. Position the protected areas within the economic and prosperity objectives of the community, and
- **3.** Show how the objectives can be achieved in the practice.

The Promise of Sidney<sup>16</sup> proposed vision is the commitment to transform the prospects, policies and practice of the actions related with protected areas as one of the best investments in the planet. This vision coordinates the expectations and recommendations from the experts convened by the World Parks Congress, and defines the changes necessary to promote the implementation of the conservation and development objectives for the parks, the people and the planet. Similarly, the Congress became the arena to take stock of the actions around conservation in aspects such as health, governance, development challenges and strengthening of capabilities, among others, in relation with 8 thematic lines:



#### Figure 4. Thematic lines of the 2014 World Conservation Congress.

Source: Sandwith. T and Bueno P. "The Promise of Sidney", South American Forum of the IUCN, 2015.

Similarly, three cross-section topics were addressed: marine conservation, world heritage, development of capabilities and a new social pact. The Promise, which is not simply a document or declaration is divided into 3 parts: (i) the vision (encourage, inspire, invest), (ii) the innovative approaches or recommendations and (iii) the solutions, recorded in the Panorama platform<sup>17</sup>.

The Sydney Promise captures the most strategic reflections of governments, international organizations, communities, youth leaders, indigenous peoples, individuals and organizations to chart the future direction of protected areas, considering that they provide and implement solutions to the problems facing the planet, for which more than 150 thematic recommendations or Innovative Approaches were elaborated. These are combined with commitments by partners to accelerate the necessary changes, allowing organizations and individuals to make their own promises with a view to facilitating the achievement of Sydney results; To date, there are about 50 commitments from countries and organizations around the world, including two from biome countries (Brazil and Peru) and a specific one related to the Amazon (ARPA Program)

<sup>16</sup> http://worldparkscongress.org/about/promise\_of\_sydney\_vision\_es.html

<sup>17</sup> www.panorama.solutions .

In relation with the components of the Amazon Vision, it is important to highlight that in terms of achieving the conservation goals, great emphasis was made on the assessment of biodiversity to inspire new generations for the purpose of greater sustainability. Among the related recommendations we have (i) promote strengthening of the adaptive systems; (ii) increase the number of protected areas that have a better management and control system; (iii) advance in the achievement of the Aichi Goals. including other area-based effective conservation measures; (iv) set ambitious goals aimed at changing production models that deteriorate the biodiversity (for example extraction zones); (v) promote the institutionalization of the Protected Areas Green List, and (vi) foster the creation of functional landscapes where connectivity benefits.

With regards to the *governance of protected areas*, emphasis was made on the need to improve their quality, diversity and vitality, with the purpose of achieving an effective and equitable administration of the use of nature. For the Amazon Vision, it is worth to rescue the recommendations related with the need to strengthen the local capabilities for a better exercise of authority, recognize a greater diversity of governance forms identifying the cultural wealth of the territories -especially those conserved by the communities (TICCAs), in addition to the private areas locally managed-, and the invitation to maintain the legal order promoting the no regression, no intrusion and guarantee of the rights and common welfare.

Annex 2 outlines briefly the recommendations for the thematic lines<sup>18</sup> on the conservation goals, climate change, development challenges, quality and diversification of governance and respect of the rights of the cultures of the indigenous peoples, related with the contents of this report.

As conclusion, it is evident that in regard to the present and future challenges in the implementation of the Amazon Vision as a precision of the PoWPA at the biome scale, the guidelines described above contribute specifically to generating the changes required in matters of policy, based on the technical analyses that contribute to the strengthening of the protected areas role in the maintenance of life in general.

<sup>18</sup> Full information about the event and its results can be found at http://worldparkscongress.org/about/promise\_of\_sydney.html



# PROGRESS IN THE DEVELOPMENT OF THE WORK PROGRAM ON PROTECTED AREAS IN THE AMAZON BIOME



In 2010, as mentioned, Redparques launched a major review exercise on fulfilling PoWPA goals, prioritized by the Amazon Vision, aiming to generate an Action Plan to be executed and evaluated in the coming years.

In light of the results and outstanding challenges, based on official data compiled by the SCDB on compliance with the National Action Plans pertaining to Implementing the PoWPA (Annex 5), progress on each of the goals, strategic actions and targets of the Amazon Vision prioritized elements are explained as follows, for the 2011-2015 period.



## Element 1: Direct actions for planning, selecting, establishing, strengthening, and managing, protected area systems and sites.

Regarding of this element, the set forth priority actions are: i) progress in consolidating and implementing criteria that strengthens the portfolio of prioritized conservation sites from a regional perspective and progress in integrating land and freshwater ecosystems in order to maintain the ecosystem services, as well as the socio-cultural and economic criteria, elements and processes ii) consolidate the process of defining the conservation portfolio of priority areas from an ecologic-regional perspective and iii) progress in the regional analysis processes, modeling, prevention and mitigation of impacts on protected areas as caused by the execution of extraction activities, infrastructure works, climate change, agricultural and cattle farming expansion and other development activities.

The importance of appraisal activities of environmental assets and services of the Amazon's protected areas is Highlighted, as a strategy for biodiversity conservation and adaptation to climate change, as well as for the development of strategies to strengthen the inter-sector coordination and communication and to facilitate integrating protected areas into the national development plans and the sector plans. Goal 1.1: To establish and strengthen national and regional systems of protected areas integrated into a global network as a contribution to globally agreed goals.

#### Creation and strengthening of National and Regional Protected Areas Systems

This goal of creating regionally protected areas' systems is to reduce biodiversity loss rates and to strengthen environmental sustainability, among others. Most of the Amazonian countries have considerably increased the proportion of protected areas. Table 10 shows the progress made in terms of

increase in numbers and surface of protected areas within the biome during the period 2011 – 2015.

For 2010, approximately 2.065.254,36 km<sup>2</sup> were reported under some conservation category, equivalent to about 31% of the area covered by the biome. By 2015, an increase of approximately 1% in the extension of protected areas in the Amazon region (2.118.743,22 km<sup>2</sup>) was reported, with the establishment of 44 new areas. The countries that reported the greatest increase in surface coverage of their protected areas are Peru, with about 1,16% equivalent to 27.457,61 km<sup>2</sup>, and Guyana with 1,21% with an increase of 8.643,19 km<sup>2</sup>. On the other hand, countries that reported a greater increase in the number of protected areas in the Amazon were Brazil (27), Colombia (14) and Peru (7).

		IUCN	No.	km²	km²	No.
COUNTRY	CATEGORT NATIONAL	CATEGORY	2010		2015	
	National Park	Ш	4	52.824,29	52.824,29	4
	Natural Monument	III	1	11,45	11,45	1
	Wildlife Reserve	VI	2	49,38	49,38	2
D - 1::- 19	Natural Integrated Management Area	VI	2	114,56	114,56	2
BOIIVIA	Immobilization Natural Reserve		1	72,75	72,75	1
	Departmental Park		2	155,54	155,54	2
	Municipal Park		2	58,74	58,74	2
	TOTAL		14	53.286,71	53.286,71	14
	Ecologic Station	la	18	98,51	107,72	19
	Biologic reserve	la	13	48,48	49,27	13
	Park	II	44	24.948,30	26.051,30	45
	Environmental Protection Area	V	23	106,74	171,91	34
	Area of relevant ecologic interest	IV	3	189	446	6
	Greenwood	VI	58	28.282,90	29.851	58
Brazil	Extractive reserve	VI	69	122,62	137,48	71
	Sustainable development reserve	VI	19	95,22	109,93	20
	Wildlife Refuge		1	64	64	1
	Area of ecologic interest	IV	4	446	446	6
	Private reserve of natural heritage	IV	51	441	466	55
	Indigenous Territories		379	1.091.935,56	1.135.649,49	381
	TOTAL		682	1.146.778,33	1.193.550	709

#### Table 10. Categories of the protected areas of the amazon biome/country (2010 vs. 2015).

<sup>19</sup> The same information reported in 2010 is presented, subject to changes on the basis of updated official information.

	National Natural Park	Ш	14	47.915,93	74.268,42	14
	National Natural Reserve		2	19.000	19.927,37	2
	Flora Sanctuary		1	102,04	102,49	1
Colombia	Protective and regional forest reserve		1	156.362,80	1.310,11	8
	Protective forest zones and forests of general interest - Law 2 dated 1959 La 2 dated 1959	VI	1	78.523,24	78.523,24	1
	Regional Natural Park		3	81,56	81,56	З
	Natural Reserve of the Civil Society	VI	0	0	0,365457	3
	District for Conservation of Soil and Waters	IV	1	2.908,18	2.908,18	1
	TOTAL		19	226.370,51	177.121,74	33
	Biologic reserve	la	4	413,2	1.344,80	5
	Ecologic reserve	la	2	1.755	1.755	2
	National Park	Ш	7	22.196,60	22.346,80	7
Ecuador	Wildlife Refuge	IV	1	37	37	1
	Reserve for production of fauna	VI	1	5.804,70	5.949,50	1
	Municipal Ecological Conservation Area		0	0	160,2	1
	TOTAL		15	30.206,5	31.593,3	17
	Biotope protection	IV	4	257	257	1
	"Adhesion" National Park	VI	1	14.000	14.000	1
	"Integral type" national natural reserve	la	3	1.898,50	1.802,03	3
	"Management and eco-tourism type" National natural reserve	IV	3	1.112,30	1.125,70	3
	Regional Natural Park	VI	1	2.640	89,04	1
French	Formal protection forest regime areas	II		3.254,75	3.254,75	
Cuyunu	Sustainable use forest regime areas	VI		16.745,25	16.745,25	
	Registered sites	V	14	529	529	14
	Coastal conservation sites	V	14	148,36	125,27	9
	Regional Natural Reserve	IV	1	24,75	24,64	1
	Directed biological reserve	la	1	1.107	1.267,98	1
	Directed biological reserve "Heart" National Park	la Ia	1	1.107 2.000,00	1.267,98 2.000,00	1
	Directed biological reserve "Heart" National Park TOTAL	la Ia	1 1 43	1.107 2.000,00 <b>43.716,91</b>	1.267,98 2.000,00 <b>41.220,66</b>	1 1 <b>35</b>
	Directed biological reserve "Heart" National Park TOTAL National Park	la la II	1 1 43 1	1.107 2.000,00 43.716,91 626,80	1.267,98 2.000,00 41.220,66 626,80	1 1 35 1
Guyana	Directed biological reserve "Heart" National Park <b>TOTAL</b> National Park Natural Reserve/Resources manage- ment area	la la II IV	1 1 43 1 1	1.107 2.000,00 43.716,91 626,80 3.717	1.267,98 2.000,00 41.220,66 626,80 12.360	1 1 <b>35</b> 1 3
Guyana	Directed biological reserve "Heart" National Park TOTAL National Park Natural Reserve/Resources manage- ment area Indigenous Territories	la la II IV	1 1 43 1 1 102	1.107 2.000,00 43.716,91 626,80 3.717 34.976,31	1.267,98 2.000,00 41.220,66 626,80 12.360 34.976,31	1 1 <b>35</b> 1 3 102

	National Park	11	9	74.673,44	90.254,57	11
	National Sanctuary		4	2.987,53	2.987,53	4
	Historic Sanctuary		1	325,92	325,92	1
	Protection Forest	VI	3	3.878,18	3.878,18	3
	Communal reserve	VI	8	17.774,66	21.665,88	10
Peru	National Reserve	VI	5	34.713,49	34.713,49	5
	Regional conservation areas	VI	5	12.436,32	25.893,07	7
	Hunting reserve	VI	0	0	0	0
	Reserved zone	Category Transitory	3	19.131,09	13.659,60	4
	TOTAL		38	165.920,63	193.378,24	45
	National Park	II	1	12,20	12,20	1
Currieren	National Natural Reserve	IV	11	1.881	1.881,0	11
Surmame	Management and use area	VI	4	177,10	171,10	4
	TOTAL		16	2.070,30	2.064,30	16
	Forest Area Under Protection	V	7	7.021,33	7.021,33	7
	Natural Monument		19	65.892,49	65.892,49	19
	National Park	II	6	90.127,58	90.127,58	6
	Forest Reserve	VI	8	118.485,34	118.485,34	8
Venezuela	Wildlife Refuge	IV	1	174,31	174,31	1
	National Hydraulic Reserve	VI	1	494,44	494,44	1
	Biosphere Reserve	VI	1	22.109,44	22.109,44	1
	Protection Zone	VI	3	74.260,14	74.260,14	3
	TOTAL		46	378.565,07	378.565,07	46
	GRAN TOTAL		977	2.086.234,88	2.118.743,22	1.021

\* The area of the biosphere reserve does not include the areas corresponding to national parks and natural monuments that are within it, so as not to overlap or repeat territory in the general total.

Sources: Data 2010: Ruiz, 2010; Data 2015: IAPA Project; NPAS web pages or Country Ministries of Environment<sup>20</sup>.

Graph 1 shows the number of protected areas, according to the IUCN category, represented in the amazon biome. Of the 513 protected areas with some IUCN category, the most represented category is the VI with 192 areas, followed by the II with 93 and the IV with 89. The remaining 508 protected areas correspond to conservation figures of countries such as Natural Reserve of Immobilization and Municipal Park for the case of Bolivia, Indigenous Territories in Brazil and Guyana, Protective and Regional Forest Reserves in Colombia and Ecological Area of Conservation in Ecuador.

In the specific case of Brazil, according to the data reported in Table 10, an increase is seen in the representativeness of the various conservation figures (27 new area), especially in the environmental protection categories with an increase of 67% since 2010 and in the areas of relevant ecological interest (two new areas until 2015).

<sup>19</sup> www.sernap.gob.bo-, www.parquesnacionales.gov.co/portal/es/sistema-nacional-de-areas-protegidas-sinap; www.sernanp.gob.pe www.ambiente.gob.ec/sistema-nacional-de-areas-protegidas; www.mma.gov.br/areas-protegidas/sistema-nacional-de-ucs-snuc http://www.parquesnacionales.com.ve/



Graph 1. Protected areas in the amazon biome per management category of the IUCN.

VI (Protected area with sustainable use of natural resources)

Source: Own development, IAPA Project, 2016

In Ecuador, specifically for the amazon biome, an increase is reported in conservation areas under the same categories from 15 in 2010 to 17 in 2015. The country has been implementing the National Classification System of Ecosystems of Ecuador generated by the MAE in 2013, which uses more precise technical criteria to establish what is considered the Amazon<sup>21</sup>.

Colombia in turn, shows a significant increase in the number of areas under the legally recognized conservation areas (23 in 2010 vs. 33 in 2015) in the Amazon region. To 2015 new categories were incorporated for the Amazon as regional national parks and natural reserves of civil society. The reduction in the coverage area of the protected areas is mainly because up until the end of 2010 a registration process started in the Registry of Protected Areas (RUNAP), which led to greater precision of the reported information for 2015. Peru reports an increase of seven new regional conservation areas, with an increase of 27.457,61 Km<sup>2</sup> and the declaration of two new Natural National Parks: Güeppí Sekime and Sierra del Divisor.

Guyana reports the declaration of two new sustainable use areas: Kanuku Mountains (6.110 Km2) and Shell Beach (6.250 Km<sup>2</sup>).

# Expansion prospects of protected areas systems in the amazon biome

In 2010, each country outlined its expansion prospects of the protected areas systems in the amazon biome In fact, most of the countries in the last five years have advanced in the expansion of various biological and cultural diversity conservation figures, and they have also strengthened the prioritization methodologies of important areas for biodiversity conservation. Below is a summary of the progress made by each of the countries in terms of the projections made in 2010, also their new conservation and protection interests are presented according to the latest studies, which already consolidate various biological, socio-cultural and political-institutional criteria (Table 11).



<sup>21</sup> According to this system, of the 90 ecosystems of the country 29 were considered Amazon Ecosystems, which even with the declaration of five new protected Amazon areas, makes the amount of km<sup>2</sup> lower than in 2010.

Table 11.	Progress	made in t	terms of	f the d	declaratio	n of	protected	areas
	and/or of	ther cons	ervation	mecl	hanisms :	since	2010.	

Country	Progress since 2010	Remarks
Bolivia	<ul> <li>In the prioritization exercises of the conservation areas, the following criteria are considered: viability, functionality and representativeness.</li> <li>To analyze viability, blocks of continuous areas and in good conservation state are identified.</li> <li>To analyze functionality, variables have been reviewed such as climate reduction, ecosystem complexity (endemic qualities and wealth of species) and important areas for water resources. For the representativeness, areas where the number of species is high have been considered.</li> <li>These three aspects combined result in a conservation vision map; where the three aspects overlap, are the most representative areas y and therefore more important to conserve. They then intersect with the PA polygons and it is noted that most of these areas have a conservation figure; however there are areas not under any figure.</li> </ul>	<ul> <li>14 of the 16 eco-regions defined in the country are adequately covered, lacking AP in the puna and cerrado ecosystems (SERNAP, 2006). According to gap analysis, the Amazon ecosystems are better represented; and the priorities are in the ecosystems outside the region.</li> <li>More possibilities to increase the TI, even within the PAs.</li> </ul>
Brazil	<ul> <li>In the last six years, the increase of conservation units in the biome was of approximately 5%.</li> <li>In 2016 the declaration of the National Parks of Acarí (896.000 ha.), the National Forests of Aripuana (751.000 ha.) and Urupadi (537.000 ha.) and the Environmental Protection Area and Biological Reserve of Manipu (152.000 ha.) will become effective. Similarly, the Amana National Forest Reserve will be expanded in 141.000 ha.</li> <li>Through the Legal Land program, public land is being provided to create the new UC Union (Ministry of Agricultural Development).</li> <li>In relation with the update of priority conservation areas, the following exercises have been carried out.</li> <li>A first exercise considered the analysis of biodiversity, vulnerability, representativeness and irreplaceability, including aspects such as endemic and threatened species, maintenance of the traditional cultures, environmental services, protection of landscape aspects.</li> <li>A second exercise considered other criteria such as political players, forest coverage, creation of processes, connectivity, forest concessions, deforestation processes, and traditional communities.</li> <li>Other exercise worked on based on the Aichi Goals, considered the connectivity of ecosystems, and analysis of other areas that could be less restrictive. The relevancy of involving strict conservation areas is being analyzed.</li> </ul>	<ul> <li>Large gaps of representation of Amazon ecosystems in the NPAS. There are possibilities for the growth of areas, especially direct use areas.</li> <li>Consolidation of CUs, integrated into protected areas mosaics.</li> <li>Update of the priority areas for biodiversity conservation. Currently, 334 priority areas have been identify covering nearly 20.721.800 ha. of which 97 would be of sustainable use.</li> <li>Although the integral conservation units are more efficient to contain the threats, the sustainable use units have a special meaning for the conservation of socio-diversity.</li> </ul>

Colombia The PNN Chiribiquete was expanded from 1'298.954,9 to 2.782.353,6 ha. (1'483.398,7 ha. expansion). • As expansion and consolidation prospects we see the ecosystems connectivity corridors . already mentioned in Table 13, where a declaration of new protected areas is foreseen at sub-regional level intended to guarantee ecologic connectivity; maintain ecosystem services; ecologic dynamics; conserve cultural diversity, as well as the values and practices associated to the management and use of biodiversity; water provision; and where impact from sector activities and deforestation process is reduced, in addition to implementing measures aimed at reducing impact (zoning plans and mining) and/ or compensation measures (oil and gas and road infrastructure sector). The aforementioned are in various stages of development and levels. management. The greatest challenge consists in strengthening inter-cultural dialog, inter-institutional work groups and sub-regional public-private alliances in order to reach the development of agreements, implement action plans and management of areas of biological and cultural importance at different scales, coordinating inter-sector interests and achieving the incorporation of these environmental zoning, conservation and management initiatives into other planning and management instruments . • Colombia is advancing in defining priority conservation sites in conjunction with the residents and relevant local, provincial and regional institutions. The intent is to integrate cultural aspects into conservation objectives, such as biodiversity, ecosystem services and assets that are the natural basis for development. In that regard, work is underway with Brazil for a cultural mapping exercise that will allow integrating these aspects into the conservation priorities analyses.

- Expansion process of the Chiribiquete PNN, with a territorial zoning perspective, coordinated with the territorial institutions, discussed with the National Hydrocarbons Agency (ANH) and in consensus with the indigenous authorities.
- Steps forward in the execution of a strategy of the PA-RPAS Regional System, which guarantees connectivity between the Andes, Orinoquía and the Amazon.
- Steps forward in the proposal to configure a RPAS in the sub-region of the Piedemonte Andino Amazónico and implementation of a territorial zoning strategy.

The consolidation processes of the Regional Protected Areas Systems (RPAS) are coordinated with the conservation priorities at regional (Prioritized areas in the planning instruments of the territorial institutions and of the environmental authorities) and local (municipal protected and civil society areas)

Important opportunities also through the creation of PAs by decision of the indigenous communities in their territories: Development of Community Conservation Areas in the framework of a green growth focus of the national development plan. PNN as coordinator of the SINAP along with strategic partners advances in the consolidation of the foundations, experiences and presentation of technical, political and legal reasons to support these community initiatives (indigenous, collective territories, farmers, local communities).

The public initiative called Corazón Amazonía (Amazon Heart) seeks environmental, cultural and economic sustainability of the Colombian Amazon, in partnership with social and producer organizations and the indigenous authorities. It is developed as one of the first actions of the Amazon Vision Program and its objective is to improve governance and promote the sustainable use of the land to reduce deforestation and conserve the biodiversity in the forests. The first component addresses management effectiveness and increased funding for PA and it will be executed in the PNN Serranía de Chiribiquete and its area of influence.

Ecuador	Three zones have been identified in which forest cover changes processes have historically occu- rred: (1) the region of the Napo River in the western Amazon, (2) the Chocó region in the northwest of the country (Sierra & Stallings, 1998) and (3) the lower flanks of the eastern Andes (MAE, 2013). In 2013, the Ministry of Environment published a National Classification System of Ecosystems of Ecuador, which establishes in total 90 continental ecosystems, of which 29 are located in the Amazon. With regard to 2010, the NPAS have increased in 2 Amazon protected areas: Reserva Biológica Colon- so Chalupas and Área Ecológica de Conservación Municipal Siete Iglesias with a total of 1.091 Km2. The expectation is that the future increase of protected areas of the NPAS occurs especially in the sub-systems: autonomous decentralized and community, once the secondary legislation is for- malized which sets forth the guidelines to declare protected areas of these 2 types. The conservation gap analysis (MAE, 2013) highli- ghts the presence of areas of high importance for biodiversity in areas without protected area cove- rage, mainly located in the south-central Amazon (Pastaza range), in the Kutukú mountain range, and in the Amazon region.	SAccording to the conservation gap analysis, the following areas were identified in the Amazon yet to be included in the NPAS: ✓ Cóndor and Kutukú, as dispersion of Pastaza There is a low possibility to increase the PAs of the national system; relatively high in ITs or protected areas for direct use.
French Guyana	• In the French-Guyana the PA prioritization exercises and selection criteria are related with the available biodiversity. There is a territorial zoning scheme that outlines the risk zones for fauna and flora and there is also an extractive use zoning in place. This results in 23.258 Km2 protected areas and 19.863 km2 of multiple use areas (sustainable use); 47% of the legally protected territory.	<ul> <li>With the creation of the Amazon Park of Guyana, the PA network reaches more than 45% of the Franco-Guyanese territory.</li> <li>There are prospects for natural sites (especially, the Abattis Cottica - Maroni River area, announced for 2010).</li> <li>It was also decided to protect the Kaw mountain site (with gold potential) and a bio-type protection area is under study.</li> </ul>
Guyana	The criteria have been based on the representa- tiveness of various habitats (savannas, forests, wetlands). There are 11.661 km2 of protected areas (this includes botanical and zoological gar- dens) and 6.695 km2 of community conservation areas (CCA). 8% of the territory is legally protected. A study was conducted on various conservation gaps but currently the intent is to strengthen the management of existing PAs.	Currently, the PAs represent 8% of the countries surface. The- re is more probability to expand forest management areas. In Kanashen there is a private conservation area that covers 6.250 km2, which is currently in an application process before the National Protection Commission to be officially recognized as protected area. Declaration expected in 2016.
Peru	<ul> <li>During this period, categorization processes of reserved zones have been completed (transitory protected areas) in the Amazon, closing processes that had been ongoing for several years. This is how Parque Nacional Gueppí Sekime was created in 2012 and Parque Nacional Sierra de Divisor in 2015, both near protected areas in bordering countries.</li> <li>Progress is being made in identifying ecosystem services at protected area level, the next step is to advance and coordinate with other areas and generate connectivity with regional conservation levels.</li> </ul>	<ul> <li>The analysis of priorities defines biomes mainly outside the Amazon domain, as the PAs already have 20,5% coverage in the rainforest biomes (IUCN Peruvian Committee, 2007)</li> <li>The gaps correspond to tropical dry forests (with only 2,9% coverage), in some inter-Andean Amazon dry valleys, such as Marañón or Huallaga</li> <li>The main representativeness gaps (in % of largest types of habitat included in the SINANPE) correspond to ecosystems that located outside the Amazon region.</li> <li>There is a high possibility for new areas, especially through regional PA systems, in San Martín and Loreto and potentially in order Amazon provinces.</li> <li>In Madre de Dios there is an important PA of national, regional and private nature.</li> </ul>
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Suriname	<ul> <li>There have been no systematic criteria to define priority areas: the areas have been prioritized based on the opinion of experts and on the need to protect habitats and basins.</li> <li>There are 14 PAs, 19.727 km2 of protected areas and 5.620 km2 of multiple use areas (sustainable use); 14% of the legally protected territory.</li> <li>A conservation corridor is being promoted between the PAs of northern Brazil with the French-Guyana, this would cover nearly two million ha.</li> <li>There is a title deed allocation problem for the indigenous communities and the fact that there is territorial zoning plan, has hindered these exercises.</li> </ul>	Some possibilities through direct use protected areas (communities).
Venezuela	<ul> <li>There are two protected areas proposals:</li> <li>El Caura: With coverage of 5 hectares; the Caura River basin holds five ABRAE. Currently, the change of management figure from Reserva Forestal Caura to National Park is being evaluated.</li> <li>La Paragua, with a coverage of 3.318.739 ha., has great hydro-electric potential. Currently the protected area technical study and justification is under review.</li> </ul>	<ul> <li>More than 80% of the Venezuelan Amazonian territory is under the figure of protected areas in their different categories, management efforts and actions have been oriented to the management of existing areas, since they correspond to most of this territory.</li> </ul>

Source: IAPA Project, 2015; NASCC Project, 2015.

In addition to the legally established protected areas and unlike the evidence provided in 2010, each country advances with other strategies and with alternative ways of protection, conservation and management of biological and cultural diversity. Among them are indigenous territories, private reserves of the civil society, community reserves, conservation concessions, eco-tourism concessions, development of focal species management (threatened, endemic, emblematic, current or potential use) of fauna and flora of cultural importance (social, economic, symbolic, mythic and /or religious) and with an ecosystem functionality focus (comprehensive forest management e.g. chestnut, vicuna, cocoa etc.); sustainable forest management developed by local communities; forest conservation compensations; implementation of ecosystem connectivity measures, comprehensive management of landscapes and conservation corridors, forest zoning units, among others (Table 12). But progress is also made in protecting and managing water resources as well as hydro-biological dynamics through the conservation of sites of hydro-biological importance and through planning and zoning of water basins. Table 12. Additional figures for conservation of biodiversity in the biome countries.

Country	Additional biodiversity protection figures
Bolivia	<ul> <li>Landscape - corridors conservation programs: Management Plan of the Vilcabamba Amboró – Madidi corridor (ongoing nearly eight years). The corridor does not have a managing body or responsible institution as such.</li> </ul>
	<ul> <li>There are also figures such as RAMSAR, IBCAs, species conservation initiatives (bats), etc.</li> </ul>
	• A large part of the Amazon is protected beyond the PAs through various protection instruments which must be used.
Brazil	<ul> <li>Territorial environmental management plans in indigenous land (PGTA): intended to improve the indigenous materials and intangible heritage and the recovery, conservation and sustainable use of the natural resources.</li> <li>Legal Reserves and Permanent Conservation Areas (Law 12.651 dated 25 2012)</li> </ul>
	Natural Heritage Private Reserves- private conservation (federal, state and municipal).
	• Ecologic corridors that pursue effective conservation and reduction of fragmentation of existing forests, through the connection between protected areas and other areas with different land use.
	• Mosaics of conservation units (CU), management model that seeks participation and integration of the CU administrators and of the local population, in order to reconcile the presence of biodiversity, improvement of social diversity and sustainable development in a regional context.
	• Bolsa Verde (Green Bag) (Law 12.512 dated 2011, regulated by Decree 7572 dated 2011), which provides subsidies to families in extreme poverty who live in priority conservation areas.
	<ul> <li>National Policy for Indigenous Territorial Zoning and Environment (Decree 7747 dated 2012), which seeks to guarantee and promote protection, restoration, conservation and sustainable use of the IT natural resources.</li> <li>National action plans for Amazon species: jaguar, bird, etc.</li> </ul>
Colombia	<ul> <li>Functional connectivity measures between ecosystems of the Andean, Urinoco and Amazon biome to contribute to maintaining land and water ecological processes.</li> </ul>
	<ul> <li>Zoning figure focused on conservation: participation of various stakeholders.</li> </ul>
	<ul> <li>Maintenance of ecosystem services and development of climate change adaptation/mitigation strategies.</li> </ul>
	• Strengthening of cultural systems to regulate the use and management of the territory developed by the local communities.
	<ul> <li>Eight IBCAs in the biome, covering 26.418,12 km<sup>2</sup>.</li> </ul>
	<ul> <li>RAMSAR wetlands, a new incorporated area covering 2.529,43 km<sup>2</sup>.</li> </ul>
Ecuador	<ul> <li>Biosphere Reserves: Yasuní (2.740.000 ha.), Sumaco (931.939 ha.), el Cóndor (1.140.000 ha.).</li> </ul>
	<ul> <li>Decentralized Autonomous Conservation Ecologic Areas (Province, Municipalities and Towns), created, administered and managed by any level of the Decentralized Autonomous Governments, conservation and sustainable use of recourses in promoted.</li> </ul>
	<ul> <li>RAMSAR sites: 18 sites of nearly 286.659 ha: 86% within PAs and 14% does not have an official protection category.</li> <li>Of the total RAMSAR wetlands of the country, only 2% is located in the Amazon covering 686.25 km<sup>2</sup></li> </ul>
	IBCA (Important Bird Conservation Areas): 24 areas defined in the Amazon
	<ul> <li>National Incentive Program for Conservation created in 2013 whereby the vision to assign a financial incentive is</li> </ul>
	expanded to a focus aimed at boosting the local economies that depend on natural resources and that support a an important part of the national economy: Proyecto Socio Bosque (1 <sup>2</sup> 227.346 ha. under this mechanism to 2013) and the National Reforestation Plan (with protection and ecologic restoration purpose).
	<ul> <li>Connectivity initiatives for conservation, whose core areas are Protected Areas and Forests and Protective Vegetation. Of the existing ones, three have a border area with Peru and Colombia, related to forests in community areas (Trinational Program for Conservation and Sustainable Development, Cordillera el Cóndor (Peru) - El Condor Biological Reserve, El Quimi Biological Reserve and Wildlife Refuge El Zarza (Ecuador) Nany - Pucacuro and Conservation Corridor Abiseo - Condor - Cutucú)</li> </ul>
Guyana	• The Low Carbon Development Strategy seeks to ensure that at least 10% of the country's area is under any protection category. The strategy provides a framework to reconcile the conservation of the tropical rainforest with the country's need to achieve a rational economic development.
French Guyana	• In partnership with WWF, areas of special interest for the conservation of biodiversity have been identified
Peru	• Concessions for conservation, use of resources other than timber; for Eco-tourism, forestation and reforestation; Wildlife - cultural landscape Management Areas– native communities; private conservation areas; zones reserved for artisanal fishing activities.
	• There is a shift from an isolated protected areas focus to a conservation mosaic focus in Regional Conservation Systems coordinating the protected natural areas with the various conservation models of biological diversity and ecosystem services available in the landscape.

Suriname	• Private initiatives: Peperpot natural corridor, established in 2009 as a private conservation area of 800 ha of floodplain forest. The corridor is connected with a natural park of 26 ha.
Venezuela	<ul> <li>Actions that boost conservation processes: Community brigades, protection groups, etc.</li> <li>In 2006 "la Misión Árbol" (Tree Mission) was created, an initiative that sought to reforest wooded areas affected by indiscriminate tree felling; this became an integral project that urged the raise of awareness on the rights and duties inherent to the relation with nature, through Conservation Committees which in conjunction with the Ministry of Popular Power for Eco-socialism and Waters are distributed in specific areas of the country and activate the "Comprehensive Plan", which is the ecological alternative of the people to protect biodiversity.</li> </ul>

Source: IAPA Project, 2015.

### Goal 1.2: To integrate protected areas into broader land– and seascapes and sectors so as to maintain its ecological structure and its function.

## Conservation opportunities from a holistic ecological perspective

In identifying regional scenarios for the integration of protected areas, an exercise has been carried out that recognizes conservation opportunities through a methodology that integrates ecological, climatic, socio-cultural, political and economic criteria and elements, articulated with principles such as representation and ecosystem functionality, vulnerability and connectivity.

In 2010, regional progress was made in identifying matching national conservation priorities and regional priorities. There was also progress in the definition of elements and criteria for the regional priorities and conservation opportunities analysis.

One of the greatest achievements of these five years is the *Portfolio of areas with conservation opportunities*<sup>22</sup> at regional scale. This work was coordinated with Redparques, FAO and other partner organizations, with strong cooperation from the group of conservation opportunities and climate change in the amazon biome, integrated by the technicians of the protected areas systems of the countries.

In order to determine the areas of greatest conservation opportunity in the biome, a systematic conservation planning exercise was carried out with the entities in charge of the protected areas within the Amazonian countries, belonging to Redparques. There is currently about 30% of the territory in the Amazonian biome under one or more of the different IUCN protection categories. Thus, the analysis used 50% of the area as a conservation goal. The criteria that supported the exercise were the representativeness of the conservation objects included in the study, the irreplaceability of the intrinsic characteristics of each planning unit, complementarity and connectivity with the current protected area system, and a spatial configuration that minimizes bordering effects.

221 classes of terrestrial ecological systems, 641 kinds of freshwater ecological systems and the potential climatic niche distribution of 24 key species were considered as conservation objects. On the other hand, the environmental costs determine the cost-effectiveness in environmental terms in designing the conservation portfolio. The environmental costs considered: a) climate risk; b) the risk of lands-cape transformation and loss of biodiversity due to anthropogenic causes; and c) ecosystem services for carbon storage and water yield.

It is important to clarify the scope and limitations of the methods used and the information available at the biome level<sup>23</sup>. It is also necessary to highlight the need to structure mechanisms for the discussion of methods and analysis of information among the technical staff of the countries.

## Main results of the regional analysis of conservation opportunities

The exercise allowed visualizing the areas of greatest conservation opportunity and their relative distribution in terms of the presence of indigenous territories and border initiatives (Figure 5). This

<sup>22</sup> WWF within IAPA and NASCC projects

<sup>23</sup> In the case of Colombia, the results differ from the priorities and conservation opportunities defined on a scale with a higher level of precision, and with the incorporation of country specific variables, mainly socio-cultural.

portfolio is a first step that allows increasing the resilience of the amazon biome before the expected changes posed by climate change. For this purpose, it is essential to ensure connectivity in areas of high ecological priority (Figure 6), either by the creation of new protected areas or by complementary conservation figures. On the other hand, in the selection of new protected areas, the irreplaceability of planning units should take precedence over considerations of anthropic transformation risk. In addition, cross-border efforts are important opportunities and work must continue. Finally, it is necessary to understand the responsibility of each country in the fulfillment of the biome goals as a whole, even if the representation at the country level has already been achieved.



## Figure 5. Conservation opportunities in the amazon biome

Source: Prüssmann et. al (2016)

Likewise, based on the proposed methodology, two priority conservation landscapes were delimited in the biome, in order to implement the Amazon Vision Action Plan. Lessons learned from implementation will be collected in order to expand the field of action throughout the biome.

The first landscape, defined as North, is formed by the triple Amazon border between Colombia, Ecuador and Peru. It covers the Colombian protected area La Paya Natural National Park, the Ecuadorian protected area Cuyabeno Wildlife Reserve and the Peruvian protected areas Güeppí-Sekime National Park, Airo Pai Community Reserve and Huimeki Communal Reserve.

The second landscape, defined as South, is made up of the Bolivian protected area called Manuripi National Amazon Wildlife Reserve<sup>24</sup>, the Brazilian protected areas called Chandless State Park and

### Figure 6. Ecological priorities in the amazon biome



Source: Prüssmann et. al (2016)

Cazumbá-Iracema Extractivist Reserve, and finally the Peruvian protected areas called Alto Purús National Park and Communal Reserve Purús.

It is expected that results and lessons learned during this process will be replicated in other areas of the biome, allowing the strengthening of coordination actions around the protected areas of the region.

### Goal 1.3: To establish and to strengthen regional networks, trans border protected areas (TBPAs) and collaboration among neighboring protected areas across national boundaries

As contribution to goals 1.2 and y 1.3 of the PoWPA, at regional level, there is an opportunity to advance cross-

<sup>24</sup> Bolivia, through Manuripi National Wildlife Reserve Management Plan 2012-2022, has established within its objectives to integrate the management of the protected area to the local, national and international context; to deepen the participation of local stakeholders in shared management; to effectively preserve the natural and cultural heritage of the reserve, among others.

border cooperation processes in adjacent protected areas, seeking the possibility to connect through ecologic corridors important for the maintenance of ecologic flows, nutrient cycles, and in general the provision of ecosystem services (Table 13). Some countries have developed border cooperation processes; however, in order to progress in managing and administrating the areas classified under ecologic connectivity corridors is no easy task, basically due to the political, legal and institutional frameworks of the bordering areas countries. A successful example is the cross-border Sustainable Conservation and Development Program between Colombia, Ecuador and Peru, which covers the natural protected areas Parque Nacional Natural La Paya (Colombia), Reserva de Producción Faunística de Cuyabeno (Ecuador) and Parque Nacional Gueppí Sekime and Reservas Comunales Airo Pai y Huimeki (Peru).

It is worth highlighting cross border cooperation among neighbouring Amazon areas between Parque Nacional Serranía La Neblina, in Venezuela and Parque Nacional Pico Da Neblina, in Brazil; both are part of a cross border conservation unit that seeks connectivity possibilities through ecologic corridors.

Within the countries and areas of the biome, important ecologic connectivity initiatives have been established, the same that are conceived as an opportunity to coordinate inter-sector management, planning and zoning agendas, coordination and participation among the various stakeholders involved; inter-institutional consolidation and political, private and social agreements for conservation and sustainable development.

Name of the protected areas or situation	Country/ countries	Remarks
	At country level	
Mosaico de Amapa occidental y Norte de Pará (Tumucumaque).	Brazil	Total area: 12.397.347,46 ha (CU: 7.523.478,4 ha and IT: 4.873.869 ha) Recognition Ordinance: MMA N° 4/2013
Mosaico del bajo río Negro.	Brazil	Recognition council: MMA No. 483, dated 14 December 2010 federal, state and municipal conservation units.
Mosaico de la Amazonía Sur.	Brazil	Area: areas 7.000.000 hectares, Recognition Ordinance: MMA No. 332 dated 25 August 2011. Federal, state and municipal conservation units.
Andino Orito – Churumbelos – Doña Juana – Alto Fragua – Picachos connectivity corridor.	Colombia	Maintain ecosystem and functional connectivity
Churumbelos – La Paya connectivity.	Colombia	between the Andes and Amazon biomes.
La Paya – Chiribiquete connectivity.	Colombia	
Connectivity between the PNN Serranía de Chiribiquete and Sierra de la Macarena.	Colombia	Andes – Amazonía – Orinoquia connectivity.
Connectivity among PNN Serranía de Chiribiquete and RNN Nukak and forest maintenance of the Miraflores – Carurú – Pacoa axis.	Colombia	
Connectivity and operation of the natural land and water systems associated to the transition zone among jungles and savannas.	Colombia	Amazonía – Orinoquía connectivity.
Llanganates – Sangay ecological corridor.	Ecuador	Tungurahua, Pastaza and Morona Santiago. With a coverage of 42.856 ha.
Proposal Pañacocha biological corridor.	Ecuador	Sucumbíos and Orellana, among Reserva de Producción Faunística Cuyabeno and el Parque Nacional Yasuní from Bosque Protector de Pañacocha (3´000.000 de ha.).
Antisana – Cayambe Coca – Sumaco corridor.	Ecuador	
Antisana – Llanganates ecological corridor.	Ecuador	Napo and Pichincha, between Reserva Ecológica Antisana (REA) in the north, y and Parque Nacional Llanganates (120.000 ha.).

Table 13.	Ecologic connectivity initiatives at country and regional level
	(adjacent protected areas) in the biome.

Podocarpus – Yacuambi corridor.	Ecuador	Zamora Chinchipe (710.768 ha.).
Sangay – Podocarpus conservation corridor.	Ecuador	Morona Santiago, Zamora Chinchipe, Azuay and Loja (792.500 ha).
Yaku Samay bio-corridor.	Ecuador	Napo, cantones: Archidona and Tena (within the Reserva de Biósfera Sumaco / part of the buffer reas of Reserva Ecológica Antisana, Parque Nacional Sumaco Napo Galeras, Parque Nacional de los Llanganates and Reserva Biológica Colonso Chalupas.) (PPD in prep., 2012 (97.137,47).
	At regional level	
Vilcabamba – Amboro Reserva Nacional Tambopata and parque nacional Bahuaja Sonene – Madidi, Pilon Lajas, Carrasco and Amboro.	Peru – Bolivia	Until now, the corridors lack a legal basis in terms of legislation and territorial management viability due to their huge size and the complexity of overla- pping administrative/territorial spaces.
Itenez – Guaporé.	Bolivia – Brazil	
In the Plains: the closure of the deforestation frontier between: Type A Forest Reserve north of the Indigenous Reservation Mirití-Paraná, PNN Serranía de Chiribiquete, PNN and Indigenous Reservation Yaigojé Apaporis, PNN Cahuinarí, Northeastern PNN Río Pure (Colombia) and Brazil.	Colombia – Brazil	It seeks to maintain and strengthen the cultural systems of regulation and territory management, developed by local communities associated to conservation interests of the Amazonian territory.
Tri-Nation Conservation Program: PNN La Paya (422.000 ha.) (Colombia) – PN Güeppi – Sekime (625971 ha.), Community reserves Airo Pai (247,887.59 ha.) and Huimeki (141 234,46 ha.) (Perú) and Reserva de Producción Faunística Cuyabeno (594.950 ha.) (Ecuador)	Colombia – Peru – Ecuador	4,000,000 ha. approx. This corridor was selected as one of the landscapes prioritized for the implementation of the Action Plan of the Amazon Region (northern landscape). Its selection was made following ecological, climatic, sociocultural, political and economic criteria.
Reserva Comunal Purús, Parque Nacional Alto Purús and Parque Nacional Sierra del Divisor - Indigenouls land "Kampa e Isolados do Rio Envira" and "Riozinho do Alto Envira.	Peru- Brazil	
Conservation Corridor Parque Nacional Rio Abiseo, - Parque Nacional Ichigkat Muja Cordillera del Cóndor – Cutucú	Ecuador – Peru	Morona Santiago and Zamora Chinchipe, from Parque Nacional Sangay in Ecuador to Parque Nacional Cordillera Azul in Peru (13.000.000 ha.). Reserva de Producción Faunística Cuyabeno and Parque Nacional Yasuní form Bosque Protector de Pañacocha (3.000.000 ha.).
Bi-national connectivity proposal Cofán territory.	Ecuador – Colombia	Sucumbíos, among Reserva Cofán Bermejo and Santuario de Flora y Plantas Medicinales Orito Inge Ande (10.204 ha.).
Parque Amazónico de Guyana Francesa –Parque Nacional Montanhas do Tumucumaque.	French Guyana - Brazil	
Parque Natural Regional de Guyana Francesa – Parque Nacional do Cabo Orange.	French Guyana - Brazil	
Parque Nacional Serranía La Neblina (Venezuela) and Parque Nacional Pico Da Neblina, (Brazil).	Venezuela-Brazil	Parque Nacional Serranía La Neblina surface 1.360.000 ha., and Parque Nacional Pico Da Neblina with 2.260.344 ha.
Agreement proposal for joint management of the cima del Roraima part of Parques Nacionales Canaima and Do Monte Roraima and Cadenas de Tepuyes Orientales.	Venezuela – Brazil	Work groups: ICMBio of Brazil and INPARQUES of Venezuela.
Reserva Nacional de Vida Silvestre Amazónica Manuripi, protected areas of Brazil Parque Estadual Chandless and Reserva Extrativista Cazumbá-Iracema, and Lastly, protected areas of Peru, Parque Nacional Alto Purús and Reserva Comunal Purús.	Bolivia-Brazil- Peru	This corridor was selected as one of the prioritized landscapes to implement the Amazon Vision Action Plan (south landscape). Its selection took was made based on ecological, climate, socio- cultural, political and economic criteria.

Source: IAPA Project, 2015.

In general, with regards to creating and strengthening regional protected areas systems, the countries that share the biome face the following challenges, among others:

- ✓ Politically defining the development and territorial zoning model most pertinent for the region according to bio-physical, socio-cultural particularities and the benefits that the Amazon represents for the planet's climate equilibrium.
- ✓ The design and implementation of funding mechanisms for the different management and conservation strategies of the protected areas systems at biome level.
- ✓ The coordination of the systems and protected areas and the buffer zones with cross-scale territorial planning and environmental zoning (zoning plans of basins; zoning plans of forests, management plans for species, etc.) and inter-sector (mining, roadways plans, etc.).
- ✓ The legal clean-up of land especially in indigenous territories.
- The delimitation of biological and cultural importance areas and the land tenancy regime.
- The management regulation of ecosystems shared by various environmental authorities and regional players (productive sectors).
- ✓ The strengthening and joint management of the protected areas, buffer zones and/or ecological corridors through public – private alliances, and the inter-sector and inter-institutional coordination at different scales.
- Establishing regulatory frameworks for management, administration and strengthening of regional institutions that execute coordinated inter-institutional and socio – cultural work in the projected conservation corridors – mosaics.
- Establishing political, legal and institutional frameworks for border areas that are important in preserving biological and cultural diversity and regional ecosystem's functionality.
- The design and implementation of funding mechanisms for the different management and

conservation strategies of the protected areas systems at the biome level.

### Goal 1.4: To substantially improve site-based protected area's planning and management

## Integration of climate change variables in protected area planning

As part of goal 1.4 of the PoWPA, the integration of measures is proposed to adapt to climate change when designing protected areas' systems and when planning and managing protected areas. Also promoting research on adaptive measures in the protected areas context. The technical guidelines that the CBD provides to achieve this goal include "ecosystem-based approach to adapt to climate change and that leads to mitigation through carbon retention" (Decisions IX/18 and X/31)<sup>25</sup>. Similarly, the Aichi Goals promote that the protected areas are well connected, which facilitates the adaptation of biodiversity to climate change.

In response to the multiple challenges posed by climate change for an effective management of the protected areas, eighteen member countries of Redparques – including eight Amazonian countries and French-Guyana adopted the Declaration for the Conference of the Parties number 21 of the UNFCCC. The Declaration on Protected Areas and Climate Change<sup>26</sup> emerged from the implementation of the Amazon Vision through the NASCC project and it recognizes the role of the protected areas in providing natural strategies to tackle climate change. The document equally emphasizes the need to reduce the vulnerability of said areas in regard to the impacts of climate change.

The Declaration was presented by representatives of Redparques at various arenas during COP 21, in which it opened a space to discuss the priorities of the amazon biome in the climate change context and how the protected areas could be incorporated into the climate change policies.

The commitments of the Declaration have laid the foundations for regional cooperation among the National Protected Areas Systems to include climate change criteria in the planning and management of protected areas, integrate the role of the

<sup>25</sup> See: www.cbd.int/doc/strategic-plan/targets/T11-quick-guide-es.pdf.

<sup>26</sup> Available at http://d2ouvy59p0dg6k.cloudfront.net/downloads/final\_infographic\_declaration\_2.pdf.

protected areas within the climate change strategies at different levels and in the resilience agenda for the amazon biome with regard to climate risks, based on regional efforts coordinated through protected areas.

### Goal 1.5: To prevent and to mitigate the negative impacts of key threats to protected areas

### Pressures on protected areas and on other conservation figures or on areas with conservation opportunities for biological and cultural diversity

One of the main threats to the Amazon region is climate change that places at risk the maintenance of biodiversity and ecosystem services. This is compounded by the processes of deforestation, mining and hydroelectric construction.

### Climate Change: Biome Vulnerability Analysis

As part of the implementation of the Amazon Vision, efforts have been directed at improving the understanding of the biome's transformation processes originated or triggered by a changing climate, priority actions for conservation and management of the "climate-smart" biome and mechanisms to strengthen the planning and management of the protected areas systems. The publication "Vulnerability and Climatic Risk Analysis of the Amazon Biome and its Protected Areas" (Prüssmann et al., 2016) summarizes the methods and results of said effort, providing key elements to understand the main challenges to manage climate change in the region and the role of the protected areas in the building of the biome's resilience.

The first step was to generate and to analyze climatic models of precipitation and temperature at the inter-annual and inter-decadal levels for the amazon biome. This allowed understanding how climate variability in the biome behaves, and where could be the greatest effects, in magnitude and frequency, of climate change under short and medium term scenarios. In this way, the Regional Index of Climate Change obtained, shows in Figure 7, that the effects of climate change could be greater in the southeast of the biome, in the states of Pará, Mato Grosso and Rondonia. In contrast, the areas that could experience the least influence of climate change are the foothills of Colombia and Ecuador, the Atlantic coast of Guyanas and the State of Maranhão in Brazil. In Bolivia, the provinces of El Beni and Pando to the east are those with the highest index of climate change. For Peru the distribution is differentiated by regions, however the biggest changes are expected towards the border with Brazil and Bolivia.

Figure 7. Regional climate change index for the amazon biome



Source: Prüssmann et. al 2016

In a second step, the analysis of three ecosystem services (water resource, carbon storage and habitat for species), under these scenarios of climate change was carried out. This, in conjunction with the review and spatial distribution of the main anthropogenic drivers of transformation in the biome (deforestation, extension and intensity of agricultural activities, mining and roads), made it possible to establish an integrated risk representation against climate change in the amazon biome. Overall, 8,37% of the biome is at very high risk, equivalent to 57,351,087 ha; in high risk, 11,86% (81,224,668 ha.). In total 138,575,755 ha. (Figure 8a).



## Figure 8. a) Integrated climate change risk index for the amazon biome

A total of 36 protected areas face very high risks. This represents 4,482,517 ha. (2,35% of the total area of biome protected areas). 76 areas are at high risk, equivalent to 20,640,954 ha. (10,81%). In total 25,123,470 ha. (Figure 8b). However, protected areas contribute to reducing the risk of climate change by 21,43% in the Amazonian biome.

The effect of protected areas is evidenced primarily by their ability to store more carbon than unprotected areas, and by regulating water yields at the extremes of climatic variability. Extreme flows occur primarily in watersheds where the surface in protected areas is less than 50%.

Figure 8. b) Integrated climate change risk index



Based on the review of existing studies carried out for the amazon biome, one must highlight that human and climate pressures and their convergence aggravate the change in the bio-physical conditions of the Amazon. However, in the path to maintain resilience as an attribute as a function of the amazon biome, the best strategy has been to safeguard areas throughout the conservation territories that are no stranger to variability effects and climate change as regional phenomena, but that play a control role on human pressures, reducing the risk of change by preserving the ecological integrity conditions.

The vulnerability analysis published by the WWF in 2016 has incorporated the basic elements to characterize and to set forth actions at regional level in the amazon biome, making it necessary to further supplement the analysis on biodiversity as the essential axis of the ecosystemic functions, define uncertainties and improve the geographic detail associated to the potential effects of climate change, taking into account the potential of the biome to tackle the climate phenomena that have an impact on it.

#### Deforestation processes in the amazon biome

The Amazon Socio-environmental Georeferenced Information Network (RAISG) published a study in October 2015 that analyzes the deforestation processes in the Amazon from 1970 until 2013. This study reveals that between 2000 and 2013 a deceleration occurred in the loss of the Amazon's original coverage compared with the period between 1970 and 2000 (Graph 2).



Graph 2. Deforestation in the Amazon 2000-2013.

#### Some of the most relevant findings are:

In the Bolivian Amazon the loss of forest reached nearly 1,000,000 ha. between 2000 and 2013. The three main causes are cattle farming, mechanized agriculture and small-scale agriculture.

The deforestation rate has decreased in the Brazilian Amazon since 2006. However, from 2000 to 2013 17,400 ha of forest were lost, that is to say 5% of the original forest area. This loss is mainly associated with agriculture and cattle farming.

In the Colombian Amazon, deforestation increased in the 2005-2010 period, when 616,700 ha of forests were lost. From 2010 to 2013 a loss was recorded of 168,400 ha. The main pressures are the expansion of the agricultural frontier mainly for cattle farming purposes, establishment of illegal crops, consolidation of roads, oil exploration and exploitation and illegal mining.

The Ecuadorian Amazon shows the second largest proportional cumulative loss of forest in the region, with a deforestation of 10,7% of its original forest. Oil exploitation is the main threat. The Peruvian Amazon shows the fourth largest cumulative loss of forest in the region (9,1%) between 2010 and 2013. Agriculture and cattle farming are important direct causes of deforestation, but as of 2009 agro-industrial plantations (palm and cacao) have become a growing threat demanding increasing concessions of the primary forest.

In the Venezuelan Amazon, as opposed to the regional trend, the amount of lost forest increased gradually between 2005 and 2013. In the context of Venezuela's Amazon territory, the deforested area is relatively low (3,3%), but the sustained increase observed is a concerned. Among the causes, illegal mining emerges as one of the main threats to the forest.

In the Amazon region of Suriname, Guyana and French-Guyana the demand for more energy to sustain economic growth is a threat. Jointly, the three countries have lost 3,2% of their forests, but Guyana and French-Guyana showed higher loss rates between 2000 and 2013 (1%) than Suriname (0,4%).

As for the deforestation processes within the protected areas, according to the RAISG (2013), until 2013, 3,103,400 ha of forests had been lost representing 2,1%. These figures show that deforestation is greater outside the protected areas of the biome. The relation between the deforestation inside and outside the protected areas and Indigenous Territories has changed in contrast with the recent period as opposed to the historical period. Until 2000, the loss within the protected areas and inside and outside the protected areas and Territories do not exceed 7,5% of the total, while in the period between 2000 and 2013 it reached 14,2%. These changes may account for greater pressure on this type of units.

This situation is evident with the events of the Three-country Corridor of Protected Areas between Colombia-Ecuador-Peru, in which in the last 20 years there has been an increase of anthropic activities of 206% in the natural coverage, changing the transformed zones from 35,139 ha to 72,730 ha and a natural coverage loss of 6%. The loss of forest in the corridor increased 170% from 186,080 ha of coverage without forest in 1990 to 316,744 ha in 2010. In the PNN La Paya (Colombia), the deforestation rate is the highest of the Corridor (0,18%). Considering the pressures identified and if the same change engine and trends were to be maintained, it is estimated that by 2020 the loss of forest will be 11,79% of the

area, and consequently by 2030 it will be 15,86%. The PNN La Paya will be the natural area most affected, followed by RPF Cuyabeno (Pacha, 2014).

It is important to highlight that in the Amazon between 2000 and 2014, a project called Amazon deforestation monitoring program was executed. This was an initiative of the Amazon Cooperation Treaty Organization (ACTO) aimed at developing and implementing participative monitoring systems for the Amazon and at strengthening the existing regional coordination platforms born from the joint efforts of the ACTO member countries i.e. (Bolivia, Brazil, Colombia, Ecuador, Guyana, Peru, Suriname and Venezuela). The project has been executed since the second half of 2011. It generates and coordinates national efforts and actions to monitor deforestation in the Amazon, based on a regional logic.

During the first phase of the project, the countries formulated national monitoring plans or upgraded similar planning instruments and socialized them later to develop the Regional Report on the Situation of the Amazon Forest. One of the achievements of the project has been the construction of regional maps pertaining to the deforestation 2000-2010; 2010-2013 and 2013-2014 (ACTO, 2014).

#### Hydro-electric power plants

As presented in Chapter 1 of this report, there were in the Amazon until 2012, some 417 hydro-electric power plants; 171 in operation or construction/development<sup>27</sup>; 246 have been planned<sup>28</sup> in the national energy plans, most of them (179 in total) were SHPP. The majority were located in the southern Amazon, followed by others in the eastern and western areas (RAISG, 2012).

According to the report called Amazonia Viva (Charity et al., 2016) 17 natural parks, reserves and ITs will be directly or indirectly impacted by 10 hydro-electric power plants planned for the next eight years in the Brazilian Amazon.

Although it is true that the construction of hydro-electric plants will continue in the Amazon, if well designed they can become a strategy to develop a low-carbon economy. However, the countries should seek to reduce the impact on the ecosystems and the biodiversity through a planning focus at basin level and through the incorporation of socio-environmental criteria in decision-making (Charity et al., 2016).

<sup>27</sup> Those under construction or in operation were grouped as "current".

<sup>28</sup> As "planned" those projected or under study.

#### Mining

In the last twenty years, the strong increase of the gold price has encouraged illegal mining in the Amazon with the corresponding socio-environmental impact. Illegal mining pollutes the ecosystems, mainly the water ecosystems. Human consumption fish and stream-side vegetation get polluted with heavy metals like mercury, which produce long-term effects on the exposed communities even if they are located at long distances of the source, thus generating collateral effects on indigenous territories, as is the case of the Yanomami in the border region between Venezuela and Brazil.

For the biome, nearly 30% of the mining permit requests and oil and gas contracts are located in protected areas.

Approximately, 800 titles have been granted within the protected areas of the biome, with an impact on 44 protected areas and 94 ITs. Furthermore, there are nearly 6,800 mining permits and oil and gas exploitation requests (Charity *et al.*, 2016).

However, actions as the one in Ecuador standout that in the framework of the National Incentive Program, include a restoration section, which seeks to increase the provision of ecosystem services through ecologic restoration activities implemented in areas that are in a degradation process, under a comprehensive landscape management focus that at the same time helps improve the quality of life of its inhabitants. The MAE decided to develop a reforestation strategy that addresses biodiversity conservation gaps, important water areas, conservation as well as protection of soil, control of floods and landslides. To that end, it has focused on programs such as Socio Bosque (Forest Partner), which serves as a positive incentive against the strongest of pressures, i.e. those mentioned above.

Peru, in turn, is implementing the monitoring and assessment program to reduce illegal mining and is providing training to the local authorities and communities on regulatory framework and environmental damage caused to health as consequence of illegal and informal mining (SERNANP, 2015). Similarly, a Geo-information Early Warning System was created against illicit activities in NPAs which, thanks to continuous monitoring can report directly and indirectly changes in the use of soil, strengthening the fight against the threats of illegal activities through the activation of the corresponding action protocols. Finally, in 2013, Bolivia incorporated into the criminal code, the offenses of illegal exploitation of minerals and the illegal commercialization of minerals as a means of control, based on current environmental regulations. On the other hand, Venezuela has begun studies to control by the State mining activity, in a special area of economic-territorial order denominated Arco Minero.



### Element 2: Governance, Participation, Equity and Benefit Sharing

The governance concept is very divers and often times; it has been used as synonym of participation, equality and governability. As explained earlier, the original text of Element 2 of the PoWPA in its translation into Spanish talks about governability; this report addresses the governance of protected areas more broadly according to the most recent developments of the IUCN and CBD.

The IUCN defines the governance of natural resources<sup>29</sup> as the interactions between structures, processes and traditions that determine how power and responsibility are exercised, how decisions are made and how the general public and other direct stakeholders intervene in the management of natural resources, including biodiversity conservation. It has been said that good governance requires clear direction, efficient performance and rendering of accounts, in addition to being founded on fundamental values and human rights, including justice, equity, as well as effective participation and contribution in the decision-making<sup>30</sup>. These principles are displayed in Figure 9.

To understand what these concepts involve, it must be mentioned that the structures comprise the legal-institutional frameworks, the state institutions (ministries, institutions, among others) and non-state ones (organized civil society, indigenous organizations, reservations, ad hoc committees, among others). The processes comprise the different practices and modalities that the management of protected areas entails. And, lastly, the traditions allude to cultural components such as knowledge, attitudes, values and practices of the players involved.

<sup>29</sup> RES3.012, CMC IUCN.

<sup>30</sup> Oviedo, 2007.



Figure 9: Principles of good governance of protected areas.

It is then paramount to look at governance not as a closed concept, but rather, as something comprised by a series of elements that interact one with the other to generate results and conditions that have an impact on the daily processes of the protected areas. Thus we talk about the combination of adequate processes between players, instruments -regulations and powers that may lead to positive -situations for the conservation of protected areas.

The IUCN puts forth that the importance of labeling the general principles for good governance lies in ensuring equitable governance of the protected areas, as proposed in Goal 11 of Aichi. All these principles must be applied in a flexible manner according to the context. There is still a long way to go to implement said principles; however, the same PoWPA opens the debate on its applicability and it provides the opportunity to the governments to commit the involved players and to lead to fairer ways of sharing the costs and benefits of the protected areas<sup>31</sup>.

According to the country's report to the CBD Secretariat<sup>32</sup>, Element 2 of the PoWPA shows limited progress at regional level, and it refers mainly to the aspects related with the integration of the rights of social players and to the potential enjoyment of the benefits derived from the protected areas. For the Amazonian countries, the commitments acquired in terms of the promotion of equity and benefit-sharing (Goal 2.1) tend in general towards activities with limited progress.

The commitments that invite to intensify actions and to strengthen the participation of the indigenous

and local communities and of all the stakeholders (Goal 2.2), mark a positive trend for the region, as there are activities in full execution in most of the countries, and even some activities have been completed already.

# Goal 2.1: To promote equity and benefit-sharing

### Legal and Institutional Frameworks

The Amazonian countries have legal and institutional frameworks that make viable and possible the management of their protected areas (Table 14). In the last 5 years, important progress was observed in the generation of new and diverse legal frameworks which cover the goals of the PoWPA and seek to improve the conditions of participation, the rights of the Indigenous Peoples to benefit-sharing due to the use of their knowledge on biodiversity resources, territorial rights, rights to prior consultation, among others. At region level, there are approximately 28 legal frameworks, among laws, policies, decrees and 22 institutional mechanisms generated to tend to this important topic. Great progress has been made in the last five years at legislative and institutional level for the region. However; in reality the challenge remains in terms of generating binding strategies or mechanisms to operationalize these legal bodies in all their dimensions.

These are great steps at legislative and institutional level for the region. However; in reality the challenge remains in terms of generating binding strategies or mechanisms to operationalize these legal bodies in all their dimensions.

<sup>31</sup> Borrini-Feyerabend et. al (2014).

<sup>32</sup> Information taken from Action Plans for Implementation of the PoWPA of the CBD www.cbd.int/protected/implementation/actionplans.

Land/Territory	Aspect
Bolivia	Legal framework
	<ul> <li>Rights of Mother Earth (2010) Art 8, all the territorial levels and fields, through all their authorities and institutions must take measures to ensure that the Rights of Mother Earth are respected.</li> <li>CEP, Art. 385, for Shared Management by 2020, strengthen the instruments and structures for social participation and decision making.</li> <li>Law 180 of Protection of the Indigenous Territory and Isiboro Sécure National Park - TIPNIS (2011) and its Supreme Decree (2012) of application, in double condition of AP and TI.</li> </ul>
	Institutional frameworks
	<ul> <li>Strategic Plan for Comprehensive Development of the NPAS by 2020.</li> <li>National Program for Climate Change with contribution from the PAs</li> <li>Action Plan for Implementation of the PoWPA of the CBD.</li> </ul>
Brazil	Legal framework
	<ul> <li>Federal Decree 7747(2012) National Policy for Environmental and Territorial Management in Indigenous Land (PNGATI) guarantees progress in territorial and environmental management of the ITs.</li> <li>Federal Law 12651(2012) sets forth the new forest code connecting the legal reserve percentage with the percentage of areas covered by conservation and ITs.</li> <li>Federal Law 13123 (2015) sets forth the regulations to the access of biodiversity resources by researchers and industry; it regulates the rights of the traditional peoples to the distribution of benefits due to the use of their knowledge of nature.</li> </ul>
	Institutional frameworks
	<ul> <li>Federal Law 12651 (2012) Rural Environmental Registry for environmental management of the country and it contributes to the control, monitoring and fight against deforestation of forests and other forms of native vegetation.</li> </ul>
Colombia	Legal framework
	<ul> <li>Decree 2372 (2010) regulates the National Protected Areas System (NPAS) and sets forth the categories of the participating areas as public or private.</li> <li>CONPES Policy Document 3680 provides guidelines to consolidate the National Protected Areas System and defines strategies geared at the design and implementation of a Registry of Protected Areas - RUNAP (pursuant to Decree 2372 -2010).</li> <li>Law 4633 (2011) measures of assistance, care, comprehensive repair and restitution of territorial right to the victims who are part of indigenous groups or communities.</li> <li>Resolution 1675 (2013) regulates Art. 63 of the Political Constitution related to Cultural Heritage on assets of public use, natural parks, community land of ethnic groups, reservation land, and archaeological heritage of the nation.</li> <li>Decree 1953 (2014) regulates the operation of the ITs with regards to the administration of the systems inherent to the Indigenous Peoples.</li> <li>Decree 2333 (2014) sets forth the mechanisms for the effective protection and legal security of the lands and territories occupied or held from ancestral times and/or by tradition by IPs.</li> </ul>
	Institutional frameworks
	<ul> <li>National Development Plan 2014-2018: "All for a new country"</li> <li>Action Plan of the NPAS 2011-2014.</li> <li>National Policy for Comprehensive Biodiversity Management and its Ecosystem Services (2012).</li> <li>Action Plan for Implementation of the PoWPA of the CBD.</li> <li>Amazon Vision as strategy to promote a development model to improve the living conditions through strengthening of, among others, forest governance and environmental governance, with the indigenous peoples.</li> </ul>

### Table 14. Legal and institutional frameworks created between 2010 and 2015.

Ecuador	Legal framework
	<ul> <li>Unified Text of the Secondary Environmental Legislation (TULAS-Reform 2012).</li> <li>Organic Code for Territorial Organization, Autonomies and Decentralization (COOTAD-2010) Resolution 005 of the National Council of Competences, sets forth the legal framework for territorial organization and operation of the decentralized autonomous governments (GADs).</li> <li>Organic Law for Citizen Participation (2010) regulates the compliance of environmental participation that covers (Art 82- 83) the environmental consultation with the community in equal terms of Art. 398 of the Constitution.</li> </ul>
	Institutional frameworks
	<ul> <li>Strategic Plan of the NPAS (2007-2016).</li> <li>Directives to establish state's protected areas and Sub-system of the Decentralized Autonomous Governments at municipal level, where conservation areas within their jurisdiction are stipulated.</li> <li>Action Plan for Implementation of the PoWPA of the CBD.</li> <li>National Incentive Program for Conservation and Sustainable Use of the Natural Heritage "Socio Bosque"(national policy of Natural Heritage for Sociedad del Buen Vivir 2013-2017).</li> </ul>
French Guyana	Legal framework
	<ul> <li>Preparatory process of the National Law on Biodiversity to be approved in 2016 to promote a transparent and efficient environmental governance.</li> </ul>
	Institutional frameworks
	• National Law on Biodiversity to be approved in 2016 will have a national committee comprised by regional committees and a National Council for the Protection of Nature at scientific level. It will take a closer look into the actions related with the access and benefit-sharing, and it will create the "national biodiversity agency" in 2017.
Guyana	Legal framework
	<ul> <li>National Forest Policy (2011)</li> <li>The Protected Areas Policy (2011) sets forth the Protected Areas Commission and the National Protected Areas System.</li> </ul>
	Institutional frameworks
	<ul> <li>National Development Strategy (2001-2010) for participation and protection needs of the environment.</li> <li>Strategy to fight poverty of Guyana (2011 - 2015).</li> <li>NBAPII (2014) updated for the National Action Plan and Biodiversity Strategy (EPANB) (2012-2020) sets forth the vision, objectives and national strategies for protection, sustainable use and equitable distribution.</li> </ul>
Peru	Legal framework
	<ul> <li>Supreme Decree 007-2011-MINAM RP 097-2011-SERNANP (Additional Provisions) which amends the Regulation of the Protected Areas Law for Administration Contracts by legal persons.</li> <li>Law 29785 of the Right to Prior Consultation to the Indigenous and Aboriginal peoples (2011).</li> </ul>
	Institutional frameworks
	<ul> <li>National Biological Diversity Strategy 2021 and its Action Plan 2014-2018 (Supreme Decree 009-2014-MINAM).</li> <li>Guidelines for Participative Management (Executive Order 150-2015-SERNANP) formalize the concept of participation, mechanisms, participation processes and monitoring.</li> <li>Model to guide the Co-Management towards conservation and sustainable development of region with Communal Reserve.</li> </ul>
Suriname	Legal framework
	National Environmental Legislation (2013).
	Institutional frameworks
	<ul> <li>National Biodiversity Strategy (2006 – 2020) puts forth the vision, objectives and national strategies for protection, sustainable use and equitable distribution.</li> <li>Development Plan for Suriname (2012-2016 (2012).</li> </ul>

Venezuela	Legal framework
	<ul> <li>Organic Law for Popular Power (2010) defines the importance of promoting values and principles of the eco- socialist ethics.</li> </ul>
	<ul> <li>Organic Law of Communities (2010) constitutes a form or social organization whereby the popular participation guarantees the execution of plans and projects.</li> </ul>
	<ul> <li>Organic Law of Social Comptrollership (2010)</li> </ul>
	<ul> <li>Forest Law (2013) that integrates aspects of participation in PA</li> </ul>
	<ul> <li>Plan Patria Organic Law (2013) to be considered for all the plans to be executed by the nation, whose 5th objective is dedicated to the environmental situation.</li> </ul>
	Institutional frameworks
	• Strategic Plan of INPARQUES (2013-2019) puts forth the guiding principles for community development, public use, protection, resource management, research and monitoring, administration and environmental planning.
	<ul> <li>National Strategy for Biological Diversity Conservation (2010 – 2020).</li> </ul>
	<ul> <li>National Policy of Environmental Education and Community Participation 2013.</li> </ul>
	<ul> <li>Creation of the Office of the Chief of Staff of Indigenous Peoples 2015</li> </ul>

Source: Own development, IAPA Project, 2015.

#### Rights, equity and benefit-sharing

On this goal, Amazonian countries report that there are initiatives, but that they still have limited progress. Concrete advances may be seen on juridical and regulatory terms, as well as very advanced participation practices in the region may be seen (Table 15).

However, aspects where participation mechanisms are specifically detailed, as well as equity in costs and benefits derived from protected areas still remain a challenge pending solution and they do not have concrete mechanisms to be oriented to obtain the term established within the PoWPA goals. There is difficulty in understanding the implications of this subject when applying them, even though there are international commitments such as the Nagoya Protocol<sup>33</sup>.

Of the countries in the Amazon region, almost all have been signatory countries, but only Peru has ratified it (SCDB, 2016). It is worth mentioning that to this regard, at the regional level, there is the Andean Decision 391 of 1996 that establishes the common regime on the access to the genetic resources for the Andean Community countries which has been the reference in several countries of the Amazon Region and that has facilitated advancement processes in some countries such as Colombia and Peru. Thus, approaching the subject of the distribution or benefit-sharing requires a deeper analysis to establish concrete actions to be taken within the scenarios of the Amazon protected areas.

Finally, it is difficult to appropriately report progress on equity and benefit-sharing when there are still challenges related to the territorial rights in the region.



<sup>33</sup> The Nagoya Protocol, signed in 2010, is a landmark on biodiversity governance and is relevant for different commercial and non commercial sectors related to the use and exchange of genetic resources and it is especially connected to the fair and equal participation of the benefits derived from using genetic resources.

## Table 15. Mechanisms generated between 2010 and 2015 to guarantee rights, equity and participation

Country/ Territory	Rights, Equity And Benefit-Sharing	
Bolivia	<ul> <li>The general management goals of the SERNAP in our "Agenda for Change" proposes among its strategic aspects the sustainable economic and social development for the generation of income, employment and other social and economic benefits from the sustainable use of biodiversity resources. Generating programs that provide sustainability to these processes aimed at improving the life conditions and for productive activities are foreseen.</li> <li>In addition, the facilitation of access to social services for inhabitants in the protected areas themselves will be</li> </ul>	
	supported.	
Brazil	• Federal Law 13123 (2015) regulates the access to the genetic resources, the protection and access to traditional associated knowledge and the distribution of the benefits of preserving and sustainable use of biodiversity.	
	• In the UCs the Bolsa Verde Program (2011) is worth highlighting for the support to extracting families, river families, indigenous and quilombolas populations as well as other traditional communities in situation of poverty for combining conditional income transfers to these families and at the same time promoting sustainable management and the preservation of biodiversity.	
Colombia	Decision 391 of the CAN.	
	<ul> <li>Decree Law 3570 (2011) delegates the Directorate of Forests, Biodiversity and Eco-Systemic Services of the Ministry of Environment and Sustainable Development everything related with requests for accessing genetic resources, resolving appeals and signing the corresponding contracts.</li> </ul>	
Ecuador	• The Program Socio Bosque of the Ministry of the Environment of Ecuador offers voluntary incentives to the conservation of woods through an investment plan in which communities may choose a social development plan.	
French Guyana	• The example of the National Park is reported, where there are no activities organized by the Park, which are directly profitable. However, there are many indirect benefits on the local development (for example, supplementary budget assignment of the municipalities; technical and financial accompaniment by local businessmen, by economic sectors and the associative fabric; indirect creation of local employment and training; investments on infrastructure and tourism).	
Guyana	<ul> <li>Amerindian Law (2006) stipulates how the indigenous communities should be governed and provides them legal faculties to manage and preserve their lands and collective property.</li> <li>The community council has the power of issuing rules that are juridically binding within the town, TI and non-indigenous communities.</li> <li>The protected areas' law grants rights to the communities for using the area for traditional hunting, fishing, agriculture, woodcutting, etc.</li> <li>In the different management plans for the protected areas actions should be planned for an equal distribution of the direct benefits of the protected area and its resources for and with the surrounding communities.</li> </ul>	
Peru	Granting rights by use contracts in the country (resources such as landscape and nature assets).	
	<ul> <li>Signing co-management contracts with Administration Contracts Executors.</li> </ul>	
	Creation of Aps in response to the demand of communities.	
	<ul> <li>Public policies that support the regulatory framework to guide and consolidate co-management models that ensure the active participation of the IP and local communities.</li> </ul>	
	<ul> <li>Voluntary Work Program with community participation through the surveillance committees.</li> </ul>	
	<ul> <li>Peru is the only Amazon country that has ratified the Nagoya Protocol of the CDB.</li> </ul>	
Suriname	• Sentence of the CIDH in the case of the Saramaka People with advancements in its discussions to 2011 and creation of a Presidential Commission.	
	New sentence of the IACHR in favor of the Kaliña and Lokono Peoples in trial established against the State in 2007 due to affectations by mining companies.	
Venezuela	• Creation of the Social Direct Community Companies with inhabitants for the use of vegetation waste, forest garden centers management and integral maintenance of the protected areas.	
	Technical training and transfer of social-environmental knowledge to Eco-Touristic Indigenous Communities, Community Councils, foundations, environmental movements for the development of productive activities.	
	Financing dealers and service providers through the Tourism Found.	

Source: Own development, IAPA Project, 2015

## Initiatives on governance shared between countries

Initiatives at the sub regional scale that cover processes beyond the countries' borders have continued to be strengthened. In IUCN's words, shared governance of cross-border management, implies formal agreements between one or more sovereign States or territories (IUCN, 2014). Thus, there are initiatives, which, from their different approaches, cooperate to improve governance in their intervention zones, as well as the consolidation of its joint vision of the territory, as shown in Table 16.

Country/ Territory	Aspect
Colombia, Ecuador, Peru	The Tri-national Program has an action plan for 4 years in which to reach the goals established in the PoWPA, it proposes cooperating against illegal activities, agreeing on environmental measures for the prevention of the impact due to infrastructure works, coordination of authorities - actors for planning and territorial organization, coordination for sustainable management of natural resources.
Bolivia, Brazil and Peru	The MAP Initiative (Madre Dios, Acre Pando) is a large-scale non-political institutional, volun- tary movement formed by citizens and institutions free and independent from the three countries.
Brazil, French Guyana, Suriname	GANECA: (Guyanas & Amazonia, North Eastern Conservation Alliance) has a Statement of Intent (2015) that has the goal of ensuring the best conservation results in a globally impor- tant sub region through the cooperation between border Áps (South Suriname Conservation Corridor and Central Suriname Nature Reserve (Suriname); National Park Montanhas do Tumucumaque (Brazil) and Guyana Amazonian Park (French Guyana). The purpose, for a total of more than 30 million Ha. of Áps, indigenous lands and protected forests, is safeguarding the integrity of a primary tropical forest zone through the inter-insti- tutional coordination and alliance between protected areas.
Guyana, Suriname, Brazil, Colombia	The purpose of the Guiana Shield Initiative is providing the means for countries to combat threats against natural resources with regards to large scale agriculture, plantations, forestry and mining industries

#### Table 16. Initiatives on shared governance among countries

Source: Own development, IAPA project, 2015

### Goal 2.2: To enhance and secure involvement of indigenous and local communities and relevant stakeholders

## Participation mechanisms, decision-making and consultation.

Participation is understood in different ways and behind such diversity it may hide interactions that do not necessarily represent the interests and needs of the populations with ties.

In the case of the PoWPA, it proposes intensifying social participation, particularly of the indigenous and local communities, as well as of other stakeholders. The countries of the biome report progresses translated into juridical instruments that have made participation possible, as well as examples about recognizing the rights of the Indigenous Peoples in joint cooperation processes, shared management experiences, public debates and generation of consensus, formal means to assess participation, special management regimes recognizing the traditional authorities and organization forms, among others.

The cooperation relationship between the Indigenous Peoples and the protected areas shows different examples of dialog, respect, coordination and complementarity in the Amazonian countries, consolidating large steps towards social participation in the protected areas. All the above mentioned is presented in Table 17.

However, there are still some limitations and unevenness in the progress with regards to actual participation practices and processes within the protected areas, which agrees with the limitations of the national legislation despite the different binding international commitments. The greatest challenge is that the CDB has proposed the participation principle as essential in reaching free and informed prior consent which will not only comprise consultation processes, but it will also allow people being consulted to give their consent.

At the regional level, there is a long way to effectively ensure the right to prior consultation as an essential participation element where juridical formalization is necessary in each country for its enforceability at an operational level and therefore, its enforcement, even though some countries already have the juridical instrument. In this case, the practical limitation remains in that the consultation per se is not a means that affects the final decision-making about the aspects being consulted.

### Table 17. Progress in participation processes, decision-making and consulting between 2010-2015

Country/ Territory	Aspect
Bolivia	Participation and decision making
	<ul> <li>The General By-Laws of the Protected Areas recognizes the Management Committees made by the State, Province ("Gobernación"), Municipalities and social organizations of the protected area as a participation means.</li> <li>Two administration modalities are allowed: the direct one and the shared one.</li> <li>A core element of the constitutional provisions is the "shared management" in spaces where TCOs (Community Origin Territories) overlap with Aps, which is the case in almost all the protected areas of national interest.</li> </ul>
	Prior consultation
	<ul> <li>Supreme Decree 29033 (2007) promotes the right of the original indigenous peoples and peasants to consulting and it also describes such process in detail.</li> <li>Consultation is binding.</li> </ul>
Brazil	Participation and decision making
	<ul> <li>National Policy on Environmental and Territorial Management in Indigenous Lands (PNGATI-2012), being implemented, built in a participative manner through dialog between the Indigenous Peoples and the Fede- ral State to ensure effectiveness thereof.</li> </ul>
	Prior consultation
	• The National System of Conservation Units establishes public consultation for the creation of Conservation Units.
Colombia	Participation and decision making
	<ul> <li>The Policy of Social Participation in Conservation (2001) guides National Parks in the fulfillment of mandates given by the Political Constitution; there is mutual recognition of the competences of the authorities, in this case, the special public authority (Indigenous People) and environmental authority, both at the same level.</li> <li>Special Management Strategies: a) for the implementation of the Social Participation Policy in protected areas in traditional territories or Indigenous Reservations the Special Management Regime REM has been developed (management instrument for the territory, implemented in conjunction among "Parques Nacionales" and the traditional authorities); b) for working with peasant communities with the Participative Ecologic Restoration strategy (REP).</li> <li>Within the framework of the REM, an innovative manner of harmonizing the presence of authorities with environmental competence as well as traditional authorities is the joint construction and the definition of Integral Conservation Priorities that integrate aspects of biodiversity, culture and interdependencies.</li> </ul>
	Prior consultation
	<ul> <li>The prior consultation law (1998) with black and indigenous communities for the exploitation of natural resources says that consultation is essential in decision making (Decree 1320).</li> <li>The law has been ratified through several sentences of the Constitutional Court and there is a follow up system; however, it does not authorize communities to halt actions in case of a disagreement.</li> <li>The Special Management Regime implemented by "Parques Nacionales" includes prior consultation.</li> </ul>

Ecuador	Participation and decision making
	<ul> <li>The Ministry of the Environment uses different instruments (management committees and agreements) to involve social actors in managing protected areas.</li> <li>Community management plans with Indigenous Peoples and local communities whereby some areas manage and preserve their territory in accordance with the indigenous and consensual vision of those protected areas.</li> </ul>
	Prior consultation
	<ul> <li>Art. 398 of the Constitution says that every state authorization that may affect the environment should be consulted with the community, which should be widely and timely informed.</li> <li>The State will value the community's opinion as per the criteria established in law and in international human rights instruments.</li> <li>These are applied exclusively as part of the environmental impact studies.</li> <li>Consultation is not binding.</li> </ul>
French Guyana	Participation and decision making
	<ul> <li>In French law (Environmental Code) official participation mechanisms are provided (agreement, notification and public consultation) with the instances of the protected areas.</li> </ul>
	• There are governance guidelines for the different by-laws of the Aps that favor integration with the actors (creation, management, evaluation).
	Prior consultation
	• For the creation of a protected area, an agreement should be reached through public debate to discuss the organization of the future area.
Guyana	Participation and decision making
	<ul> <li>Between 2008 and 2010, the Environmental Protection Agency and community representatives met to discuss the limits of the new protected areas to be created in the country. Based on those proposals, the areas of Shell Beach and Kanuku Mountains were created. From that point on, participative construction processes are carried out with the local actors (players).</li> </ul>
	<ul> <li>There have been participative processes in yielding management plans of protected areas. They have informative processes of national circulation for review and for contributions. At the same time, at least one public meeting should be carried out in Georgetown for its final discussion.</li> <li>The management authority responsible for the management plan of a national protected area should consult with each Amerindian community and each Indigenous People within the zone.</li> </ul>
	Prior consultation
	<ul> <li>The Amerindian Law (2006) includes procedures in the event an Indigenous People wished its territory to be recognized as part of the NPAS.</li> </ul>
	Indigenous People without the prior consent of its general assembly.
	<ul> <li>If a protected area is established in the land occupied by an indigenous community, no alteration shall be caused on any traditional right over such land, unless the community gives its consent in writing. The indigenous community who has traditional rights over those lands shall be consulted about the management of the protected area.</li> </ul>
Peru	Participation and decision making
	<ul> <li>Participative management has a work focus for PA management that promotes the participation of actors, through commitments and agreements, or others, being it able to generate shared benefits and achieving results associated to conservation.</li> <li>Participation venues are the management committees, on the basis of participative management guidelines.</li> <li>Community reservations have a special regime in its administration that regulates the participative management between the State and the peasant and native communities of the organized population. In addition, work has been carried out in conjunction with the National Association of Executors of Contracts for the Administration of Community Reservations of the Amazon Region (based on the model to guide</li> </ul>
	the co-management towards the conservation and sustainable development of a region with a community reservation). • Other mechanisms in the Amazon region are the Surveillance Committees (local participation).

	Prior consultation
	<ul> <li>Law of the Right to Prior Consultation with Indigenous or Original (or First Nations') Peoples and regulations thereof.</li> <li>To date, it is said that there are more than 12 prior consultation processes in the country</li> <li>Consultation applies to Indigenous Peoples.</li> </ul>
Suriname	Participation and decision making
	The participation means are established from the Forests Division Directorate, responsible for managing natural reservations.
	Prior consultation
	Legislation does not integrate Prior Consultation means. There are experiences where a consultation and consensus commission is created (for the main communication and decision making processes) by representatives of local communities and governments.
	and decision making processes, by representatives of local communicies and governments.
Venezuela	Participation and decision making
Venezuela	Participation and decision making Installation of the Higher Organ for the Integral Management of the System of National Parks and Monuments of Venezuela, which comprises the ministries responsible for all the environmental policies, instance that allows making requests and proposals subsequent to consulting at the presidential level. INPARQUES implements actions with protecting groups and community brigades through participative meetings with the popular power to guide the importance of protected venues as areas for social welfare. Participative and productive experiences are reported to contribute to the community economic system, such as direct socially owned companies for the management of solid waste.
Venezuela	<ul> <li>Participation and decision making</li> <li>Installation of the Higher Organ for the Integral Management of the System of National Parks and Monuments of Venezuela, which comprises the ministries responsible for all the environmental policies, instance that allows making requests and proposals subsequent to consulting at the presidential level.</li> <li>INPARQUES implements actions with protecting groups and community brigades through participative meetings with the popular power to guide the importance of protected venues as areas for social welfare.</li> <li>Participative and productive experiences are reported to contribute to the community economic system, such as direct socially owned companies for the management of solid waste.</li> <li>Prior consultation</li> </ul>

Source: Own development, IAPA project, 2015.

#### Land tenure

Land tenure in the Amazon region has different forms of occupation depending on national legislations. Despite certain advancements, it is still the subject with the highest conflicts with regards to protected areas. The most difficult aspect in all the countries of the region is the one related to legalization of lands. In the last five years there have been advancements only in two countries. It is necessary to work in formally recognizing the territorial rights of Indigenous Peoples and local communities.

### Table 18. Trends on land tenure in the Amazonian countries

Country/Territory	Aspect
Bolivia	There are 11 protected areas overlapping 17 TIOCS, representing an overlap of 3.2 million ha. Large populations live in these zones where the use of the resources is guaranteed, except that of the subsoil. The State guarantees the right of ownership over land to peasant and indigenous communities. Numerous cases of entitlement of TIOCs in Tierras Bajas of Bolivia up to 2011.
Brazil	There are dialogs aimed at overcoming the problems of overlapping between conservation units and indige- nous territories, land reform settlements and the Quilombolas communities zones. Difficulties have not been solved due to serious conflicts of land regularization of the Conservation Units. Even though the right to the possession and use of lands, land property remains on the Federal Government.
Colombia	Since the Political Constitution of 1991, the Indigenous Peoples have guarantees for the recognition of their territorial rights. Several regulations establish that they own the reservations. The connection of the collective property, the subsistence of the community, cultural development and spiritual values is worth highlighting. The concept of territory has a higher reach than that of land property or possession, as the Constitutional Court treats it as a fundamental right, besides providing them juridical security thereon.

Ecuador	Since 2012, the Organic Lands and Territories Law is aimed at implementing aspects such as the agricultural one, relevant for the conservation of habitats and controlling the expansion of the agricultural border. This subject should be approached from the possession of land, attending the problem of equal distribution under the criterion of protecting the social and environmental function of land.
French Guyana	The State possesses most of the land. There are three situations: 1. At the zone of adhesion of the National Park and the rest of Guyana (95% forests) = National management of the Forests (ONF); 2. At the central zone (CZ) of the Park = management of the Park (recognition of the traditional authorities and uses at the CZ); in the case of reservations = ONF management; 3. Collective Use Right Zones (ZDUC) = Special zones where the rights to using and occupying the land as well as other rights are recognized to the original and local communities. There is currently the will for allowing assigning land to city councils mostly made of local communities.
Guyana	The Amerindian Law stipulates how the governance of indigenous communities should be. This law grants communities legal faculties for managing and preserving their lands. Lands are the collective property of the community and they are administered by a tribe council (consejo de aldea) that generates juridically binding rules.
Peru	The Unique Registry of Protected Areas (RUNAP) is carried out by the Superintendence of Public Records (SUNARP). No property is registered, but the condition of the land or protected area. Large extensions of land are being legalized in the Amazon region and some cases are known which are already in the process or allocating titles (1240 territorial law suits are mentioned). This subject has the State's institutional political will as well as the financial support from international organizations.
Suriname	All the land that is not registered as private property belongs to the State, as well as its natural resources. There is a plan for amending the Nature Preservation Law that has been developed during 2015, but no repre- sentative advancements have been achieved.
Venezuela	With regards to the valuation of the possession of land, the following is set forth: 1. Lands corresponding to national parks and natural monuments are managed by the State; 2. Activities and uses given to them may be maintained provided they are ancestral; 3. Agricultural and subsistence activities are carried out in the Amazon region under the sole supervision of indigenous communities based on the ancestral rights granted to them by the Indigenous Peoples and Communities Law (2005).

Source: Own development, IAPA Project, 2015

### Governance forms: Indigenous and community governance

There is an increasing trend with regards to the aspects of rights' recognition of the Indigenous Peoples at the international level, as well as significant samples in the region of the amazon biome. Several countries have experiences that show the different forms of cooperation between Indigenous Territories and the protected areas systems. The advancement of this recognition opens increasingly higher integration options, options of respect of the rights, but also of cooperation and complementarity for the conservation of the protected areas and the cultural reproduction of the Amazon indigenous territories.

Country/Territory	Aspect
Bolivia	<ul> <li>The TI's are spaces for the collective determination, with government mechanisms, parent organization, a maximum instance of deliberation (assemblies) and they make decisions in a consensual manner.</li> <li>Not all PA are overlapped only with TIOCs. In other cases, there are several base organizations such as the peasants unions, inter cultural and even private ones, that participate through the Management Committee in the management.</li> </ul>
Brazil	In addition to the 12 national UC categories, there are other types that differentiate themselves because their primary goal is not the conservation and they are considered ancillary strategies for the conservation of the biodiversity and natural resources: a) Community owned Indigenous Lands, inhabited by one or more indigenous peoples, whose purpose is preserving the environmental resources necessary for their wellbeing and necessary for their physical and cultural reproduction; b) Permanent Preservation Area, "protected, covered or not by the native vegetation area, with the function of preserving water resources, the landscape, the geological stability and the biological diversity; c) Legal Reservation Area, whose function is ensuring the sustainable economic use of natural resources or the rural property; d) Lands occupied by remains of quilombos (quilombolas), whose function ensures physical, social, economic and cultural conditions.

### Table 19. Forms of indigenous and community governance in the amazon biome as of 2015

Colombia	<ul> <li>The Colombian Constitutional Court recognizes as Indigenous Territories: a) the "contemporary" or "colonial" reservations with titles, b) the indigenous territories with which there are processes for obtaining titles, extension or legalization of the reservation, c) territories without titles in possession or traditionally occupied by Indigenous Peoples, in many cases overlapped in the same territory with the Areas Protected by the State.</li> <li>The Colombian experience for materializing the State's political will from the NNP competencies to ensure the exercise of the rights of Indigenous Peoples in territories overlapping protected areas should be highlighted. It has developed a participative management for the overlaps with IT, integrating the recognition that IPs are special public authorities and working together in the coordination of the public function of conservation, focusing on the integral management of the territory.</li> <li>With regards to indigenous governance, there is the figure of the Special Management Regime as a planning strategy agreed between the environmental authority and the public indigenous authority, with which agreements are made on the use, control and co-administration of the natural resources in the overlapping area.</li> <li>There are also categories of protected areas of public and private governance. Currently, there is a Bill to generate community governance categories.</li> </ul>
Ecuador	<ul> <li>4 types of governance are recognized: by the government, shared, private and by Indigenous Peoples. There are no cases of private and Indigenous governance cases in the NPAS, they are recognized as community ones.</li> <li>In the case of shared governance, processes of delegation of duties are established. There is no regulation on the existence of TI overlapping protected areas in the Amazon region, or official mechanisms to support complementarity processes with other forms of conservation.</li> </ul>
French Guyana	• There is not yet a special statute for indigenous reservations. A process is starting for the recognition and there is a consulting committee from the populations.
Guyana	<ul> <li>The Amerindian Law says that all lands with a community title, even those conservation areas of community property, should be managed and governed by the communities themselves.</li> <li>In 2014, the Kanashen People applied to have its land with titles, approximately 3% of Guyana, declared as a national protected area within the NPAS. The application has gone through due process and a statement is expected in 2016.</li> <li>There is a protected area, the lwokr protected area, which has a governance structure different from that of the State (common law).</li> </ul>
Peru	<ul> <li>As per Law 28736 and Supreme Decree N 008-2007-MIMDES, complementarity is foreseen with other forms of conservation of the territory, through the regional conservation systems as well as the territorial reservations.</li> <li>This mechanism allows assembling processes that will generate common points and points for cooperation from the different instances that make up a protected area, in many cases, the territories of the Indigenous Peoples.</li> <li>Discussion processes have been carried out with representatives of indigenous communities on the principles of management and governance models.</li> </ul>
Suriname	No advancement has been reported on the recognition of the rights of the Indigenous Peoples.
Venezuela	<ul> <li>Creation of Community Councils and Civil Associations of Original Peoples.</li> <li>Creation of Indigenous Military Governments ("Capitanías Indígenas") in accordance with the ancestral territories.</li> <li>Co-responsibility between Original Peoples and the State to materialize the Shared Environmental Management for the protection of the protected areas. (Organic Law of Indigenous Peoples and Communities 2005, Article 48).</li> </ul>

Source: Own development, IAPA Project, 2015



## Element 3. Enabling activities

### Goal 3.4: To ensure financial sustainability of protected areas and national and regional systems of protected areas

Budgets assigned to preserving the Amazon protected areas are still very limited and this becomes a structural barrier that limits the consolidation of the conservation activities in all the countries of the biome. That is the reason why there is need for availability of enough, diverse, timely and long-term resources to become a critical factor for the sustainability of the protected areas of the biome.

This section analyzes the advancement of the countries of the biome in the financial sustainability of their protected areas from three different angles. First, it analyzes the performance in terms of the PoWPA goals; second, the evolution of the biome in budget terms and finally, it considers a series of qualitative factors and enabling elements for the financial sustainability.

The goal fixed by the PoWPA is having enough resources to cover the costs of effectively implementing and managing the national and regional systems of protected areas, with national resources as well as from international resources, particularly, to support the needs of the countries under development and countries with transition economies and small insular States under development.

The biome shows advancement with regards to 2010 in the application of the actions suggested by the PoWPA; two of the eight show no advancement, precisely the ones related to regional and international cooperation, as well as the exchange of experiences and successful study cases between countries. All the rest are in process in most of the countries of the biome and they show in some cases significant advancements with regards to 2010. However, advancements identified are due more to the individual initiative of the countries. In many cases, this effort responds to systemic initiative, not necessarily landed at the scale of the protected areas of the amazon biome. Along these lines, four countries (Brazil, Colombia, Ecuador, Peru), have an analysis of their financing gaps, while Bolivia has just started this analysis. Brazil, Colombia, Ecuador, Peru and Venezuela have developed or updated national financial strategies for their NPAS. Bolivia has started the process to develop its strategy.

There are exchanges among Brazil, Colombia and Peru in order to establish Permanent Financing; Funds; RedLAC has a program of thematic exchange between its members.

With regards to the need of providing information on the financial sustainability on a regular basis, the existence of systems for monitoring and reporting on the performance in financial management is evident, with 18% improvement in the period between 2010 and 2015.

It is worth highlighting that Ecuador, Venezuela and Colombia say they have carried out recent economic valuation exercises within the protected areas of the biome.

Cases such as Colombia, Brazil, Peru and Ecuador are important, where the analysis of the financial gaps have become a negotiation tool for an increase of the State allocations, justification of new projects and investment flows. Projects focused on closing the gap should also be mentioned, such as the case of ARPA in Brazil, specifically in the area of the amazon biome and the Permanent Financing Fund of Peru for all its NPAS. The financial gap analysis carried out in different countries have managed to generate reference information, in some cases they have moved to information systems that generate time series which explain the evolution of allocations and budgets executed in protected areas.

Another relevant aspect of the past five years is the carrying out of economic appraisal exercises that allow estimating the contribution of the protected areas to the economy of their countries. Effectively, several countries of the region have carried out these exercises and they would be potentially prepared to disseminate their learning and to support capabilities in other countries of the region.

Table 20 shows some data on the financial situation of the protected areas in 6 Amazonian countries<sup>34</sup>.

<sup>34</sup> There is no information about Guyana, French Guyana and Suriname.

There may be seen that the resources assigned to the biome have improved marginally during the period of the study, they also keep a modest participation within the NPAS budget in each country.

The total amount presented includes total direct and indirect expenditures, expenditures at the site level and national coordination, resources from donors, other governmental offices and extraordinary resources. The State is still the primary source of income for the protected areas of the region, with a participation of about 68%. However, it would seem that this trend has been reverted at least partially, given that in 2010 its participation was even higher, around 74%.

The participation of the international cooperation shows a slight increase in the last years, despite the fact that most of these countries are not priority subjects for the international assistance and cooperation any more.

	Amazon Protected Areas Budget				Total Budget of the Protected Areas System	
Country	(USD millions)	%	(USD millions)	%	(USD m	iillions)
	2010	2010	2015	2015	2010	2015
Bolivia	2,1	38%	2,1	26%	5,5	8,1
Brazil	8,3	4%	11,6	5%	222,7	222,7
Colombia	6	30%	5,3	15%	20,2	36,2
Ecuador	1,2	31%	4,2	8%	3,9	49,7
French Guyana	8,7	7%	8,7	7%	131,2	131,2
Guyana	ND	ND	ND	ND	ND	ND
Peru	5,4	36%	7,6	33%	14,9	22,7
Suriname	ND	ND	ND	ND	ND	ND
Venezuela	ND	ND	10	14%	ND	72,5
Total	31,7	8%	49,5	9%	398,4	543,1

#### Table 20. Total resources available for Amazon protected areas by country in 2010 vs. 2015

Source: Own development, IAPA project, 2016

The self-management income currently represent 11% of the resources available compared to 8% of 2010. However, there are no new items in its composition given that most of these resources are still generated by tourism (Graph 3).



Graph 3. Participation in percentage by source of income

Source: Own development, IAPA project, 2016

The financial gap analysis carried out in different countries have managed to generate reference information, in some cases they have evolved towards information systems that generate time series which explain the evolution of allocations and budgets executed in protected areas.

However, there is not a sufficiently detailed break down of the sources to verify, for example, the weight of the resources executed by the environmental funds. Even though in the whole region there is a trend towards reducing the dependency and specific weight of these mechanisms within the national budgets of protected areas, it is also true that in countries such as Brazil, the contribution of the FUNBIO makes an important difference in the flow of resources for the amazon biome. In the other end, countries such as Ecuador have decided to close their Environmental Fund, which is in liquidation phase. Considering that the preservation of protected areas is just one of the multiple strategies in preserving biodiversity, Moore Foundation published in 2014 information about the flow of international financial resources that have been executed for the preservation of the amazon biome strictly. In accordance with this source, international financing for the preservation of the amazon biome is about USD 206,2 million per year and comes especially from 24 large donors. Brazil is the country with the greatest support with practically 50% of the total amount invested, followed by Peru with 16%.

Of all the conservation strategies analyzed in Moore's studio, the conservation of protected areas represents 15,8% of the total resources invested by donors and sponsors, that is to say, almost 30,9 million per year. In accordance with the same study, the conservation strategies with the greatest success in

attracting resources concentrate 50% of financing. These were the Payments for Environmental Services/REED+ and initiatives related to the Legislation, Policies and Law Enforcement.

Within the international cooperation, one of the main financing actors of the conservation of the region has been the Global Environment Facility (GEF). Since 1991, this actor has executed projects for an amount that exceeds 1.000 million dollars in the countries of the amazon biome, an average of 43 million per year that leverage four times more resources from other sources per dollar invested (Table 21). As an example of the importance of this actor for financing the conservation of the biome at the regional scale, projects such as Guyana Shield Facility that involves Guyana, Brazil and Colombia may be mentioned. Another and more recent example is the project "Conservation of forests and sustainability in the heart of the Amazon region".

Country	Number of projects	GEF Grant (USD)	Co-financing (USD)	Total (USD)
Bolivia	17	56.936.518	114.309.327	171.245.845
Brazil	52	512.901.894	1.772.175.098	2.285.076.992
Colombia	45	158.114.278	675.246.938	833.361.216
Ecuador	36	112.752.528	313.627.941	426.380.469
French Guyana	ND	ND	ND	ND
Guyana	10	20.354.953	47.076.617	67.431.570
Peru	44	136.395.091	663.027.232	799.422.323
Venezuela	16	63.452.149	204.697.605	268.149.754
Suriname	8	23.816.597	66.981.666	90.798.263
TOTAL	228	1.084.724.008	3.857.142.424	4.941.866.432

### Table 21. Historic amount of the GEF portfolio by country

Source: Global Environment Facility, s.f.

The percentage of these projects and the amounts allocated that are directly or indirectly related to the conservation of the amazon biome is still unknown. Given that just a few countries have implemented information and accounting systems that provide periodical information on the flow of resources to the protected areas, there is a high complexity in the compilation and analysis allowing more detailed information, as well as a greater certainty about the investment through funds and/ or circumstantial projects.

The above mentioned indicates that it is essential to work on portfolios with different sources of income for the conservation to ensure resources in the long term and which will not depend on not very stable sources. In addition, it is worth paying attention to State sources, particularly in post-crisis periods, given that there may be more pressures for reducing public expenditure.

The participation of the international cooperation shows a slight increase in the last years, despite the fact that most of these countries are not priority subjects for the international assistance and cooperation any more.

### Enabling conditions for financial sustainability: Qualitative factors

The assessment of the three elements of the Score Card shows a significant variation in the score obtained in each one of the components between 2010 and 2015. The general performance of the Amazonian countries with regards to the three components analyzed is slightly higher than the South American and Latin American average.

Effectively, an increase of 15 points is recorded in component 1 in the period of the analysis, while 2 and 3 recorded an increase of 7 and 8 points respectively, within the term analyzed (Graph 4).

These results suggest that during the last five years there have been significant advancements with regards to the institutional reference framework and building in many cases an institutional capacity, which was clearly weak in 2010. This behavior appears to be logic, given that a good part of the barriers and bottlenecks are related to this component and they have a systemic incidence on the rest of them.





Source: Own development, IAPA project, 2016

Initiatives and projects developed by the countries on financial sustainability issues are closely related; at least 16 actors were identified who sometimes operate in different countries of the region, offering great opportunities of cooperation and work at the biome scale. Several actors present in the financial sustainability component work in the countries that make the amazon biome, which suggests opportunities at the level of exchanging experiences and strengthening capabilities.

With regards to using financial sustainability tools used in the amazon biome, the existence of planning instruments and financial policy in the national protected areas systems is analyzed. Initially, the existence of the following three tools of financial planning is verified. 1) financial gap analysis; 2) financial sustainability strategies or plans; 3) economic valuation of the contribution of the protected areas to the local or national economy. The tool most used by the countries is the financing strategy, which shows a noticeable progress with regards to 2010 where very few countries had such tool (Table 22). While the least used tool is the economic assessment, which does not necessarily suggest a lack of capacity, but rather a questioning to the sense of purpose for the exercises to be tied to decision making processes; it is mentioned that in a few cases they end up using financing mechanisms or affecting key decision making processes.

## Table 22. Existence of financial sustainability tools of protected areas by country

Country	Financial Gap Analysis	Financing Strategy	Economic valuation
Bolivia	Х	Х	Х
Brazil	√	√	Х
Colombia	√	√	√
Ecuador	√	✓	√
Guyana	N.D	N.D	N.D
Peru	√	√	Х
Suriname	N.D	N.D	N.D
Venezuela	Х	√	✓

Source: Own development, IAPA project, 2016

The main weaknesses common to the countries of the amazon biome to be worked in the future, despite the fact that large undertakings have been carried out to that end, are the economic valuation (for example, ecosystems services, jobs based on tourism, etc.), a better preparation of the Government's budget for NPAS and well defined personnel requirements, profiles and incentives at the site and system level. Additionally and given that the biome generates goods and services of a global character, it is essential to quantify its contribution to have a technical basis that will allow designing compensation and mitigation tools. Additionally, it is important to assess better mechanisms for determining user rates, communication strategies to increase public awareness on the justification of the income generation mechanisms and operational plans of payments for environmental services (PSA) for protected areas.

#### Ongoing initiatives

Most countries have some financial sustainability project or initiative in different stages. Table 23 provides information about those that have been considered as the most relevant ones in each country.

Country	Projects and initiatives
Bolivia	<ul> <li>Consulting on the system's funding needs and financing strategy.</li> <li>Tourism and chestnut and acai exploitation.</li> <li>Charging for tourism systems and charging for environmental management.</li> </ul>
Brazil	<ul> <li>LifeWeb proposal for ARPA with German cooperation</li> <li>Compensation</li> <li>Payment for environmental services in the Acre State as pioneer.</li> </ul>
Colombia	<ul> <li>Permanent Financing Fund (Memorandum of Understanding) to ensure long term funding and increase the capacity of the Protected Areas System of Colombia - PFF.</li> <li>Development of economic and financial instruments for the generation of resources for the SPNN (Economic valuation of water resources, compensation).</li> </ul>
Ecuador	<ul><li>Project GEF PNUD of Financial Sustainability</li><li>Updating of the gap and the Financial Sustainability Strategy</li></ul>
Peru	Peru Heritage Initiative: Securing the PA of Peru.
Venezuela	<ul><li>Creation of direct sustainability socially owned companies.</li><li>Diversification and increase of the sustainability source.</li></ul>

### Table 23. Main current financial sustainability initiatives and projects in the Amazonian countries

Source: Own development, IAPA project, 2016

Brazil, Colombia and Peru have permanent financing initiatives; for example, Brazil is in the final stage, while Colombia is starting its process. These longterm mechanisms move large amounts of resources in a relatively short period and they offer opportunities for exchanging experiences with the rest of countries of the biome.



## Element 4. Standards, assessment and monitoring

### Goal 4.2: To evaluate and improve the effectiveness of protected areas management

Measuring effectiveness in managing protected areas is now one of the most relevant landmarks for managing the systems of protected areas at the global level and Latin America has made huge efforts that have deserved recognition in the trend. The countries of the amazon biome are not away from this reality and despite the different levels of advancement and methodological developments they have managed to introduce changes necessary for strengthening the management from more complete planning, monitoring and training schemes that allow adapting to different circumstances due to the behavior of such systems, particularly in view of a scenario of a natural environment that is constantly changing.

In general terms, the countries of the biome have advanced significantly in adapting the methods, standards, criteria and indicators to measure the effectiveness of the management and assessments have been carried out in more than 60% for the case of seven countries<sup>35</sup>. These results have been included in the national CDB<sup>36</sup> reports and key recommendations have been adopted for the new assessments as well as for the planning system itself (see column "Actions implemented after the assessments" in Table 24).

At the level of the countries, the application of the methodologies in the protected areas of the Amazon region is observed in 7 of the 9 countries; at the biome scale, concrete joint management experien-

<sup>35</sup> For the goal of 60%, established through Decision X/31, Bolivia, Brazil, Colombia, Ecuador, French Guyana, Peru and Venezuela have made assessments to 2015.

<sup>36</sup> The countries that submitted the report in 2012 were Bolivia, Brazil, Colombia, Ecuador, Guyana and Peru. See Annex 6.

ces of trans-border territories may be observed, such as the case of the Tri-Nation Program of La Paya (Colombia) – Güeppí (Peru) – Cuyabeno (Ecuador), as well as other ecologic corridors, especially in Brazil, implying a reflection about how to carry out assessments to measure its effectiveness at the site level. However, it is still an important challenge to establish joint actuation parameters to ensure the existence of biodiversity in the long term, even though the countries individually show substantial advancements from the last assessment made by Redparques in 2010.

To date, the eight Amazonian countries and the French Guyana territory have institutionalized tools for measuring the success in the management of their protected areas, even though some of them are still incipient or are limited to specific monitoring (for example, GEF Projects). This has been possible partly thanks to the fact that there has been will by the administrations for generating processes that take care of the learning and the needs of the protected areas.

This report shows the tools and variables to measure effectiveness in the management in the Amazonian countries (Table 24), as well as the perspective about what may be carried out at the level of the biome within the framework of the Amazon Vision.

The trend of using international references such as the Reference Framework of the UCN's World Commission on Protected Areas, the Tool for Monitoring the Effectiveness of the World Bank Management -METT (Management Effectiveness Tracking Tool) and the WWF – RAPPAM<sup>37</sup> (Rapid Assessment and Prioritization of Protected Areas Management), mainly. Additionally, countries have advanced in adapting systematic assessment methods that consider particularities of the NPAS themselves and that are increasingly being connected as an essential instrument in planning and defining priorities for action.

Along these lines, it is also worth remembering that the application of methodologies for measuring management success is closely related with the international framework that implies fulfilling goals juridically binding and others of a technical character, the Aichi Goals, or the UICM Guidelines such as the Sidney Promise.

On the on hand, the Aichi Goal 11 foresees that for 2020, 17% of the important areas for biodiversity will

The two goals with regards to management effectiveness contemplated in the PoWPA are goal 1.4<sup>39</sup> related to improving planning and management of protected areas based on the place and, more concretely, goal 4.2 related to the assessment and improvement of the effectiveness of the management of protected areas.

Being this understood it is worth highlighting that between 2010 and 2015 the Amazonian countries have made huge advancements towards building and adapting methodologies for the evaluation of effectiveness in the management of protected areas, as well as in the necessary management of resources, personnel and political support for decision making, despite the large amount of challenges it entails and that in some cases it has not been translated into improvements.

Starting from the conclusions of the past Regional Report 2010, it is clear that in at least 8 countries<sup>40</sup> there are operational monitoring and planning systems that attend the Evaluation Cycle proposed by the CMAP Framework of Reference, which comprises five key elements (see Figure 10): context, planning, input, processes, products and results.

Even though in the past most of the attention was given to the first three (Ruiz, 2010), the countries from the biome have focused their efforts on the *results*, which comes accompanied by an analysis process on the needs of change and the instruments required to achieve them (for example, at the institutional and legal level and at the level of personnel and resources, capabilities, etc.), considering criteria beyond the cycle such as the *impact* and the *performance* and analyzing short, medium and long term time scales.

be preserved through systems of protected areas effectively and equally managed while the Sídney promise covers four Innovative Approaches<sup>38</sup> referred to the effectiveness of management within the framework of the thematic line "Reaching the Conservation Goals". With no doubt, protected areas have proven they are the places where the biological diversity is preserved the best, when they are well managed; therefore, as a requirement for reaching a good level of conservation, measuring the effectiveness of management is an essential element of the Aichi Goal 11 (Juffe, et.al, 2014).

<sup>37</sup> Which is in turn a development of the CMAP Reference Framework.

<sup>38 4 5, 6</sup> and 11. See Annex 2.

<sup>39</sup> Already assessed at the beginning of this chapter.

<sup>40</sup> Bolivia, Brazil, Colombia, Ecuador, Guyana, French Guyana, Peru and Venezuela



Figure 10. The evaluation and the Management Cycle

Source: adapted from Ervin, 2003

One of the big challenges is still coordinating the relationships between the different components of the management cycle, considering mainly the coordination between the information resulting from what is being monitored and assessed with the subsequent feedback in planning. Gearing of these two components is key for an adaptive and effective management (SERNANP, 2016).

There can still be seen important weaknesses with regards to the data taking methods and evidence management, the lack of perspectives at the region or landscape level, the heterogeneity of tools and actors participating in measuring and interpretation of the results for improving management of the territory, as well as changes of sector policies, governing plans, institutional research programs, management plans and the management cycle itself.

At the same time, very important findings are highlighted, such as the growing appropriation of the exercises by the personnel who works in the protected areas, the usefulness of the analysis for decision making from changes in planning, investment and management thanks to the confidence in the results by the technical and directive levels and the growing capacity to carry out the analysis by the internal and external teams. New variables are being considered within the analysis, related to the territorial dimension, the governability and governance and to the weather vulnerability, even though it is important to deepen into these analysis in a less general manner as they are traditionally included as part of integrity or condition analysis.

Table 24 shows the main findings with regards to the tools used to 2015, the methodologies and data obtained, actions implemented, variables analyzed, periodicity and some general remarks.

It is worth mentioning that the tools shown herein respond to an evolutionary and adaptive process that contains learnings from those used in 2010; generally, they are improvements to or diversification of the approaches related to the biome, or the management and operation of the protected areas, or with obtaining the conservation goals for which they have been created.



Table 24. Tools used by the amazonian countries for following up and assessing the effectiveness of the management of the protected areas

Remarks	The EGAP is an evolution from the MEMS (Measuring of the Management Effectiveness of the NPAS), used between 2001 and 2006 and which, from the updating of the strategic agenda in which social participation is included, was placed as a measuring instrument. It is not aimed at disqualifying or depreciating PA's or officers' actions.		The GAMB parameter excludes, for measuring the effectiveness, the variables related to the risk of the protected area as it considers they are not related to the management, which is what is assessed.		As a complement Diagnosis is used, which is a tool for collecting information aimed at supporting the analysis and planning-monitoring and assessing the management effectiveness in PA developed by the JRC/UE/IUCN within the framework of the project BIOPAMA (Biodiversity & Protected Areas Management)
Determining Variables	Global performance ariable - DEMPAP, built from the 6 management variables that make up arameters: GFIN: Financial Management GFIN: Financial Derative Management GAMB: Environmental Management DSOE: Social - Economic Management DSOE: Social - Economic Management Coordination COIN: Inter-Institutional Coordination				
Amazon PA Assessment			N.A.		
Actions implemented after the assessments	Results aimed at management feedback, determining, weaknesses, bottlenecks and strengthening capabilities.		They provide the criteria under which the administration of the protected area may tune up its direction and focus the management activities: changes in guidelines in management instruments.		Aiming the execution of its programs and projects towards the environmental, social and financial sustainability.
Methodology and data obtained	Considers the different aspects of the management (information, planning, administration, protection, development, etc.), which make the conservation of the natural and cultural heritage.	The management assessment is made on the basis of the intrinsic conditions of management, but it is also connected to the conditions in which it is developed (for example, institutional social- political context and threats).	Based on a vision of the quality of management as an evolutionary process.	Finally, each PA is qualified and recommendations are made for its performance to improve.	
Tools used	EGAP - Status of the management of the protected areas				
Country			Bolivia		

Remarks	RAPAMM and FAUC com from the CMAP and METT methodology.	RAPAMM and FAUC measure the UCs, while SAMGe measures management from the ICMBio guidelines.	It was observed that from the adjustments to the methodology, it was easier for managers to respond to the questionnaires.	Climate change actions or pressures are analyzed, but there are specific indicators, which could be useful in future, analysis.	Based on the Administration category of the UC, the SAMGe assesses the uses, however, the same uses banned may generate positive impacts in the economic spheres, the conservation of the biodiversity or social conservation, especially the distribution of the goals and uses.
Determining Variables	<ul> <li>Pressures and threats</li> <li>Biological importance</li> <li>Social-Economic importance</li> <li>Vulnerability</li> <li>Goals</li> <li>Legal protection and policies</li> </ul>	<ul> <li>Design and planning of the area or the UCs System</li> <li>Human Resources</li> <li>Communication and information</li> <li>Infrastructure</li> </ul>	<ul> <li>Financial Resources</li> <li>Management Planning</li> <li>Decision making process</li> <li>Research, assessment and monitoring</li> </ul>	Management Plan Participative Management Terms of commitment (with Indigenous Territories) Real Use right concession Signposting Demarcation Financial situation Frotection Frotection Equipment Facilities Research Monitoring	Monitoring of the management and evaluative quality instruments (uses and management actions, impact evaluation), in accordance with conservation goals.
Amazon PA Assessment	In 2005: 242 UC (85%) + Federal System In 2010: 296 UC (94%)	+ Federal System and States: AC, AM, AP, PA, RO, RR y TO In 2015: 320 UC (100%) + Federal System and	States: AC, AM, PA, RO and TO	112 UC - ARPA is a program with emphasis on the protected areas in the Brazilian Amazon Region	Amazon Pilot: 150 UC Oct. Nov 2015 Brazil Pilot: 170 UC Jan/Mar 2016
Actions implemented after the assessments	Between 2005 and 2010 the questions were adjusted to reduce subjectivity and ensure comparison. An application was developed to respond to the	questionnaire offline and the database to check the answers from the prior cycle. Data are sent to the Presidency of the ICMBio for decision making	They are used punctually for management characterization in management plans	An adaptation of the METT to the Reference Frameworks has been made for UCs consolidation scenarios. In the first years they defined the budget limits of the UC, which led to forcing results. Now, the budget is defined by the States- The results contribute to the Annual Operative Plan of ARPA	There is an internalization proposal for the institutional decision-making and management characterization in a new model of making ICMBio management plans and to contribute to the qualitative database for the different spheres of decision making.
Methodology and data obtained	Simple method for identifying trends or aspects required to reach management effectiveness and allowing decision- making.	lt consists in identifying the variables that participate in managing	a UC to ask some questions that allow a quantitative grading.	For the ARPA Program, adapted from the METT.	It is a management effectiveness analysis methodology from the use and conservation goals, made of two main elements: the evaluative characterization and the analysis of two management instruments.
Tools used	Rapid Assessment	and Prioritization of Protected Areas Management - RAPPAM		FAUC - Assessment Tool of the Conservation Units	<b>SAMGe</b> - Management Analysis and Monitoring System
Country				Brazil	

Remarks	Relevant inputs have been achieved for the generation of international cooperation projects for the process of updating the management plans, as well as for the analysis of the effectiveness of the SPNN management and for the selection of areas within the framework of the Green List Initiative.	The system analysis was carried out in 2010, under two purposes: 1. Analyzing the management of the National Natural Parks System. 2. Integrating the analysis at the site level and at the SPNN level, issuing recommendations for the improvement thereof.	The condition of the conservation objects is monitored and management is followed up, promoting self-reflection processes with NNP and through the social participation approach in the conservation an analysis of the AP management is made.	The idea is using systematically the results of this monitoring to improve processes in the development of the adaptive management.	An analysis of the ecologic integrity has been carried out at the site and threats and pressures level to have information and a baseline on the status of the protected areas.	Adjustments are currently being made to the tool as of the learnings and the planning of the entity, strengthening subjects relevant to the Amazon region, such as governance.			
Determining Variables	n each one of the three periods of time different variables are measured: 1. Long term corresponds co the mission: status- pressure analysis; cologic integrity – Values bject of conservation 2. Medium term to strategic planning: Social egitimacy degree alanning: Governability; ncidence of the armed conflict; operative quality, human talent management.								
Amazon PA Assessment	All the Amazon PA assessed in the assessed in the cycles corresponding to 2015 Short cycle at the PA level: 2011 - Fourth application: labor burdens analysis and first online and first online application in 2 PA application in 2 PA - 2013 - 2014 - Sixth application in 2 PA PA - 2013 - 2014 - Sixth application for 3 PA that make up the AME - Macarena; 100% PA PA evel: 2010, 2015 level: 2010, 2015								
Actions implemented after the assessments	At the system level, recommendations were made around the following variables: • National Parks System • Policy and Legislation Framework • Biodiversity • Social Participation Framework • Biodiversity • Social Participation • Tourism • Administration and financial) • Monitoring, research and Evaluation • International commitment and connection • SINAP Coordination From a prioritization matrix, changes have been incorporated into the Management Plans with regards to the diagnosis (current situation and the strategic planning (operation, participation, management of values object of conservation).								
Methodology and data obtained	It consists in a combination of interviews - questionnaires based on the CMAP Cycle. analysis of secondary documentation, field trips and group workshops. 2010 - The analysis is made at the system level, parallel to an internal analysis of the effectiveness of the management of all the protected areas of the SPNN at the site level, using the AEMAPPS methodology; applied in correspond to the mister the long term, to the strategic planning in the medium term and to the operative planning in the short term.								
Tools used	Effectiveness Analysis at the System Level - Analysis of the Management of Protected Areas with Social Participation								
Country	Colombia								

S	sed as satisfactory ation levels of the s to say, that the low management vered.	by region as well m/sphere; results r for the system, as		standardized and s worth mentioning t (cost-benefit)	ent for collecting echnological tool ints savings in the	נותמנפ סד טכט אל של			ts are quantitative e of Form 4, it	al perception of key e these natural	med at contrasting	ssential onsible for the PA management, operation in the ater support and management improvement
Remark	In 2015, the EEM is asses; fulfillment as per the valu global methodology, that i factors and means that al are being appropriately co	Results may be extracted as aggregations by progra are also obtained by PA, o well as historic analysis.		The implementation of a s automated methodology i and as a result, an efficier	and innovative managem information through the t is obtained, which represe	MAE management (an es) 170.000, avoiding costs fo mobilization and travel all			The forms' data and resul and qualitative. In the cas	allows proving the externa actors that inhabit and us	places. This valuation is ai the self-assessment.	This evaluation provides e information to those resp to strategically guide their guide the international co spheres that require a gre strengthen/ redirect the r programs in a continuous process.
Determining Variables	Form 3 (EEM) allows asses- sing variables and indicators different but comparable for spheres based on the framework of the CMAP and	it contains the six elements: • Context • Planning • Input	<ul><li> Processes</li><li> Products</li><li> Results</li></ul>	Additionally, the management programs that define the specific activities,	resources, infrastructure, goals and actions necessary to fulfill the management	goals established by the MAE are defined, as follows: 1. Administration and Planning	2. Control and Surveillance	3. Communication, Education	and Environmental Participation (CEPA)	4. Public Use and Tourism	5. Biodiversity Management	In Form 2, there is a variable that reviews the <b>climate</b> <b>change</b> among other threats that affect the PA (for example, productive activities, mining and production, transportation, roads, among others)
Amazon PA Assessment	There are results from the EEM from 2012, 2013, 2014 and 2015. There is a 7% increase in 2015 with regards to 2012, which has been considered as a satisfactory fulfillment, described as having the factors and means that facilitate management. It applies to the 48 protected areas that make up the continental PANE, covering all the Amazon PA.											
Actions implemented after the assessments	The results have been taken for each one of the programs with the ourpose of improving planning thereof and budgets assignment. Ecuador has significant advancements in the efficient management of the information through the development of the information of processes and provides on-line information elevant for supporting decision making processes.											
Methodology and data obtained	Used to assess the strengths or weaknesses in the programs or phases (spheres) of a PA management. It comprises 4 forms; the first 3 apply to the PA Administrator and the last one to the strategic actors. Form 1: General data - basic information and main characteristics Form 2: Theast to the Protected Area - general list, classified in accordance with their importance in high, medium or low Form 2: Strategic Actors Effectiveness Evaluation, PA management by program and sphere with its respective indicators form a: Strategic Actors Evaluation - National Biodiversity Directorate, Touristic Operators, Decentralized Autonomous Governments, Communities management of protected areas in which the management of the Protected Areas of the State (PANE) is approved and determined".											
Tools used	EEM - Evaluation of the Management Effectiveness											
Country						Ecuador						

Remarks	It shows the goals and the assessment criterion to which the NP primary mission will be subject, as well as the effectiveness of its internal management. Once a year, based on the year's indicators.	Charts sometimes include evaluation questions and indicators to assess the NP/RNP actions and their partners to implement the strategic guidelines in the chart and its cross cutting principles.	For Natural Reservations (NR), a new model of their new management plan is being followed, given by the National Reservations Federation (NRF) and it is being adapted to its regional context.	Maripa-G is a work made more than 10 years with different actors such as the WWF, NP, reservations, among others, to generate indicators in protected areas. Unfortunately, it could not be implemented due to cost constrains for informing these indicators.
Determining Variables	<ul> <li>For the NP (2015-2017):</li> <li>Knowledge on the heritage of the territory</li> <li>Protection and restoration of the natural and cultural heritage and exceptional landscape</li> </ul>	<ul> <li>Accompaniment to the actors under the sustainable development logics</li> <li>Broadcasting knowledge and receiving visitors.</li> <li>Conducting the NP policy.</li> <li>Public management (financial management bunnan resources)</li> </ul>	infrastructure, etc.) For NP, participation processes and governance analysis - changes made to the NP over its territory, including within the legal framework and applications thereof. For the RN, they are more about changes in scientific protocols.	<ul> <li>Climate Change Variables:</li> <li>Carbon footprint of the Public Administration.</li> <li>Carbon Footprints in the NPs as protected areas: very useful to discuss the contribution of the French Guyana to the national and international debate and dialog in the reduction of carbon emissions, mitigation and compensation thereof.</li> </ul>
Amazon PA Assessment	Yes. It is a 3 years contract. Evaluation is made on an annual basis.	Yes. The Chart lasts 10 to 15 years (NP/ RNP).		Yes. The management plan lasts 5 years (NR).
Actions implemented after the assessments	Reviewing the COB with new goals built between the Park and the Ministry		There are processes that have just started; therefore, there are no relevant data to be reported.	The purpose is reviewing or re-writing the management plan or the territorial chart.
Methodology and data obtained	Collection of data on the financial and human resources used for each objective; percentage of realization of the actions/ projects foreseen.	Use of more robust evaluation questions and qualitative, quantitative	Assessments are more oriented to measuring results and impacts. In the NPs, as well as in the regional parks, software is being introduced to ensure the	evaluation of the Chart and park actions and COB. Additionally, park employees are gradually being trained between 2016 and 2017 for them to make the assessments to their projects.
Tools used	COB - " Objectives Contract" between the National Park (NP) and the Ministry of the Environment	Assessment of the territorial Document (NP and Natural Regional Park (PNR)).		Evaluation of the management plan (Natural Reservations (NR)
Country			French Guyana	

Remarks	No results are known after 2005 It is a participative process, even though it is very expensive as it implies field visits for grading	Within the framework of the PA shared management (Iwokrama), in January 2016 a co-management agreement was signed with Rupununi communities whereby specific responsibilities are established; this will allow measuring the management effectiveness. There is no information for the PA in the national level, which in the past had the METT as a reference for being involved in GEF projects (Guiana Shield Facility).		
Determining Variables	<ul> <li>Administration and operation</li> <li>Social, natural and cultural resources</li> <li>Political and legal</li> <li>Economic and financial</li> </ul>	Υ.Υ. Υ.Υ.		
Amazon PA Assessment	N.A.	N.A.		
Actions implemented after the assessments	N.A.	N.A.		
Methodology and data obtained	A score is assigned to each one of the elements (herein, variables), starting from the assumption of an optimum conservation status.	The Plan is the parameter against which the management effectiveness is measured.		
Tools used	Maripa-G	Territorial Organization Plan		
Country	Guyana			



Remarks	It is the methodology officially adopted by Presidential Resolution 238 dated 2013 for fulfilling the SERNANP functions assigned at the national and regional level.	The effects of all the PA and the system may be added. It does not determine the hectares affected in an NPA.	The EEM of the NPA in Peru is carried out considering the contribution to the conservation of a representative sample of biodiversity, as well as the sustainable development. There are 3 main components i) the environmental one; ii) the economic one; and iii) the social-cultural one. The activities matrix analyzes the environmental component, which environmental component, which evaluates what has to do with the conservation status of each PA.	Economic costs have been integrated in identifying priority areas for conservation in the western Amazon region.			
Determining Variables	Variaties Effects reported: Overuse of resources Contamination Displacement of native species due to the introduction of exotic species introduction of exotic species Cattle raising Forest extraction Hydro biological Mining Hydro biological Others Others						
Amazon PA Assessment	Quarterly reports are produced. There is a web display where the accrued and / or activity deffects may be freets may be remanently and for all the PA of the system, especially, the Amazon ones.						
Actions implemented after the assessments	The start point to make an assessment of the effectiveness measuring is not an assumption any more, which has increased the capacity of controlling the impacts given that follow up is made to goals as well as to the actions implemented.	Modifications in the management plan for all to have the same structural elements and for them to be more easily evaluated (objectives, goals, indicators).	Now, the Master Plan is made by the NPA personnel through a participative process where commitments with the different actors (interest groups) are generated. An analysis of factors is made (not of threats) and zoning conditioned by seasons, which allows more dynamism. The conservation purpose was replaced by indicators of the conservation status (environmental elements), planning is made in accordance with the NPA reality and it is reviewed on an annual basis. Organization of the macro regional institutionalism and strengthening of the management systems for regional conservation: regional				
Methodology and data obtained	It describes the sample units where one or more effects have been identified. Therefore, it is known which are the activities associated to the effects, as well as specifying the zones with a significant impact due to accrued effects.	It allows calculating the probabilities of occurrence of the effects of the NPA in terms of percentage.	<ul> <li>National Planning Level NPA System - SINANPE: Based on learnings from applying the 2001 monitoring methodologies: Monitoring the conditions necessary for the NPA management, 2005 Environmental monitoring system standardized for the SINANPE; 2007: Updating of Individual PA conditions monitoring the effective management of the PA - It was difficult to relate the results of the evaluations with the results of the evaluations and the evaluations with the resolute the evaluations with</li></ul>	processes aimed at a performance evaluation. Regional Planning Level Regional Conservation System 2011 - 2015: Effects by activity Matrix - Aimed at an impact evaluation, geographically explicit and coordinated with the planning process.			
Tools used	Matrix of effects by anthropic activities.						
Country	Per						
Remarks	The radar measures evaluation units different from those of the matrix as it approaches management. The radar analyzes the EEM social component that assesses the degree of cooperation and organization of the strategic actors in the NPA. It is important to consider the participation radar. The actors map and the participation radar.			The actors map measures the EEM social component, which evaluates the benefits, beneficiaries and rights granted contributed by the development of activities carried out in a sustainable manner in each PA.			
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Determining Variables	Axes of the participative management: Inclusion: Management Committee Integration: participation of the local groups in conservation actions Participation in the production of the planning instruments Relation of the NPA with the environment Communication Accountability Effective Management				The results allow conducting the	management proposing route maps or actions for the participation to be shown in the improvement of the participative management: the tools used are being improved.	
Amazon PA Assessment	Y -						
Actions implemented after the assessments	the assessments rganization of the macro egional institutionalism an agrement systems or regional conservation: egional approach based on wider governance of the erritory.						
Methodology and data obtained	Shows the advancements in management and visualizes aspects to be strengthened considering the existence of actors and the mission of the NPA in the territory as exes of development.	Methodology: The 4 axes of the radar represent a total of 19 questions where each question presents 4	grading alternatives to determine the optimum level of organization of the strategic actors.	Methodology: Visualizing and assessing the degree of participation of the strategic actors through the indicator "Actors Index"; through a two input matrix: i) actors in accordance with cooperation categories (distant, neutral and cooperator) and ii) type of actor. The distant and cooperator categories have in turn three levels of evaluation (high, medium and low), which are weighted with values. The actors index is the weighted average of the total of strategic actors identified, organized by degree of participation.			
Tools used	Participative management radar Actors map				Actors map		
Country				c	л С		

Remarks	The benefits reported by the development of the different activities of the NPA may represent an input for the criteria for assigning resources for periods subsequent to the evaluation for all the NPA to be effectively controlled (100% of their spheres controlled).	This follow up covers the EEM economic component.
Determining Variables	Each sustainable activity in the NPA or in its zone of influence should report: • Benefits • Benefits	<ul> <li>Rights granted and/ or agreements</li> </ul>
Amazon PA Assessment	The Head of the NPA should report these indicators on an annual basis through the	reports of its master plan.
Actions implemented after the assessments		
Methodology and data obtained	All Master Plans made, updated or adapted should include performance indicators of the economic activities that promote the sustainable	around the NPA.
Tools used	Follow up to the economic indicators included in the Management	Plans (Master Plans).
Country	Peru	

Remarks	Experiences to be extracted from the annication in the areas of	Experiences to be extracted from the application in the areas of the project Suriname Coastal Protected Areas Management of the GEF.			
Determining Variables	CMAP evaluation cycle with emphasis on context, input and processes.	lt includes climate change considerations.			
Amazon PA Assessment	No specific assessments have	been carried out as there are no management plans to be assessed.			
Actions implemented after the assessments	Ч. Z				
Methodology and data obtained	It consists in filling in a score form for	monitoring GEF projects - excluding the PA managed by the Foundation Conservación Surinam.			
Tools used	METT -	Management Effectiveness Tracking Tool			
Country		Suriname			

Remarks			The Strategic Plan 2013- 2019 relates to some areas on which monitoring is carried out: Governing scope of Administration Governing scope of Research and Monitoring Governing scope of Public Use of Environmental Protection Governing scope of Resource Management		
Determining Variables	Determining variables in the management strategy: • Respecting the	harmony: offering spaces for the respectful	<ul> <li>coexistence</li> <li>with nature, its</li> <li>defense and</li> <li>defense and</li> <li>enjoyment</li> <li>Commitment,</li> <li>responsibility</li> <li>word given and</li> <li>obligations</li> <li>contracted with</li> <li>the people are</li> <li>Protagonist</li> <li>participation of</li> <li>the people: active</li> <li>participation of</li> <li>the number of the PA</li> <li>in the actions that</li> <li>and revolutionary</li> <li>quality: more</li> <li>effectiveness</li> <li>in obtaining</li> <li>results with</li> <li>environmental</li> <li>political</li> <li>and socially</li> </ul>		
Amazon PA Assessment			The application of the methodology is permanent and a balance of management and results is carried out on a quarterly basis. An increase in costs was observed between 2011 and 2015, which shows the incremental application in the total of the PA.		
Actions implemented after the assessments	Analysis, evaluation and decision making in the organizational structures of the national parks and natural monuments - Determining the management of each area and the fulfillment of the plan's strategic lines.	Determination of the management of each area and compliance with the strategic lines of the plan	<ul> <li>Scope of Environmental Planning: process of updating Management Plans and Regulation of Uses Stope of Investigation and Monitoring: incorporation of specialists, equipment, community brigades.</li> <li>Scope of Community Development: formation of protective groups, ecotourism, overcoming poverty, eco-healthy activities, sustainable communal economy, infrastructure works.</li> <li>Scope of Public Use: activities with communities for eco-healthy parks, interpretation paths, environmental guides).</li> <li>Scope of Environmental Protection: creation and strengthening of the Civil Guard Body of Forest Firefighters and Communal Forest Guard.</li> <li>Scope of Resource Management: calculation of load capacity of trails and recreational areas, adequacy of service providers, Watershed Management Plan.</li> <li>Creating State organization instances for the integral administration of the SNPV.</li> <li>Identification of critical, immediate attention zones.</li> </ul>		
Methodology and data obtained	Provides qualitative and quantitative information on the fulfillment of the objectives and the scope of goals set out in the Strategic Plan 2013-2019		Participatory action between Inparques and the community, service providers and institutions		
Tools used	INPARQUES Strategic Strategic Plan as the essential tool for the management effectiveness of the National Parks System of Venezuela (SNPV)				
Country			Venezuela		

Of the *national descriptions* mentioned above, it is possible to conclude that to date, at least 7 of the 9 countries of the biome systematically apply tools for measuring management effectiveness, which are the result of learning processes, adjustments in the indicators, methods, resources and temporalities to ensure the evaluation shall be approached in an integral manner for it to offer options to improve impact in conservation of protected areas as well as the systems they depend of.

For example, in Ecuador, the evaluation results are essential for measuring management and they allow improving the operation of the protected areas in the long term and allow identifying spheres that require more support for strengthening them through an improved planning. For Venezuela it has become essential identifying the lack of personnel for those programs where more gaps have been found and, thanks to measuring, specialized personnel have been increased.

Additionally, it is noticeable that for most countries the capacity and the will of the personnel associated to protected areas to perform the measuring exercises have increased as the benefits of having tools to quantify the needs have been experienced.

Even more, these results, apart from supporting policy and inter-sector relations decisions, have facilitated much more robust planning processes, as there is more clarity of where deficiencies are and what strategies may be implemented, strengthening the management cycle itself. And it is the case as it has migrated towards a system look in which not only the individual management of a protected area is important, but it also has to be accompanied by improvements at the institutional level, as shown by the evaluation of National Parks made in Colombia through the Management Analysis of the National Parks System, as well as the results of the application of the SAMGe in Brazil.

One of the challenges still existing, in spite of the tools described herein approach it mostly as one of the variables of the analysis. It is the greatest integration of protected areas as environmental determinants within the territorial zoning and in two ways, as the collateral effects of national and subnational zoning policies critically affect effectiveness in reaching the goals for which such areas are created. In addition, participative planning and monitoring are still incipient and invite to create other types of visions within success measuring. The participative management radar used by the Peruvian government is an excellent instrument to ensure long lasting governance models, respectful of the rights and obligations of all actors affecting the PA management and the Bolivian EGAP is original as it is carried out by an entity of evaluators that include the civil society.

There are still difficulties for making a reflective analysis that allows using the management effectiveness evaluations to break the divorce between planning and implementation to understand evaluation as a management improvement tool and making it adaptive. One of the challenges is prioritizing the interventions to effectively feedback planning from the results of the evaluations.

It is surprising the focus some tools have applied with regards to climate change, not only as a variable determining the condition of an area, but also as a risk factor over potential changes in the ecologic structure in which they are immersed. In addition, of how the actors themselves generate impacts that may be mitigated. The case of the French Guyana territory is exceptional in this sense as it connects the management of the areas and their potential carbon footprint.

Another essential point refers to the generation of changes with a positive impact on the performance of the areas and systems, beyond an eventual grading. The matrix of effects by activities of Peru, as well as Bolivia's EGAP are essential references.

Within the main trends, the tools focus on evaluating the management/ performance of the areas, or the conservation goals. The fact that some tools have evaluation approaches<sup>41</sup> over different spheres or components such as the environmental, the economic, the social and the administrative one is worth mentioning (for example, Peru and Venezuela).

Analysis have led to rethinking the management for of the areas and systems both for the form they connect to other programs (i.e., research) as well as in terms of the validation itself and the actors involved, from the need of assessing other management categories (i.e., private or municipal areas in Brazil) up to the recategorization of some areas.

<sup>41</sup> Some of them incorporate specific variables such as the social - environmental one in Bolivia.

Additionally, the introduction of improvements and subsequent achievement of the goals of creating the protected areas in a more effective way can be observed in the light of the recognition of the success, as in the case of the inclusion of three Colombian national parks<sup>42</sup> in the IUCN Green List of Protected Areas in 2014, whose nomination implied the most exhaustive analysis of world class management standards and which, from three pillars<sup>43</sup> of criteria, a very high level of success was determined in the achievement of its goals. Analyzing the potential of the protected areas of the biome to enter this List shall be an interesting challenge of the Amazon Vision.

Even though it is possible to have aggregated information on the protected areas by biome as data may be filtered in most tools, only in the case of the ARPA Program has a wider connection at the biome level, as well as the Three-Nation Program on trans-border issues. In the same way and as a fundamental contribution to the reading of variables of effectiveness measurement beyond protected areas, it should be noted that Brazil has carried out an application of RAPPAM in 5 conservation mosaics, 3 of which are in the biome.

The above mentioned is essential to understand the scope at the regional scale, where the trans-bor-

der management experience of the Three-Nation Program for the conservation and sustainable development corridor between Colombia, Ecuador and Peru gives an opportunity for thinking about the requirements an effectiveness analysis at this scale should have, as they are more complex goals that exceed planning through the instruments of the national protected areas, but it allows seeing them as conservation opportunities for the biome.

The Tree-Nation Program has proposed some goals in view a *coordinated regional management* to ensure that the corridor will *preserve biodiversity values and is developed in a sustainable manner*. That is why starting from a structure and goals defined at the landscape scale, the three States agreed to establish a follow up mechanism adaptable to the circumstances of the territory, under thematic contexts and axes (18 indicators). They make up the measuring tool that shows the values of the Corridor, considering the context of the areas that connect it (Carlos Mauricio Herrera, WWF Colombia).

This experience, in addition to the methodology applied in Brazilian conservation mosaics, will contribute significantly to improving the management of protected areas and consolidating a common exercise on a biome scale.

<sup>42</sup> These 3 do not include Amazon parks, even though it has been foreseen to expand the list and to include PA from the biome.

<sup>43</sup> Coherent and appropriate planning, equal governance, effective management and, in the long term, added, lead to a fourth pillar related to the successful results.



# CHAPTER 4.

# SYNTHESIS OF ADVANCEMENTS AND CHALLENGES IN IMPLEMENTING THE WORK PROGRAMA ON PROTECTED AREAS IN THE AMAZON BIOME



Once the advancements have been analyzed for each one of the goals of the PoWPA prioritized by Amazon Vision and from the updating of the reports of the Action Plans submitted to the Agreement Secretariat (Annex 6) by the countries of the biome, it is possible to show that most strategic actions proposed by the PoWPA itself have been approached at different scales in the countries of the amazon biome between 2010 and 2015 and, essentially, there are evidences of a regional approach against the adoption of instruments that lead to this fulfillment.

Some key factors for each one of the elements are highlighted, as follows:

Element 1: Direct actions for planning, selecting, establishing, strengthening, and managing, protected area systems and sites

An important progress may be seen in establishing and strengthening the regional and national systems of protected areas, as in Colombia, Peru and Venezuela, which have declared new, protected areas for the amazon biome in the past years. This goes with an improvement in planning and managing the areas already declared, despite the existence of recurrent challenges to achieve an effective management. Additionally, the alternative conservation alternatives are convincing in almost all systems in addition to the initiatives for the integration of the protected areas at a wider scale of the landscape as in the functional conservation measures in Colombia, landscape conservation programs in Bolivia and connectivity corridors in Ecuador.

Against the identification of connectivity initiatives at the country and region scale, the connectivity corridors of Colombia and Brazil and the Three-Nation Program Colombia- Ecuador-Peru are worth highlighting, even though for most shared borders there are joint management initiatives.

The portfolio of conservation opportunities and the analysis of vulnerability to the Climate Change carried out by the WWF under the direction of the countries, which constitutes an essential input for making decisions aimed at strengthening the role of the protected areas as strategies for the adaptation and generation of resilience of the territory. As a complement, the study of the policies on protected areas as strategies for the adaptation to the climate change is a significant advancement for improving planning.



# Element 2: Governance, participation, equity and benefit sharing

Amazonian countries show an important political will by the NPAS's authorities for promoting processes to support governance of the protected areas. Most countries report decided actions to increase the social participation, the recognition of rights and the inclusion of social actors in planning, monitoring and evaluation processes in protected areas, particularly, in view of the development of political frameworks and legal provisions that protect participation, the rights of the Indigenous Peoples and the local communities, making viable effective actions to achieve equity goals.

Some models of shared governance have been built at the sub regional level through coordination initiatives, even though the advancements in this matter are limited, as well as in the participation mechanisms in the costs and benefits derived from the creation and administration of the protected areas.

In addition, the cooperation relationship between the Indigenous Peoples and the protected areas show different examples of dialog, respect, coordination and complementarity in some of the Amazonian countries, as well as the recognition of the governance at different levels, including governance by the Indigenous Peoples and local communities, private subsystems, local or municipal governments, regional systems, among others. However, this is not the reality in all the countries.

To this regard, there are also concrete limitations with regards to formalizing the appropriate consultation mechanisms with the populations connected to the protected areas, and there is no mention of consent processes.

The most difficult and conflicting subject in the biome is still the land tenure. It is a pending challenge that requires working in the formal recognition of the territorial rights of the indigenous peoples and local communities.



Six of the eight actions suggested by the PoWPA with regards to this Element present a level of advancement, in some cases, significant against the report in 2010. These are due more to the countries' individual initiatives and they are not necessarily realistic at the scale of the protected areas of the amazon biome.

Cases where the analyses of the financial gaps have become a negotiation tool for an increase of the State allocations, justification of new projects and investment flows stand out. There are projects focused on closing the gap (i.e. ARPA).

In the past five years economic appraisal exercises that allow estimating the contribution of the protected areas to the economy of their countries have been carried out.

Despite the increase in the resources available for the NPAS, it may be observed that the resources assigned to the biome have improved only marginally during the period assessed. The protected areas of the amazon biome will receive USD 70 million per year, 17% of the total resources available of the NPAS.

Budget assignments of the States are still the primary income of the protected areas in the countries of the biome, which have been complemented mostly through international cooperation, given that the own income generation mechanisms associated to the services provided are still incipient. The financial sustainability initiatives are worth highlighting, the equity funds in Peru and Brazil, the compensations or retributive rates as well as the public-private alliances, which have eased significant burdens (example, Tourism).

With regards to the financial gap, even though the countries that make up the amazon biome have made exercises based on a methodology that facilitates the comparison and monitoring, it is still pending to establish the investment gap for the set of these protected areas to reach minimum management effectiveness levels

Certain mechanisms and financial sustainability tools may be seen, such as the environmental funds, participation and co-management figures, payment for environmental services and others related to the climate change.



The methodologies for measuring the management effectiveness in Amazonian countries show a clear evolution and adaptation against the management needs learned during the years. They have been directed by international elements, but at the same time, specialized in the national contexts so they have had an effective influence in decision-making with regards to the management of the protected areas.

The Amazonian countries have fulfilled most of the actions suggested by the PoWPA for establishing methods, standards and measuring criteria. Their application in more than 60% of the territory and the use of information generated through these tools for improving the planning and management of the NPASs; in spite of not having specific methodologies for determined ecosystems such as those comprised in the amazon biome, in 7 of the 9 countries, management effectiveness analysis have been applied in the Amazon protected areas, integrating recommendations specific to the territorial and regional context.

There is a growing trend to evaluate the impacts and to generate changes from the decision making levels from the results of the evaluation of the management effectiveness, under criteria that analyze the design, planning, results and products aimed at strengthening management. Therefore, it is necessary to continue with a focus on the processes and the strategies, and integrating management visions that allow seeing how the protected areas contribute to the conservation of an ecosystem wider than that of the protected areas individually.

There are still lacking specific developments for measuring the management of regional initiatives for the conservation of protected areas such as Amazon Vision, even though there are essential experiences that will contribute directly to the generation of reading instruments common for the areas of the biome.

Table 25 summarizes the main achievements or data relevant against the fulfillment of the goals related to the PoWPA in the countries of the biome, seen from a regional perspective.

### Table 25. Summary of the implementation of the PoWPA in the amazon biome to 2015

Goal	Progress
1.1. To establish and strengthen national and regional systems of protected areas integrated into a global network as a contribution to globally agreed goals	<ul> <li>44 new protected areas under some category created by the IUCN.</li> <li>Implementing detailed methodologies that increase the level of precision of the information over the protected areas in the biome.</li> <li>Advancements in the establishment of other strategies and alternative forms of protection, conservation and management of the biological and cultural diversity.</li> </ul>
1.2. To integrate protected areas into broader land- and seascapes and sectors so as to maintain ecological structure and function	<ul> <li>16 connectivity initiatives at the country scale that try to maintain Eco systemic and functional connectivity.</li> </ul>
1.3. To establish and strengthen regional networks, trans boundary protected areas (TBPAs) and collaboration between neighboring protected areas across national boundaries	<ul> <li>Portfolio on conservation opportunities for the biome developed.</li> <li>12 ecologic connectivity initiatives at the regional scale (adjacent protected areas), which includes the two landscapes prioritized (north and south).</li> </ul>
1.4 To substantially improve site-based protected area planning and management	<ul> <li>Regional cooperation between National Protected Areas Systems to include climate change criteria in the planning and management of the protected areas.</li> <li>Improved planning and management thanks to changes generated in the measurement of management effectiveness</li> </ul>
1.5. To prevent and mitigate the negative impacts of key threats to protected areas	<ul> <li>Analysis of vulnerability to the Climate Change as an essential input for making decisions aimed at strengthening the role of the protected areas as strategies for the adaptation and generation of resilience of the territory.</li> </ul>
2.1 To promote equity and benefit-sharing	<ul> <li>28 new juridical frameworks (between laws, policies, decrees) and 22 institutional mechanisms that make social participation viable.</li> <li>Advancements on 4 regional coordination and cooperation initiatives between border protected areas.</li> <li>The 9 Amazonian countries are signatories of the Nagoya Protocol. To date, only Peru has ratified it.</li> </ul>
2.2 To enhance and secure involvement of indigenous and local communities and relevant stakeholders	<ul> <li>Great advancements on participation practices.</li> <li>Important progresses on the recognition of the rights of the Indigenous Peoples; shared management experiences; debates and generation of consensus; formal mechanisms to evaluate participation; special management regimes, recognition of authorities and traditional organization forms; complementarity.</li> <li>Good governance practices in all countries.</li> <li>Substantial advancements about the possession of land in 2 countries.</li> </ul>
3.4. To ensure financial sustainability of protected areas and national and regional systems of protected areas	<ul> <li>6 of the 8 actions suggested are ongoing in most countries.</li> <li>Significant advancements in gap exercises and financing strategies.</li> <li>The financial resources for protected Amazon areas went from USD 31,7 million to 41,5 million in the period 2010-2015</li> <li>The evaluation of the elements of the Score Card shows a significant variation in the performance of the countries, slightly higher than the South American and Latin American average.</li> </ul>
4.2 To evaluate and improve the effectiveness of protected areas management	<ul> <li>8 countries have their own tools for measuring the effectiveness of management.</li> <li>7 countries apply them systematically.</li> <li>6 countries have fulfilled the evaluation goal of 60% of the national protected areas.</li> <li>6 countries apply effectiveness measuring methodologies in all Amazon protected areas.</li> <li>There is a measuring tool at the biome scale.</li> </ul>

Source: Own development, IAPA project, 2016

# CHAPTER 5.

PERSPECTIVES AND OPPORTUNITIES TO ADVANCE IN THE IMPLEMENTATION OF THE WORK PROGRAM OVER PROTECTED AREAS IN THE COUNTRIES TO 2020 THROUGH AMAZON VISION



In accordance with the findings of this report and considering as a long term perspective for the fulfillment of strategies to 2020, the countries and a territory of the amazon biome have made investments, strengthened their capacity and generated alliances such as the Redparques Amazon Vision Initiative to fulfill with the goals established in the PoWPA, in accordance with the national and regional contexts, considering the new international agenda and building from experiences and learnings from what was achieved to 2010. However, it is still necessary to advance in the goals which were not ready for the dates established due to different circumstances, or that have been projected in a larger time rage since 2010.

Within the framework of the Action Plan 2010-2020 for the consolidation of the

Amazon Vision, activities projected are still valid and, in some cases, the countries of the biome have considered keeping this regional acting perspective in the light of new exercises connected to this Redparques initiative.

The actions suggested for each one of the PoWPA Elements for the rest of the 2010-2020 period are presented below with some general thoughts, formulated in accordance with the advancements and perspectives at the regional scale, that is to say, considering specific activities and processes carried out with regards to Redparques Amazon View (Annex 4).

Temporalities used for the projection of the Action Plan to 2020 are as follows; short term to 2016, medium term to 2018 and long term to 2020.

Element 1. Direct actions for planning, selecting, establishing, strengthening, and managing, protected area systems and sites.

Goal 1.1: To establish and strengthen national and regional systems of protected areas integrated into a global network as a contribution to globally agreed goals

Tables 10, 11, 12 and 13 show processes for the creation, expansion and coordination of protected areas in the region which will deserve larger supports in terms of the other goals of this program, decidedly in terms of budget assignment and capacity for an effective management and governance.

It will be sought that the conservation priorities identified at the biome level, in accordance with the results of the new Portfolio of conservation opportunities, be driven and have planning processes, in order to:

- ✓ At country level, visibility of portfolio information and cross these results with country priorities
- ✓ Strengthen actions with other biome's stakeholders.
- Carry out a joint technical exercise that allows the exchange of experiences in the region.
- ✓ Search for other biome-scale conservation mechanisms.

	Element 1. Direct actions for planning, selecting, establishing, strengthening, and managing, protected area systems and sites.					
			Term (years)			
Goals	Strategic action	Activities	Short 2016	Medium 2018	Long 2020	
		Agreeing a methodological plan and route for making national conservation goals compatible with regional needs	x	x		
1.1 To establish and strengthen national and regional systems	Achieving an agreement on goals and priorities of the biological and cultural diversity from the regional perspective, as well as planning processes - action in prioritized areas	Advancing in consolidating and implementing criteria to strengthen the portfolio of priority conservation sites from a regional perspective which integrates the ground and clear water ecosystems to maintain the ecosystemic services as well as the social-cultural and economic criteria, elements and processes.	x	x		
of protected areas integrated into a global network as a contribution to globally agreed goals		Jointly defining and implementing proposals for classifying conservation objects (gross filter and fine filter)	х	x		
0		Agreeing on adjacent sites and blocks as an opportunity for advancing in trans-border cooperation processes	х	x		
		Advancing in cooperative planning - action processes to achieve the conservation of the prioritized areas and/ or blocks	х	x		

# Goal 1.2: To integrate protected areas into broader land- and seascapes and sectors so as to maintain ecological structure and function.

Additionally, Table 11 shows some of the initiatives of interest to 2015, which should be followed up to promote shared management mechanisms that ensure the functionality of alternative conservation areas.

These mechanisms should guarantee the functionality and structure of protected areas and alternative conservation figures both at the country and biome level, for which a greater discussion and analysis of information among the technicians is necessary, within the framework of the Portfolio of conservation opportunities.



Element 1. Direct actions for planning, selecting, establishing, strengthening, and managing, protected area systems and sites.						
			Term (years)			
Goals	Strategic action	Activities	Short 2016	Medium 2018	Long 2020	
1.2. To integrate protected areas	Consolidating the process of defining the portfolio of priority conservation areas from	Developing protocols for the design and implementation of ecologic corridors and other connectivity figures with the participation of indigenous and local communities, etc.	х	х		
into broader land- and seascapes and sectors so as to maintain ecological structure and function.	an ecologic-regional perspective, integrating landscapes of ground and clear water ecosystems as well as other criteria and social- cultural and economic elements.	Intensifying the conservation efforts, among other things, expanding the protected areas and ecologic networks for biologic diversity of the continental waters and designating appropriate and complete networks of swamp areas within river basins through international cooperation in the management of continental water resources.		х	Х	

## Goal 1.3: To establish and strengthen regional networks, trans boundary protected areas (TBPAs) and collaboration between neighboring protected areas across national boundaries.

This goal is essential for management from the Redparques and, naturally, from Amazon Vision, given that these particular areas are the most conclusive expression of the goals of the Vision. In addition, the joint management mechanisms beyond the borders are a challenge that should be approached from Amazon Vision. The political will to advance in declarations or management between governments is key for this intention.

To achieve this, it is necessary to generate coordination mechanisms and inter-institutional coordination for action in border areas, strengthen social participation in the control and surveillance of the protected areas, communication mechanisms and reporting between different actors including communities and environmental authorities, identify locally joint work sites, promote internal agreements between NPASs and seek to scale processes at the political level to formalize initiatives.

Element 1. Direct actions for planning, selecting, establishing, strengthening, and managing, protected area systems and sites.							
			Term (years)				
Goals Strategic action	Activities	Short 2016	Medium 2018	Long 2020			
1.3 To establish and strengthen regional networks, trans	stablish and Advancing in national and nen regional regional management s, trans processes that will	Creating the conditions for establishing cooperation agreements between adjacent PAs.	х	х	х		
boundary protected areas (TBPAs) and collaboration between neighboring protected areas across national boundaries	facilitate incorporating into the governments' agendas the subject of trans-border PA and formalizing multilateral agreements between adjacent protected areas.	Defining and implementing strategies aimed at ensuring the support and political will in the regional cooperation processes for strengthening networks and effectively managing adjacent protected areas.		x	х		

## Goal 1.4: To substantially improve site-based protected area planning and management.

Information platforms and repositories to strengthen planning and administration capabilities for the biome NPAS will be boosted through projects such as the Observatory and of specific criteria for the appropriate management of the protected areas in view of the new challenges. This is the case of the climate vulnerability study and the formulation of new research projects that will require a joint management of resources is foreseen. Additionally, the protocol on measuring the effectiveness of management at the biome scale will contribute substantially to the better planning of Amazon subsystems which may contribute valuable lessons for all the NPAS with regards to variables (for example, climate change as a risk factor), methodologies and improvements introduced from the assessments made.

With the support of the operational units of the Redparques, it is expected to implement concrete action plans to implement the Declaration on Protected Areas and Climate Change, as well as other policy instruments that have an impact on the improvement of long-term planning.

Element 1. Direct actions for planning, selecting, establishing, strengthening, and managing, protected area systems and sites.							
				Term (years)			
Goals	Strategic action	Activities	Short 2016	Medium 2018	Long 2020		
1.4. To substantially improve site- based protected area planning and management	Formulating, consolidating and harmonizing protected areas integral management plans with a regional approach, with an adaptive view, long term and which will also include management	Coordinating and harmonizing planning of the protected areas with regards to the strategic plans of the systems and with sector initiatives of a regional character based on the ecosystemic approach.	х	х	х		
		Sharing experiences of PA planning and management methodologies to strengthen subregional planning initiatives that contribute to the effective conservation and sustainable use of the biological diversity at the regional scale.	х	х			
	monitoring and biological and cultural diversity and assessment systems.	Developing management and planning models of protected areas that strengthen the processes at the regional level and that integrate protected areas into the territorial zoning initiatives.		х	х		

# Goal 1.5: To prevent and mitigate the negative impacts of key threats to protected areas

The information platforms of the Amazon View will be essential for monitoring and preventing irreversible impacts on the biological and cultural diversity of the biome. Additionally, the Monitoring of Amazon deforestation, OTCA initiative aimed at developing and implementing participative monitoring systems of the forest coverage in the Amazon region and strengthening the existing regional management coordination platforms, becomes an opportunity to know the biome's deforestation dynamics and to generate joint strategies between the countries to stop this phenomenon and to revert the adverse effects thereof over the ecosystems and the goods and services derived.

To this end, it is invited to work on the standardization of criteria to generate information from countries that facilitate technical articulation in fundamental topics such as coverage, climate vulnerability, ecological processes and economic flow, as well as to formalize sustained financing strategies for mitigation and adaptation to the effects of climate change.

Element 1. Direct actions for planning, selecting, establishing, strengthening, and managing, protected area systems and sites.						
			Term (years)			
Goals	Strategic action	Activities	Short 2016	Medium 2018	Long 2020	
		Designing and instrumenting training programs on impact assessment, monitoring plans, mitigation, strategic environmental evaluations, etc. to strengthen the national and regional technical capacity.	Х	х		
		Producing and agreeing a classification system (indicators, variables, methodologies, models and information scales) standardized to make the regional analysis on the status and pressure over the ecosystems and regional PAs.	х	x		
	Advancing in the regional processes for the analysis, modeling, prevention and mitigation of impacts on PA due to the development of extraction activities, infrastructure, climate change, agricultural expansion and other development activities.	Developing agreements to establish a regional monitoring structure from the different initiatives ongoing.	х	х		
1.5 To prevent and mitigate the negative impacts of key threats to protected areas		Supporting the generation of communication and dialog spaces in view or progresses of the countries with regards to the phenomenon of the climate change: analysis of the scenarios, vulnerability, effects, mitigation strategies and instruments, adaptation, etc., to jointly define technical, operative and financial strategies for mitigation and adaptation in the PA systems.	х	x		
		Advancing in technical cooperation processes for the analysis and modeling of impacts on PAs of activities such as; i) mining, ii) exploration and exploitation of hydrocarbons, iii) infrastructure: hydroelectric plants, iv) non regulated hunting, v) disposal of wastes in urban centers and vi) fire with regards to CC and agricultural expansion.	х	x		
		Advancing in the subregional technical cooperation for the implementation of early warning systems in areas where the implementation of activities and high impact projects may be foreseen.	х	x	х	

	Promoting the participation and corporate and social responsibility for adopting good practices in important areas that contribute to conserving the biological and cultural diversity.	x	x	
	Strengthening the different control and surveillance mechanisms in protected areas for the conservation of biodiversity.	x	x	x
	Establishing valuation mechanisms for the environmental goods and services about the importance of the Amazon protected areas as a strategy for the conservation of biodiversity and adaptation to climate change.	x	х	
	Promoting the implementation of strategic environmental evaluations (EAE) of sector policies, plans and programs of a regional scope as a strategy for preventing significant environmental effects.	x	x	x
	Analyzing the proposals which are being made from the Amazon countries with regards to the REDD with the purpose of facilitating the exchan- ge of information and experiences.	х		
	Sharing information and methodologies related to the use and sustainable management of the natural resources of the protected areas.	х	х	x



# Element 2. governance, participation, equity and benefit sharing

# Goal 2.1: To promote equity

### and benefit-sharing

The report on this subject is connected to general experiences, which are not necessarily covered, by juridical frameworks and rules that may facilitate such processes and provide them sustainability. Additionally, a limitation is observed with regards to the understanding how to design and achieve actions resulting in the participation in costs and benefits to the populations. This is a subject that is still difficult to approach. This subject remains as a challenge pending to be deepened in designing the concrete mechanisms and results in the years to come.

Regional governance experiences require an exercise of more integration between countries, starting from the construction and strengthening of the Amazon Vision. Greater efforts are pending to make joint learning exercises and replicate good practices between countries, accompanied by the collective political will to harmonize actions that will build a joint vision of the region. The greatest challenge is building the NPA management as a coordinator of processes within a context of a larger picture.

Weaknesses in the exercise of good governance in the region can be overcome by strengthening the capacities of relevant actors in protected areas in relation to responsibilities and competencies, good governance skills (e.g. communication, facilitation, stakeholder articulation, conflict management), protection of traditional practices and mechanisms for equitable sharing of costs and benefits, as well as the promotion of initiatives for the sustainable use of natural resources by ethnic communities.

The major challenge is to constitute PA management as a processes articulator in a context of a wider landscape. The management of Redparques to achieve assessments of governance, socio-environmental management courses and the structuring of a portfolio of community micro-projects will be crucial to achieve this purpose.

	Element 2: Govern	nance, Participation, Equity and Benefit Sharin	g		
				Term (years)	
Goals	Strategic action	Activities	Short 2016	Medium 2018	Long 2020
		Advancing in participative assessments of existing, formal or non formal governance models and processes to achieve the conservation and development goals, with an emphasis on transnational processes.	x	x	x
		Establishing mechanisms for exchanging regional experiences on PAs management: shared management, good practices, land possession forms, lessons learned with regards to PAs governance, etc.	х	x	x
	With the participation	Promoting processes of capacity building that incorporate: i) the diversity of actors with shared responsibilities and competences in PAs management and ii) the skills required by the new governance forms (communication, negotiation, facilitation, coordination of actors, conflicts management, etc.).	x	x	X
2.1. To promote equity and benefit- sharing	of the different actors, studying, valuating and promoting biological and cultural diversity conservation and management strategies, figures and tools to find alternatives that	Sharing experiences on the sustainable use and management of the goods and services of biodiversity in the protected areas and conservation territories to contribute to improve the life standards of the populations of such geographic spaces.	x	x	x
	facilitate the effective management and conservation of areas of biological, cultural and economic importance.	Supporting initiatives on the sustainable use and management of the goods and services derived from biodiversity (ethnic- tourism, ecotourism, etc.), promoted by indigenous and local communities in PAs.	х	x	х
		Strengthening the capacities of institutions, indigenous, African- American and local communities in trans-border protected areas for the protection of traditional knowledge and practices and innovation on the use and management of biodiversity and to establish mechanisms and processes on clear and equal participation in the costs and benefits of the indigenous and local communities in the creation and management of protected areas.		x	х
		Analyzing the different mechanisms and incentives promoted by the Amazonian countries for the management and conservation of private protected areas, to identify common tools that contribute to the sustainability of this protection figure at a regional scale.	х	x	x

# Goal 2.2: To enhance and secure involvement of indigenous and local communities and relevant stakeholders

There are different legal mechanisms and mechanisms of recognition of the rights and duties of the Indigenous Peoples and local communities in view of the existence of protected areas, including those that facilitate the direct management of ancestral territories as places for the conservation of biodiversity. However, there is still a challenge with regards to the regulation and effective application of laws in benefit of these peoples, given that the practice is not necessarily exercising authority with equity against other actors. Orientation with regards to criteria for exercising good governance at the regional level is a priority thematic axis for the operation of Redparques in the years to come.

	Element 2	2: Governance, Participation, Equity and Benefit Sharir	ıg		
				Term (years)	
Goals	Strategic action	Activities	Short 2016	Medium 2018	Long 2020
		Supporting evaluation exercises and exchanging experiences on effective participation mechanisms of stakeholders in the creation and shared management of conservation figures and in general, of types of governance in protected areas, including the equal participation in the costs and benefits of the indigenous and local communities in the PAs).	x	x	х
	Exchanging experiences	Generating processes in strengthening local and institutional capacities for the shared administration and management of protected areas.	x	x	Х
2.2. To enhance and secure involvement of indigenous and local communication indigenous and indigenous and indigenous and	Systematizing and exchanging experiences about participation processes of all social actors in the follow up of development projects with an incidence on protected areas and lands of indigenous and local communities.	х	x	х	
local communities and relevant stakeholders	Afro-descending communities and other actors involved in the creation, management and planning of	Coordinating the PoWPA with other programs related to the CDB: forest biological diversity, maritime and cost biological diversity, access and participation in the benefits and article 8 j) and other provisions to improve enforcement and strengthening governability.		x	х
protected	protected areas.	Integrating the provisions of COP 10 on the access and benefit-sharing with the issue of PAs governance to contribute to the reduction of poverty and to improving the life means of indigenous and local communities;		x	х
		Including the indigenous and local communities and other parties involved with protected areas in advising committees and in consultations and efficacy exams for the presentation of reports about the PoWPA and in the efficacy exams of the protected areas system.		x	х



# Element 3. Enabling activities

## Goal 3.4: To ensure financial sustainability of protected areas and national and regional systems of protected areas

The report presents the efforts by country for establishing sustainability strategies and others that are complementary, such as the international cooperation projects. However, there is no work guideline at the regional level, considering regional platforms such as RedLAC of LifeWeb itself of the CDB. The region is late for advancing in these types of exercises at the biome scale. It is expected that through the component of the IAPA project in the subject, joint action strategies will be boosted, including the possibility of coordinating actions for financing through the GEF.

This reality moves to propose new conservation figures and innovative financing mechanisms (e.g.

Green Climate Funds, payments for environmental services, compensations, carbon credits) that respond to the current technical and financial conditions and needs of the biome, which are not only aimed at generating funds but at reducing costs.

A greater integration with the processes and results of the measurement of the management effectiveness is expected. The lack of management plans of some protected areas is an important barrier for generating cost effective management, because if there are no technical guidelines, there is a risk for making investments that will not attend priority needs.

In the light of the main threats on the biome's integrity, the need for additional resources to strengthen the authority capacity in controlling and monitoring fulfillment of high impact prevention, mitigation, compensation and remediation measures is indisputable. Therefore it is imperative that Redparques may generate alliances for biodiversity monitoring, with other relevant organizations.

		Element 3: Enabling Activities			
				Term (years)	
Goals	Strategic action	Activities	Short 2016	Medium 2018	Long 2020
		Consolidating a standardized protocol of regional information of financial sustainability, considering experiences such as that of OTCA or the Ministry of the Environment of Brazil and jointly analyzing the regional information needs and gaps.	х	x	
	Developing a	Making studies that allow incorporating the environmental variables into the national accounts.			х
3.4. To ensure financial sustainability of	at a regional scale (from estimates and tools applied by the countries) on the financing	Advancing on systematic exercises of economic valuation, with an emphasis on ecosystemic services, at the amazon biome scale that show the benefits generated and the economic contribution to the regional development.		x	х
and national and regional systems of protected areas	and managing a regional financial sustainability	Identifying and managing financial sources and mechanisms for the sustainable management of the Biome protected areas.	х	х	х
	strategy for protected areas of the amazon Biome.	Advancing in the systematization, studies and exchange of experiences and training to include the financial sustainability subject into the systematic planning processes.	х	х	
		Making updates, periodical assessments and systematizing information on the financial sustainability analysis in the Amazon region using the financial sustainability score cards and other appropriate instruments with the purpose of making regional analysis.	Х	X	

Generating training processes on financial sustainability and in the application of the tools through REDPARQUES, aimed at state officers and personnel working at the PAs.	х	x	
Analyzing, systematizing and documenting lessons learned and regional experiences on financial mechanisms that may contribute to the financial sustainability of protected areas of the amazon biome.	х	х	х

# Element 4. Standards, assessment, and monitoring

## Goal 4.2. To evaluate and improve the effectiveness of protected areas management

Considering the advancements reported, it is worth revaluating the role of Amazon Vision as the channel to build a common language to measure the contribution of the protected areas in the conservation at the biome scale from the application of a methodological guideline. The IAPA project contributes with this intention through the construction of a protocol of referential indicators with biome perspective to be tested with the intention of generating the appropriate mechanisms for strengthening conservation all over the Amazon region, from the aggregation of individual indicators showing complementarity and which may be comparable (RedLAC, 2012). Considering that each country has different tools and that at the amazon biome scale specific criteria should be defined, the performance level of the biome's protected areas will be categorized for the evaluation results to be comparable and, additionally, to draw relevant conclusions at the wider picture level.

Amazonian countries are now in pursue of establishing the contributions over the biome conservation through the experience and identification of the common criteria found through the tools each one of the protected areas systems has developed with the intention of rethinking conservation beyond the limits of the protected areas and the States. This will be supported applying a protocol of referential indicators that offers a view on how protected areas contribute to the conservation of the biome and at the same time, contributes to strengthening each one of the national protected areas systems. The monitoring mechanism of these results requires the accompaniment of the Redparques to guarantee its success.



-			Element 4: Standards, assessment, and monitoring			
					Term (years)	
	Goals	Strategic action	Activities	Short 2016	Medium 2018	Long 2020
			Promoting activities that promote the development of capacities for the 9 countries of the region manage to make and institutionalize the management effectiveness analysis of their protected areas with the purpose of having a complete regional scenario.	х	x	
			Promoting regional workshops with technical personnel of the institutions of the protected areas responsible for the management effectiveness to review their tools and to develop indicators and variables to cover the gaps in the Reference Framework of the Management Effectiveness of the CMAP and for them to be adapted to the regional scale.	х	x	
			Making a standardized protocol to share information on the assessment of the effectiveness of the management of protected areas and continuing strengthening periodical processes of regional analysis.	х	Х	
			Strengthening the effectiveness analysis processes and their incorporation into the planning and management processes of each country from the exchange of experiences and training.	х	х	х
		Advancing in the learning process, concepts, information,	Advancing in processes of developing pilot experiences on the effectiveness of the management of trans-border areas, strengthening the management plans.	х	х	
	4.2. To evaluate and improve the	systematization and exchange and analysis of EEM results at different	Carrying out the analysis on the effectiveness of the management of the APs systems, integrating the elements that characterize the financing system.		х	х
	effectiveness of protected areas management	strengths and weaknesses that contribute to the effective	Considering in the EEM processes at the regional level other subjects that are becoming increasingly important such as management standards for protected areas and implementing ecologic corridors.		х	х
		management of the protected areas of the amazon biome.	Coordinating with RedLac and other financing sources with the purpose of promoting the support to the monitoring and evaluation activities on the effectiveness of the management of protected areas.	х	Х	х
			Generating a process or studying and learning to integrate the cultural subject into the effectiveness analysis in accordance with the needs of each one of the countries.	х	х	х
			Supporting analyses that include the results of the management effectiveness with governance variables and categories of management of protected areas.	х	х	х
			Connecting research and monitoring programs for the conservation and sustainable use of the resources of PAs.		х	х
			Adapting the tool in accordance with the areas and use categories, as applicable, in order to assessing the efficiency and efficacy of different types of governance and categories of protected areas.		х	х
			Considering the possibility of including, as the case may be, information on governance and the social impacts and benefits of the PAs in the process of assessing the efficacy of PAs management.		Х	х

# The role of the Redparques: towards an Amazon Vision beyond the protected areas – that is to say a contribution to the resilience of the biome, both socially as well as in the ecosystem.

In the building and strengthening process of the Amazon Vision Initiative it has become clear that the role played by the NPAS in providing natural solutions to meet the challenges of the territory is unquestionable. Nevertheless, it is still necessary to continue to create venues to raise awareness about the importance of protected areas in the biome, through actions at different levels and through taking into account other visions about the territory that are fundamental for its management.

Redparques, in its articulating role to ensure that the capacity of NPASs is strengthened in relation to the challenges presented in this report, has an immense potential. Its greatest potential lies in respect of continuing to generate frameworks for harmonizing criteria, generating technical guidelines for the appropriate decision taking in relation to priority topics that effectively manage protected areas and in respect of the possibility of influencing at different levels public policies that include protected natural spaces as fundamental areas that enable the resilience of the territory.

There are proposed strategic actions that are critical for political, financial and social sustainability of the Initiative. They are: continuous monitoring, the search for best practices in the fundamental aspects when managing and governing protected areas, the exchange of knowledge and experiences among the players that impact the management of the PAs, the constant work of the topic oriented groups constituted by experts within the Systems and accompanied by partner organizations and, the management of projects and / or venues (e.g., academic, participation or visibility).

The projects that currently pursue the Vision and that have yielded tangible results to progress in fulfilling the PoWPA goals reported herein will be of crucial importance to support the Redparques in their pursuits of positioning, management of resources and updating of needs when facing new global challenges. The member countries of the Network have an immense opportunity to continue generating useful products and alliances to measure progress, benefits and impacts, in order to strengthen the construction of an ecosystemic vision of preserving the amazon biome. The following is the summary of the strategic actions proposed by the National Coordinators of Redparques to achieve these purposes, interlinking the technical results of the Initiative with other political and administrative strategies.



Objectives	Ecosystemic Vision for Conservation of Biodiversity Actions put forth in 2010	of the Amazon Biome From Redparques, how can progress be made, how can
0000000		support be provided, what specific actions?
	<ol> <li>Consolidate and coordinate the work of the thematic teams shaped in such way that they become the technical and conceptual support that leverages the continuity of the ecosystemic vision for conservation of the biodiversity of the Biome and in the execution of the PoWPA at regional scale, including joint management of regional projects making possible to invigorate the thematic work</li> </ol>	<ul> <li>Institutionalize thematic working groups in order to generate the concrete products that will be managed through the spaces of item 1.</li> </ul>
lidate a shared ecosystemic for conservation of the ical and cultural diversity Amazon Biome that	<ol> <li>Advance in national and regional management processes that facilitate the incorporation into the governments agendas of the adjoining PA topic and the ecosystemic vision for conservation, promoting the participation of various players involved</li> </ol>	<ul> <li>Internal ownership- in the institutional planning of the Amazon Vision- importance and commitments- all this makes possible to report and inform on the progress made.</li> <li>Urge the countries, from the regional coordination standpoint, to take ownership and socialize the agreements generated through the Vision and the PoWPA.</li> <li>Advance within the countries with the leadership of Redparques (directors of the PoWPAs), the processes and results of the implementation of the Vision for planning and decision making considering the agreements generated under the framework of said vision.</li> </ul>
butes to effectively ging protected areas ms and maintaining is and services, integrity, ionality and resilience of the e with regards to the natural nthropogenic effects and ures in the climate change	3. Strengthen regional inter-institutional coordination levels and mechanisms: REDPARQUES, OTCA, CAN, IUCN, CBD, as well as the supporting institutions: academia, NGOS: WWF, TNC, WCS, CI, etc. in order to facilitate the execution of the actions put forth under the framework of the Ecosystemic Vision for Conservation of Biodiversity of the Amazon Biome and the PoWPA at regional scale, in such way that technical and financial partnerships and agreements are generated.	<ul> <li>Generate a map of players (internal, sector).</li> <li>Once identified, the next step is to group these spaces per topic (political, technical, financial, cooperation), adjusted for the target audience.</li> <li>Design an effective communication strategy, identifying various spaces to communicate such as the pg of Redparques, among others.</li> <li>Convene positioning and cooperation/contribution spaces (incl. donor tables, donation campaigns)</li> </ul>
	4. Identify overlaps between the construction of the Ecosystemic Vision for Conservation of Biodiversity of the Amazon Biome and other regional initiatives to generate cooperation and coordination of actions of common interest.	<ul> <li>Hold an internal meeting of Redparques to identify those regional initiatives that can be coordinated with the Ecosystemic Vision for Conservation of Biodiversity of the Amazon Biome, its areas of work and access mechanisms.</li> <li>Hold an internal meeting of Redparques to identify work priorities.</li> </ul>
	<ol> <li>Analyze and evaluate the quality and the results of cross- border cooperation in protected areas and put forth additional conservation figures.</li> </ol>	<ul> <li>Promote the establishment of a platform that contains information on new cross-border cooperation proposals (supported by spatialization and legal analyses) and allow tracking of existing initiatives.</li> <li>Facilitate spaces to promote dialog and processes as well as to provide support in the search for funding.</li> <li>Promote conservation blocks between two or more countries of the biome.</li> </ul>

Objectives	Actions put forth in 2010	From Redparques, how can progress be made, how can support be provided, what specific actions?
	<ol> <li>Advance in awareness raising processes aimed at all sectors on the importance of biodiversity and its conservation through the protected areas and other forms of conservation</li> </ol>	<ul> <li>Support the implementation of a communications plan within the countries and at Biome scale</li> <li>Strengthening of the communications network</li> </ul>
	<ol> <li>Implement communication and dissemination plans to promote the exchange of information and the understanding of the importance of biodiversity and of the PAs and to socialize the progress of each one of the actions of the Biome PoWPA</li> </ol>	<ul> <li>Conduct a cost-benefit analysis on the advantages of sharing information related with the conservation impact of the biome.</li> <li>Exchange experiences between the countries</li> <li>Generate strategies so that the technical information spreads across the general public.</li> <li>Raise awareness about Redparques in various spaces.</li> </ul>
	8. Scale at biome level the indicators to assess the progress in the implementation of a work plan on protected areas, in accordance with the indicators framework proposed for the Strategic Plan for Biological Diversity 2011 2020	<ul> <li>Promote the conduct of an exercise that allows for scaling at biome level the indicators used for each country for their reports to the CBD.</li> </ul>
	9. Adopt the standardized form proposed at COP 10 for presentation of the progress reports of the PoWPA	<ul> <li>Scale the national reports at biome level adopting the form put forth at COP 10, following the temporary nature defined by the CBD</li> </ul>

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# ANNEXES

# Annex 1. Aichi Goals of the CDB

#### STRATEGIC GOAL A:

Address the underlying causes of biodiversity loss by mainstreaming biodiversity across government and society

#### Target 1

By 2020, at the latest, people are aware of the values of biodiversity and the steps they can take to conserve and use it sustainably

#### Target 2

By 2020, at the latest, biodiversity values have been integrated into national and local development and poverty reduction strategies and planning processes and are being incorporated into national accounting, as appropriate, and reporting systems

#### Target 3

By 2020, at the latest, incentives, including subsidies, harmful to biodiversity are eliminated, phased out or reformed in order to minimize or avoid negative impacts, and positive incentives for the conservation and sustainable use of biodiversity are developed and applied, consistent and in harmony with the Convention and other relevant international obligations, taking into account national socio economic conditions

#### Target 4

By 2020, at the latest, Governments, business and stakeholders at all levels have taken steps to achieve or have implemented plans for sustainable production and consumption and have kept the impacts of use of natural resources well within safe ecological limits

#### STRATEGIC GOAL B:

Reduce the direct pressures on biodiversity and promote sustainable use

#### Target 5

By 2020, the rate of loss of all natural habitats, including forests, is at least halved and where feasible brought close to zero, and degradation and fragmentation is significantly reduced

#### Target 6

By 2020 all fish and invertebrate stocks and aquatic plants are managed and harvested sustainably, legally and applying ecosystem based approaches, so that overfishing is avoided, recovery plans and measures are in place for all depleted species, fisheries have no significant adverse impacts on threatened species and vulnerable ecosystems and the impacts of fisheries on stocks, species and ecosystems are within safe ecological limits

#### Target 7

By  $\overline{2}020$  areas under agriculture, aquaculture and forestry are managed sustainably, ensuring conservation of biodiversity

#### Target 8

By 2020, pollution, including from excess nutrients, has been brought to levels that are not detrimental to ecosystem function and biodiversity

#### Target 9

By 2020, invasive alien species and pathways are identified and prioritized, priority species are controlled or eradicated, and measures are in place to manage pathways to prevent their introduction and establishment

#### Target 10

By 2015, the multiple anthropogenic pressures on coral reefs, and other vulnerable ecosystems impacted by climate change or ocean acidification are minimized, so as to maintain their integrity and functioning

#### STRATEGIC GOAL C:

To improve the status of biodiversity by safeguarding ecosystems, species and genetic diversity

#### Target 11

By 2020, at least 17 per cent of terrestrial and inland water, and 10 per cent of coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem services, are conserved through effectively and equitably managed, ecologically representative and well connected systems of protected areas and other effective area-based conservation measures, and integrated into the wider landscapes and seascapes

#### Target 12

By 2020 the extinction of known threatened species has been prevented and their conservation status, particularly of those most in decline, has been improved and sustained

#### Target 13

By 2020, the genetic diversity of cultivated plants and farmed and domesticated animals and of wild relatives, including other socio-economically as well as culturally valuable species, is maintained, and strategies have been developed and implemented for minimizing genetic erosion and safeguarding their genetic diversity

#### STRATEGIC GOAL D:

# Enhance the benefits to all from biodiversity and ecosystem services

#### Target 14

By 2020, ecosystems that provide essential services, including services related to water, and contribute to health, livelihoods and well-being, are restored and safeguarded, taking into account the needs of women, indigenous and local communities, and the poor and vulnerable

#### Target 15

By 2020, ecosystem resilience and the contribution of biodiversity to carbon stocks has been enhanced, through conservation and restoration, including restoration of at least 15 per cent of degraded ecosystems, thereby contributing to climate change mitigation and adaptation and to combating desertification

#### Target 16

By 2015, the Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization is in force and operational, consistent with national legislation

#### STRATEGIC GOAL E:

Enhance implementation through participatory planning, knowledge management and capacity building

#### Target 17

By 2015 each Party has developed, adopted as a policy instrument, and has commenced implementing an effective, participatory and updated national biodiversity strategy and action plan

#### Target 18

By 2020, the traditional knowledge, innovations and practices of indigenous and local communities relevant for the conservation and sustainable use of biodiversity, and their customary use of biological resources, are respected, subject to national legislation and relevant international obligations, and fully integrated and reflected in the implementation of the Convention with the full and effective participation of indigenous and local communities, at all relevant levels

#### Target 19

By 2020, knowledge, the science base and technologies relating to biodiversity, its values, functioning, status and trends, and the consequences of its loss, are improved, widely shared and transferred, and applied

#### Target 20

By 2020, at the latest, the mobilization of financial resources for effectively implementing the Strategic Plan for Biodiversity 2011-2020 from all sources, and in accordance with the consolidated and agreed process in the Strategy for Resource Mobilization, should increase substantially from the current levels. This target will be subject to changes contingent to resource needs assessments to be developed and reported by Parties

# Annex 2. Innovative Approaches (recommendations) of the Sidney Promise

**1.** Countries include the Aichi Targets, including a full implementation of Target 11, within their revised National Biodiversity Strategies and Action Plans, and implement these. These commitments must be kept: it is not a matter of starting again or ignoring promises already made.

**2.** IUCN adopts formal definitions of non-regression. Multilateral lending institutions and private sector actors develop policies and safeguards governing their engagement regarding protected areas that have experienced or are proposed for legal downgrading, downsizing, and degazettement.

**3.** Governments and partners give due attention to the underlying drivers of biodiversity loss, including consumption and population growth, governance and corruption, as key impediments to successful conservation and management of protected areas.

**4.** Governments and other sectors prioritize not only establishment of critical new protected areas, but focus on adequate resourcing, effective management and consistent and transparent monitoring of those already in existence.

**5.** Progress towards Aichi Target 11 should be based on a comprehensive global assessment of the effectiveness of protected areas management and how well they are contributing to biodiversity conservation, rather than just an assessment of area covered.

6. Countries fully report, taking into account all governance types, on their protected area systems (location, extent, management categories, management effectiveness, governance) into the UN List of Protected Areas through the UNEP World Conservation Monitoring Centre and IUCN WCPA.

**7.** Countries support ongoing efforts to complete assessments of risk of extinction for species and risk of collapse of ecosystems, including documentation of the threats to these, especially by undertaking and repeating assessments following agreed IUCN standards and methods.

**8.** Countries, local communities, and the private sector consider prioritizing sites that contribute significantly to the global persistence of biodiversity (including both species and ecosystems, across the terrestrial, freshwater, and marine biomes, and recognizing the dependence of biodiversity on geodiversity) when creating or expanding formal protected areas or implementing other area-based conservation measures and safeguards, starting with the many thousands of such sites identified to date, especially those holding the last population of a highly threatened species.

**9.** Governments establish incentives and support for connectivity planning across both fragmented and intact landscapes, including cross-jurisdictional initiatives. Functional landscapes and seascapes need their connectivity maintained through the establishment of large scale conservation systems and ecological restoration.

**10.** Global protected areas should include a specific focus on coverage and management of freshwater ecosystems in their own right rather than as a component of terrestrial systems, and should address downstream watershed protection where threats are greatest, as much as upstream landscape protection.

**11.** Countries and protected areas support the IUCN Green List standard and other species focused standards, for effective management of their protected areas and biodiversity, and work to achieve that standard.

**12**. The contribution of indigenous and local peoples, and privately protected areas to conservation is recognised and promoted, along with the importance of effective and appropriate legal frameworks that recognize, support and enable diverse types of protected areas governance.

**13.** IUCN should develop guidance on "other effective area based conservation measures" so this measure is best used for conservation.

**14.** Small grant mechanisms for the conservation of biodiversity are highly effective, and should be strongly supported in particular to help civil society in designing, governing and managing protected areas, complementing large-scale funding as part of resource mobilization mechanisms.

**15.** Countries, donors, and international funding agencies commit to increasing financial resources significantly, and in proportion to their budgets, and create innovative approaches to secure new financial resources for protected areas at levels that can enable effective management.

**16.** Urgent action must be taken by governments, the global and local communities, and protected areas in addressing the rising threats to biodiversity from wildlife crime, overexploitation, invasive species, climate change, disease, fire, and habitat degradation and loss. The critical importance of no take areas was recognized for marine ecosystems.

17. "Human wildlife conflict" is a major concern for many protected areas globally and threatens to undermine local support. The issue requires global support, and should be described as "human wildlife interactions" which reflects both positive and negative experiences.

**18.** A communication channel for emergency contact with IUCN should be established, so that international support can be obtained to rapidly address crises.

**19.** Governments and all sectors must adopt greater consistency in the collection, evaluation and reporting of biodiversity data within each country and globally, inside and outside protected areas, and make these data discoverable, available and accessible to support evidenced based decision making.

**20.** Governments and peoples must move far beyond the Aichi targets to adaptive conservation systems that are based on halting biodiversity loss (Aichi Target 12). This must be done balancing biodiversity and human needs. We need to increase conservation until biodiversity loss is halted. The total area of protected areas and connectivity lands needs to be far higher than current conceptions and delegates agreed on the importance of setting ambitious targets. Percentage targets are problematic in focusing on area at the expense of biodiversity objectives. Nonetheless, many delegates argued that these should be around 30% of the planet for no take reserves, 50% overall protection, and 100% of the land and water managed sustainably.

**1.** Countries should bring into the UNFCCC process and COP21 in 2015 outcome the full recognition of biodiversity, ecosystems and particularly protected areas as key to enable countries to adapt and mitigate to climate change.

**2.** All countries should mainstream the concept of "Protected areas as natural solutions to climate change" into national development plans, communication and financial strategies, for natural and social resilience.

**3.** Governments and relevant stakeholders should enhance adaptation and mitigation strategies within and outside protected area boundaries through carbon management, long term monitoring, and integrated landscape connectivity.

**4.** Protected areas must actively engage new thinking in planning and management to ensure equitable participation from society, including youth, women and indigenous and local communities, building on traditional knowledge and working together in finding solutions to climate change.

**5.** Protected areas should adopt and apply innovative, appropriate, and context-specific adaptation measures to ensure that in the face of transformative climatic change they can continue providing the full array of values, functions, and services for people and nature, including climate protection and disaster risk reduction.

**6.** New partnerships must be formed and strengthened within and beyond national boundaries to protect and connect landscapes and seascapes as they transform and adapt to climate; we especially must support coalitions in the polar regions, such as the Artic Council and the Antarctic Treaty System because these areas are experiencing rapid change.

**1.** Governments and parties to global negotiations must develop and incorporate clear protected area targets into the Sustainable Development Goals and post-2015 development framework, so that the SDGs reflect the fundamental role of healthy protected areas in delivering on national sustainable development goals.

2. Development sector planning agencies must work more effectively across sectors and fully integrate protected areas values into such key national development plans as national economic development plans and poverty reduction strategies – especially sectoral plans affecting landscapes and seascape – and firmly anchor protected areas in inclusive environment, governance and land-use planning frameworks.

**3.** Integrate protected area values into the methodologies and procedures for economic accounting, such as in tourism, forest or water satellite accounts, SEEAs and ultimately Standard National Accounts, which measure, account, monitor and report on development and human well-being.

**4.** Partner with the public and private sectors to create the tools and approaches governments need to provide sufficient economic evidence of protected area benefits and to better understand their protected area expenditures, financing needs and opportunities, to increase investments, fill financing gaps and move towards long-term sustainable financing.

**5.** Establish and employ sufficient social and environmental safeguards (e.g., voluntary and regulatory tools and standards and improved enforcement) to determine the full costs and benefits of economic and social investments, so societies can effectively deal with their inherent trade-offs and risks and the integrity of protected areas and the wellbeing of affected communities can be monitored and secured.

**6.** Provide the tools to governments to increasingly develop and apply regulatory-based [or statutory] spatial planning and other landscape-level approaches that sustain landscape- and seascape-level ecological processes, including critical ecosystem services and connectivity, so that protected areas can deliver on conservation goals and development challenges, including on climate resilience.

**7.** Ramp up work with such intensive land and sea-use industries and associations as agriculture and fisheries to deploy sustainable agricultural intensification and fisheries, conservation- and climate-smart agriculture, and market-based mechanisms such as sustainability standards to maintain permeable landscapes that support protected area systems and sustain ecosystem services that are essential for food and water security.

**8.** Protected areas agencies need to update the design, management and governance of protected areas to consider a wide array of social and economic benefits such as jobs, livelihoods, community safety nets, and social and environmental resilience in order to build constituency and political will for protected areas.

1. Enhancing governance. All countries, relevant organisations, protected area managers and rightsholders realise the full potential of enhancing governance for the conservation of nature through participatory processes of inquiry, assessment, evaluation and action for systems of protected and conserved areas and territories in the landscape / seascape and for individual sites.

2. Standards and guidance. All countries, relevant organisations, protected area managers and rightsholders inclusively develop standards, guidance and stronger and more supportive legal frameworks, including better integration of customary laws, to enhance the diversity, quality and vitality of governance of protected and conserved areas and territories. This is particularly important in relation to CBD's PoWPA and Plan of Action on Customary Sustainable Use, National Biodiversity Strategies and Action Plans, and IUCN Green Lists.

**3.** Voluntary conservation. All countries, relevant organisations, protected area managers and rightsholders better recognise and appropriately support voluntary and self-directed conservation efforts, including in the territories and areas conserved by indigenous peoples and local communities (ICCAs) within and outside protected areas, and in privately protected and conserved areas and networks.

**4.** Collective rights and responsibilities. All countries, relevant organisations, protected area managers and rightsholders take concrete steps, through laws, agreements and enforcement mechanisms, to recognise and secure the right of self-determination of indigenous peoples as well as the collective land and resource rights and responsibilities of indigenous peoples and traditional peasant, forest, herder and fishing communities—both sedentary and mobile— for the billions of hectares of forests, rangelands, wetlands, mountains, coastlands and sea they customarily govern and manage on our planet. This will strengthen their commitment to sustainable livelihoods and foster their engagement in conserving nature.

**5.** Governance overlaps. In situations where the land, water, natural resources and coastal and marine areas of indigenous peoples and local communities overlap with established protected areas under any other governance type, all countries and relevant organisations ensure that collective rights and responsibilities to own, govern, manage, and use such land, water, natural resources and coastal and marine areas are respected. Further, they ensure that the indigenous peoples' and local communities' right to free, prior and informed consent is affirmed and their livelihoods and food and water sovereignty are appropriately recognized and supported, along with their knowledge, institutions, practices, management strategies and plans related to conservation. They foster, moreover, the full engagement of the concerned indigenous peoples and local communities in the governance of the overlapping established protected areas.

**6.** Governance for sustainable use. All countries, relevant organisations, protected area managers and rightsholders recognise and learn from the conservation models and governance conditions by which conservation of nature is complementary to, and mutually supportive of, the presence of people, human development, and sustainable use of natural resources and wildlife.

**7.** Shared governance. All countries, relevant organisations, protected area managers and rightsholders support the maintenance and implementation of a variety of shared governance models for protected and conserved areas, in particular for the conservation of transboundary ecosystems and migratory species as means to ensure their equity, effectiveness and efficiency, including for sustainable use. This should be achieved through recognition of customary practices, advances in protected area law and other legislation, and models of transboundary conservation governance designed to suit their contexts.

**8.** Governance to conserve the High Seas. Governments establish equitable and effective systems of shared governance of marine areas beyond national jurisdiction (incorporating marine protected areas) by developing, adopting and bringing into force through national laws an international instrument, under the United Nations Convention on the Law of the Sea, which will address conservation and sustainable use of marine biological diversity in areas beyond national jurisdiction.

**9.** Aarhus and beyond. All countries and relevant organisations, in line with the Aarhus Convention, establish mechanisms to ensure access to information, meaningful participation in decision-making and justice at all levels regarding protected and conserved areas.

**10.** Implementing policies and agreements. All countries, relevant organisations, protected area managers and rightsholders recommit to and strengthen the implementation of policies and agreements concerning governance for the conservation of nature, including (but not limited to): CBD national action plans to implement PoWPA and National Biodiversity Strategies and Action Plans in line with CBD Decisions; the CBD Plan of Action on Customary Sustainable Use; the CBD Akwé: Kon Guidelines; the FAO Voluntary Guidelines on Responsible Governance of Tenure and Voluntary Guidelines on Small-Scale Fisheries; UNDRIP; as well as broader procedural and substantive human rights. This should be achieved through a combination of concrete action in the field, capacity building in learning networks, new legislation, regulations and enforcement, and adherence to values such as mutual respect, dignity and humility in governance policies and practices. Clear limits to patterns of unsustainable exploitation of natural resources should be set and respected

**11.** CBD Guidance. The CBD Secretariat and relevant partners highlight and develop guidance on: assessing the "equitable management" dimension of Aichi Target 11; governing, managing, recognizing and monitoring OECMs; and better understanding the close intersection of governance and the law (both in the statutory and customary sense). This should be done through legitimate, widely consultative and accountable processes where indigenous peoples and local communities are fully engaged.

**12.** Transnational wildlife crime. All countries, relevant organisations, protected area managers and rightsholders engage in putting transnational wildlife crime out of business by well-coordinated support to: devolved wildlife governance arrangements that engage indigenous peoples and local communities and secure the equitable sharing of the benefits derived from conservation efforts, and sustainable use in particular; stronger laws and independent judiciaries; anti-corruption measures and whistleblower protection; mandatory due diligence regulations; increased law enforcement efforts by legitimate authorities in compliance with human rights standards; efficient transboundary cooperation, traceability mechanisms and regional alliances; and enhanced transparency at all levels.

**13.** "No Go" policies. All governments and relevant organizations, with full, informed and effective participation of relevant rightsholders set clear limits to patterns of unsustainable exploitation of natural resources. This includes identifying, legally defining and implementing "No Go" policies, such as existing IUCN policies to prevent extractive industries from affecting World Heritage Sites and protected areas under IUCN Category I to IV and other similar policies of international and national organisations, indigenous peoples and local communities. In addition, they further investigate, adopt, expand and implement "No Go" policies through regulatory instruments designed to conserve Key Biodiversity Areas, ICCAs, sacred natural and cultural sites, indigenous peoples' territories, the commons of peasant, forest, herder and fishing communities, areas conserved by religious communities, as well as, possibly, protected areas under all categories. "No Go" policies should be seen as interim measures while all countries move towards full sustainability across all landscapes and seascapes.

**14.** Non-regression principles. All countries and relevant organisations, with the full, informed and effective participation of relevant rightsholders and stakeholders and with due respect for the rights of indigenous peoples and local communities, adopt laws and enforcement mechanisms to implement non-regression principles and thereby prevent the weakening of protected and conserved areas by (or for the purpose of establishing) environmentally destructive activities.

**15.** Governance capacity. Conservation organisations and donors support civil society and governments across the world to undertake capacity development initiatives on adaptive governance of protected and conserved territories and areas (including through national and regional learning networks, community based monitoring, communication efforts, legal literacy initiatives and new curricula in professional training) and targeted research (including on land reform processes, characteristics of governance institutions beneficial to conservation, effective support for ICCAs and privately conserved areas, as well as responses to the challenges inherent in unpredictable change in social–ecological systems). Protected area managers, rightsholders and stakeholders improve their understanding and take action to enhance the vitality of governing protected and conserved areas.

**16.** Innovative legal guidance. All countries and relevant organisations explore innovative legal frameworks and tools to develop guidance at various levels, including about equity in conservation, conflict resolution in conservation initiatives and the respect of human rights. In particular, they enable and encourage the development and use of community protocols as a means for indigenous peoples and local communities governing conserved areas and territories and custodians of sacred natural and cultural sites to exercise their rights and responsibilities, gain recognition of their institutions and determine their access and benefit sharing arrangements, pursuant to the CBD and other relevant international law

**17.** Justice and redress. Governments and UN human rights bodies, in full collaboration with relevant rightsholders, establish effective monitoring, restitution and accountability mechanisms to ensure that rights-based approaches and international standards of justice are applied in all conservation programmes. This should redress past and ongoing injustices suffered by indigenous peoples and local communities, including restitution of lands expropriated without free, prior and informed consent, and application of appropriate processes, such as the IUCN Whakatane Mechanism.

**18.** Governance data and analyses. All governments, conservation agencies and organisations, the IUCN, the ICCA Consortium and relevant IUCN Commissions' specialist groups, ensuring the free prior and informed consent of relevant rightsholders, support inquiries, data gathering, analyses and reports on governance of protected and conserved areas to feed into UNEP WCMC databases and PoWPA's and other reports to the CBD. This will allow the development of comprehensive and valid databases and analyses on governance and connectivity of protected areas and other effective conservation measures, including Transboundary Conservation Areas, privately protected and conserved areas, and ICCAs.

**19.** Food and water sovereignty. All countries, relevant organizations, protected area managers and rightsholders take concrete steps to ensure the food and water sovereignty of producer communities in protected and conserved areas, including the right to use, save and freely exchange diverse seeds and livestock breeds, building upon cultural diversity, traditional knowledge and practices, and local innovations. This will promote sustainable and resilient local food systems based on quality and cooperation, naturally connected with wild biodiversity and renewable resources in the local commons and larger landscape/ seascape.

**20.** Governance for the conservation of nature and human well being. All governments, relevant civil society organisations and faith organisations work towards adopting pathways of well-being centred on commonsbased self-reliance, direct political and economic democracy and ecological sustainability, learning from initiatives of equitable, effective and wise governance for the conservation of nature. They ensure that the post-2015 Sustainable Development Goals are oriented by these principles and learning.

**1.** By 2020, all governments recognise, strengthen, and appropriately support the collective land and resource rights of Indigenous Peoples and local communities to their lands and seas and achieving their contribution to their countries' conservation, climate resilience and socio-economic goals based on demonstrated evidence that shows a strong connection between secure territorial rights, with their own governance systems, improved conservation values and community well-being.

2. IUCN, the WPCA and Indigenous Peoples develop a new category system for indigenous territories management, including Indigenous Protected Areas (IPAs) and create a committee for the monitoring and implementation of this category system, The Promise of Sydney and other international commitments that fully and effectively engages Indigenous Peoples.

**3.** By 2020 IUCN and its members, including governments and protected area managers, co-create programmes with the full consent and involvement of traditional knowledge holders for the respectful application and maintenance of traditional knowledge and customary governance systems, ensuring that actions in and around protected areas are built on the combination of diverse knowledge systems, skills and capacities, integrating a rights-based approach.

**4.** In accordance with UNDRIP, all protected areas established on the territories, lands or seascapes of Indigenous Peoples fully observe their rights and governance systems, and Indigenous Peoples are fully involved in their creation, designation and management. Where Indigenous Peoples and local communities have been evicted from their lands by the creation of protected areas national laws should be revised to guarantee the restitution of rights and recognise their right to return to and remain on their lands.

**5.** Traditional knowledge, practices and indigenous economies are promoted and applied in responding to climate change, in particular through local adaptation efforts, and in the conservation and management of protected areas and other effective area-based conservation measures, including Indigenous bio-cultural territories, World Heritage Sites and Sacred Natural Sites (SNS).

**6.** Management objectives and actions for all ecosystems must recognise the intrinsic and cultural values of those systems and the inherent right of Indigenous communities to use, develop and control these resources.

**7.** By 2020 the conceptual and management gap between natural and cultural World Heritage Site designations is eliminated, and a comprehensive approach taken towards the conservation of natural and biocultural heritage and knowledge systems in all designated sites.

**8.** The implementation of the World Heritage Convention is aligned with the principles of UNDRIP and the Outcome Document of the 2014 World Conference on Indigenous Peoples and the Convention's procedures and Operational Guidelines are amended accordingly, with the full and effective participation of Indigenous Peoples.

**9.** Governments implement and enforce appropriate laws, policies and programmes, with the full and effective participation of Indigenous Peoples and local communities to create No-Go areas within World Heritage Sites, Sacred Natural Sites and Territories and in other sites where Indigenous Peoples and local communities are conserving lands and resources, particularly from mining and other extractive and destructive industries. IUCN must establish a Task Force to study and define the "No-Go area" concept, develop a relevant program of work and prepare a motion for endorsement at the 2016 World Conservation Congress.

**10.** Spatial planning-based decision-making inside and outside protected areas, IPAs, indigenous bio-cultural territories and Sacred Natural Sites and Territories (SNS&Ts) is undertaken with indigenous people in a participatory manner and with their full prior informed consent to ensure that industries and development have a positive impact on biodiversity, people, their well-being and livelihoods. Governments refrain from granting concessions to extractive industries and megaprojects within protected areas.

**11.** Innovative financing mechanisms including indigenous peoples economic systems and Access and Benefit Sharing mechanisms are created to support indigenous and local land and sea managers in their efforts to promote indigenous economies and implement enduring, effective territorial management using traditional knowledge including a dedicated funding mechanism to support and strengthen Indigenous Peoples in the management of indigenous areas and special funding windows in existing mechanisms.

**12.** Formal educational opportunities are created to recognize and include Indigenous cultural skills; accredited pathways are provided for Indigenous rangers and trackers that account for their cultural knowledge and skills, including for non-literate expert trackers, and are promoted and shared internationally.

**13.** Governments, organizations and communication companies support access by Indigenous Peoples to new information and communication technologies (ICTs), such as satellite monitoring systems to enable them to manage their territories and participate in the management of protected areas generally more effectively.

**14.** All governments and the IUCN formally recognize important role that Indigenous women and youth play in developing and maintaining protected areas of all types and give special attention in all of these recommendations to promoting and strengthening their participation at all levels of protected area management from local through to the institutional structure of IUCN.
## Annex 3. IUCN protected areas matrix: Management categories and governance types

· Indigenous peoples communities	Community conservation declared and managed by local communities						
D.Governance by and local	Indigenous territories and conservation arenas declared by indigenous peoples						
ance	Profit organizations (e.g. Corporations)						
C.Private Govern	Nonprofit organizations (e.g. ONG5, Universities, etc.)						
	Declared and managed by the owner individually						
JCe	Joint management (Pluralist governance body)						
.Shared Governar	Collaborative management (various forms of pluralisot governance)						
Ξ	Cross-border management						
/ernment	Delegation of management (e.g. to a NGO)						
ance from the Gov	Sub-national institution or local/ municipal government						
A.Governa	Ministry or Federal or national agen- cy in charge of management						
Type of governan- ce/UICN Category		l Strict Reserve	ll National Park	III Natural Monument	IV Habitat/species Management Arena	V Protected marine or land landscape Protegido	VI Protected area with managed resources

Source: Adapted from Borrini-Feyerabend et al. 2004, taken from Bueno. P (2014)

## Annex 4. Action Plan 2016 – 2020: Fulfillment advancements and actions to be developed at the regional level for each element of the POWPA

Elem	ent 1: Direct actions for plannin protect	ng, selecting, establishing, strengthening, an ted area systems and sites	d managing,
Goals	Strategic action	Activities	Next steps to achieve the objectives
		Agreeing a methodological plan and route for making national conservation goals compatible with regional needs	
1.1. To establish and strengthen national and regional systems of protected areas	Achieving an agreement on goals and priorities of the biological and cultural	Advancing in consolidating and implementing criteria to strengthen the portfolio of priority conservation sites from a regional perspective which integrates the ground and clear water ecosystems to maintain the ecosystemic services as well as the social-cultural and economic criteria, elements and processes.	Socialize and validate the portfolio through Redparques.
integrated into a global network as a contribution to globally agreed goals	diversity from the regional perspective, as well as planning processes - action in prioritized areas	Jointly defining and implementing proposals for classifying conservation objects (gross filter and fine filter)	This action requires monitoring
		Agreeing on adjacent sites and blocks as an opportunity for advancing in trans- border cooperation processes	It is necessary to formalize the cooperation processes.
		Advancing in cooperative planning - action processes to achieve the conservation of the prioritized areas and/ or blocks	It is necessary to formalize the cooperation processes.
1.2. To integrate	Consolidating the process of defining the portfolio of priority conservation areas	Developing protocols for the design and implementation of ecologic corridors and other connectivity figures with the participation of indigenous and local communities, etc.	
protected areas into broader land- and seascapes and sectors so as to maintain ecological structure and function.	from an ecologic-regional perspective, integrating landscapes of ground and clear water ecosystems as well as other criteria and social-cultural and economic elements.	Intensifying the conservation efforts, among other things, expanding the protected areas and ecologic networks for biologic diversity of the continental waters and designating appropriate and complete networks of swamp areas within river basins through international cooperation in the management of continental water resources	
1.3 To establish and strengthen regional networks, trans boundary protected	Advancing in national and regional management processes that will facilitate incorporating into	Creating the conditions for establishing cooperation agreements between adjacent PAs.	Prepare a general balance on adjoining areas and based on that generate actions
areas (TBPAs) and collaboration between neighboring protected areas across national boundaries	the governments' agendas the subject of trans- border PA and formalizing multilateral agreements between adjacent protected areas.	Defining and implementing strategies aimed at ensuring the support and political will in the regional cooperation processes for strengthening networks and effectively managing adjacent protected areas.	

Elem	ent 1: Direct actions for plannir protect	ng, selecting, establishing, strengthening, an Ied area systems and sites	d managing,
Goals	Strategic action	Activities	Next steps to achieve the objectives
		Coordinating and harmonizing planning of the protected areas with regards to the strategic plans of the systems and with sector initiatives of a regional character based on the ecosystemic approach.	A management effectiveness course is proposed
1.4. To substantially improve site-based protected area planning	Formulating, consolidating and harmonizing protected areas integral management plans with a regional approach, with an adaptive view, long term and which will also include	Sharing experiences of PA planning and management methodologies to strengthen subregional planning initiatives that contribute to the effective conservation and sustainable use of the biological diversity at the regional scale.	A need has been identified to present the progress in the areas that have moved forward in this activity
and management	management monitoring and biological and cultural diversity and assessment systems	Developing management and planning models of protected areas that strengthen the processes at the regional level and that integrate protected areas into the territorial zoning initiatives.	Identify priorities/needs of conservation at biome level Generate internships Strengthening through the academia Include the biome focus in each one of the national training programs Institutionalize training programs on a permanent basis
		Designing and instrumenting training programs on impact assessment, monitoring plans, mitigation, strategic environmental evaluations, etc. to strengthen the national and regional technical capacity.	Technical work meetings to standardize information Generate information at in the areas of ecosystemtic processes, coverage, climate vulnerability and economic flow for management of the biome. In border areas, gather the countries to streamline a compatible methodology and scale (connectivity)-
1.5. To prevent and mitigate the negative impacts of key threats to protected areas	Advancing in the regional processes for the analysis, modeling, prevention and mitigation of impacts on PA due to the development of extraction activities, infrastructure,	Producing and agreeing a classification system (indicators, variables, methodologies, models and information scales) standardized to make the regional analysis on the status and pressure over the ecosystems and regional PAs.	Standardization Strengthen technical coordination, technical meetings of specialists
	climate change, agricultural expansion and other development activities.	Developing agreements to establish a regional monitoring structure from the different initiatives ongoing.	Define strategies for technical and financial mitigation and adaptation to CC in a sustainable manner
		Supporting the generation of communication and dialog spaces in view or progresses of the countries with regards to the phenomenon of the climate change: analysis of the scenarios, vulnerability, effects, mitigation strategies and instruments, adaptation, etc., to jointly define technical, operative and financial strategies for mitigation and adaptation in the PA systems.	Prioritize the main threats to the biome for the modeling Institutional coordination at country and region level. The impact assessment and management of protected areas part is not managed Strengthen technical coordination and technical meetings of biome specialists Impact assessment

	Advancing in technical cooperation processes for the analysis and modeling of impacts on PAs of activities such as; i) mining, ii) exploration and exploitation of hydrocarbons, iii) infrastructure: hydroelectric plants, iv) non regulated hunting, v) disposal of wastes in urban centers and vi) fire with regards to CC and agricultural expansion.	The implementation of this activity is a complex one. Biome specialists committee. Generation of official information. Development of high impact projects observatory.
	Advancing in the subregional technical cooperation for the implementation of early warning systems in areas where the implementation of activities and high impact projects may be foreseen.	Share national experiences Systematize the experiences (case studies), lessons learned Raise standards of good practice at the institutions that fund the corporations projects.
	Promoting the participation and corporate and social responsibility for adopting good practices in important areas that contribute to conserving the biological and cultural diversity.	Continue strengthening social participation in control and oversight. Generate communication and reporting mechanisms among the different players Strengthen the technical capabilities of the environmental authorities (prosecution and environmental) E.g.: Tambopata-Madidi, Gueppí Cuyabeno. Political/ institutional and legal support (border areas). Inte-institutional international coordination, including chancellors offices for the necessary actions in border areas.
	Strengthening the different control and surveillance mechanisms in protected areas for the conservation of biodiversity.	
	Establishing valuation mechanisms for the environmental goods and services about the importance of the Amazon protected areas as a strategy for the conservation of biodiversity and adaptation to climate change. Promoting the implementation of strategic environmental evaluations (EAE) of sector policies, plans and programs of a regional scope as a strategy for preventing significant environmental effects.	Prioritize projects for development of the EAE
	Analyzing the proposals which are being made from the Amazon countries with regards to the REDD with the purpose of facilitating the exchange of information and experiences.	Share the experience. Internships. Analysis of the initiatives value chain
	Sharing information and methodologies related to the use and sustainable management of the natural resources of the protected areas.	Share the experience. Pasantías. Analysis of the initiatives value chain

	Element 2: Govern	nance, Participation, Equity and Benefit Sharing	
Goals	Strategic action	Activities	Next steps to achieve the objectives
		Advancing in participative assessments of existing, formal or non formal governance models and processes to achieve the conservation and development goals, with an emphasis on transnational processes.	
		Establishing mechanisms for exchanging regional experiences on PAs management: shared management, good practices, land possession forms, lessons learned with regards to PAs governance, etc.	Ensure that these spaces do not depend on NGOs projects, but that are rather institutionalized by the governments. Adopt in other countries like Venezuela, the good practice experience (education) from Brazil for example. Utilize the spaces already institutionalized like Redparques, Programa Trinacional, OTCA.
	With the participation of the different actors, studying, valuating and promoting biological	Promoting processes of capacity building that incorporate: i) the diversity of actors with shared responsibilities and competences in PAs management and ii) the skills required by the new governance forms (communication, negotiation, facilitation, coordination of actors, conflicts management, etc.).	Strengthen Redparques to improve training of personnel.
2.1. To promote equity and benefit- sharing	and cultural diversity conservation and management strategies, figures and tools to find alternatives that facilitate the effective management and conservation of areas of	Sharing experiences on the sustainable use and management of the goods and services of biodiversity in the protected areas and conservation territories to contribute to improve the life standards of the populations of such geographic spaces.	Expand the range of action to incorporate countries that have not joined at cross- border level. Resume exchanges of experiences under the GSF umbrella
	economic importance.	Supporting initiatives on the sustainable use and management of the goods and services derived from biodiversity (ethnic-tourism, ecotourism, etc.), promoted by indigenous and local communities in PAs.	Replicate the current good practices of the Amazon. Include countries with small-scale initiatives and strengthen them.
		Strengthening the capacities of institutions, indigenous, African-American and local communities in trans-border protected areas for the protection of traditional knowledge and practices and innovation on the use and management of biodiversity and to establish mechanisms and processes on clear and equal participation in the costs and benefits of the indigenous and local communities in the creation and management of protected areas.	Set down processes/projects at levels in which they can be applied in the field
		Analyzing the different mechanisms and incentives promoted by the Amazonian countries for the management and conservation of private protected areas, to identify common tools that contribute to the sustainability of this protection figure at a regional scale.	

	Element 2: Goverr	nance, Participation, Equity and Benefit Sharing	
Goals	Strategic action	Activities	Next steps to achieve the objectives
		Supporting evaluation exercises and exchanging experiences on effective participation mechanisms of stakeholders in the creation and shared management of conservation figures and in general, of types of governance in protected areas (including the equal participation in the costs and benefits of the indigenous and local communities in the PAs).	There are participation initiatives in other sectors of the Biome (Brazil, French Guyana and Suriname) that must be expanded.
		Generating processes in strengthening local and institutional capacities for the shared administration and management of protected areas.	Exercise of Redparques for the building of the Amazon Vision
2.2. To enhance and secure involvement of indigenous and	Exchanging experiences that allow facilitating and strengthening the participation and communication processes with the local, indigenous and Afro-	Systematizing and exchanging experiences about participation processes of all social actors in the follow up of development projects with an incidence on protected areas and lands of indigenous and local communities.	
and relevant stakeholders	descending communities and other actors involved in the creation, management and planning of protected areas.	Coordinating the PoWPA with other programs related to the CDB: forest biological diversity, maritime and cost biological diversity, access and participation in the benefits and article 8 j) and other provisions to improve enforcement and strengthening governability.	
		Integrating the provisions of COP 10 on the access and benefit-sharing with the issue of PAs governance to contribute to the reduction of poverty and to improving the life means of indigenous and local communities;	
		Including the indigenous and local communities and other parties involved with protected areas in advising committees and in consultations and efficacy exams for the presentation of reports about the PoWPA and in the efficacy exams of the protected areas system.	It is necessary to agree on the mechanisms. Identify indigenous organizations of the Amazon who participate in the processes Integration of FUNAI from Brazil

		Element 3. Enabling Activities	
Goals	Strategic action	Activities	Next steps to achieve the objectives
		Consolidating a standardized protocol of regional information of financial sustainability, considering experiences such as that of OTCA or the Ministry of the Environment of Brazil and jointly analyzing the regional information needs and gaps.	Strengthen the scope and role of the Thematic Group to generate regional tools to systematize the financial information
		Making studies that allow incorporating the environmental variables into the national accounts.	Advance in economic valuation exercises and convene the ministries of Finance, Treasury, Economy to present and validate their results. Strengthen the negotiation capability and utilization of financial and economic information for the decision making process.
		Advancing on systematic exercises of economic valuation, with an emphasis on ecosystemic services, at the amazon biome scale that show the benefits generated and the economic contribution to the regional development.	Develop an economic valuation analysis on the contribution of the Amazon Biome to the economy of its countries, the region and the world. Pursue opportunities to execute it within the TEEB framework (The economics of biodiversity)
3.4. To ensure financial sustainability of	Developing a complete analysis at a regional scale (from estimates and tools applied by the countries) on	Identifying and managing financial sources and mechanisms for the sustainable management of the Biome protected areas.	Strengthen the scope and the role of the Thematic Group to boost south-south cooperation Promote a third donors table on Life Web and Amazon Vision
protected areas and national and regional systems of protected areas	the financing needs and defining and managing a regional financial sustainability strategy for protected areas of the amazon Biome.	Advancing in the systematization, studies and exchange of experiences and training to include the financial sustainability subject into the systematic planning processes.	Greater precision is required in terms of projects and activities, especially in relation to NGOs, environmental funds and international cooperation players. Review E-Conservation from the EU (www.econservation.jrc.ec.europa.eu)
		Making updates, periodical assessments and systematizing information on the financial sustainability analysis in the Amazon region using the financial sustainability score cards and other appropriate instruments with the purpose of making regional analysis.	Utilize the tool to plan to influence the financial sustainability initiatives in the region
		Generating training processes on financial sustainability and in the application of the tools through REDPARQUES, aimed at state officers and personnel working at the PAs.	Strengthen and equip the Thematic Group to generate a capacity building and south-south cooperation system.
		Analyzing, systematizing and documenting lessons learned and regional experiences on financial mechanisms that may contribute to the financial sustainability of protected areas of the amazon biome.	Survey of best practices, case studies and lessons learned Ecuador: a financial sustainability proposal is being developed to manage wild life (reduce the extraction that scheduled to start in the PA), as lesson learned or exchange of experience. Venezuela: top park agency

	Element 4:	Standards, assessment, and monitoring	
Goals	Strategic action	Activities	Next steps to achieve the objectives
		Promoting activities that promote the development of capacities for the 9 countries of the region manage to make and institutionalize the management effectiveness analysis of their protected areas with the purpose of having a complete regional scenario.	Consolidate information from Guyana
		Promoting regional workshops with technical personnel of the institutions of the protected areas responsible for the management effectiveness to review their tools and to develop indicators and variables to cover the gaps in the Reference Framework of the Management Effectiveness of the CMAP and for them to be adapted to the regional scale.	Implement a tracking instrument for the improvement of the tools used by the countries. Engagement through RedParques for institutionalization of the contributions to the tools. Update of information on the tools (metadata). A session is suggested to put the activities into operation
4.2. To evaluate and improve the	Advancing in the learning process, concepts, information, systematization and exchange and analysis of EEM results	Making a standardized protocol to share information on the assessment of the effectiveness of the management of protected areas and continuing strengthening periodical processes of regional analysis.	Periodical Agenda. Rescue the contributions of other thematic groups to include them in the effectiveness reports.
effectiveness of protected areas management	at different scales, identifying strengths and weaknesses that contribute to the effective management of the protected areas of the amazon biome.	Strengthening the effectiveness analysis processes and their incorporation into the planning and management processes of each country from the exchange of experiences and training.	
		Advancing in processes of developing pilot experiences on the effectiveness of the management of trans-border areas, strengthening the management plans.	Implementation of proposed activities
		Carrying out the analysis on the effectiveness of the management of the APs systems, integrating the elements that characterize the financing system.	Identify from the other thematic groups what to include in the effectiveness analysis Work coordinated with The Financial Sustainability Group
		Considering in the EEM processes at the regional level other subjects that are becoming increasingly important such as management standards for protected areas and implementing ecologic corridors.	Identify strengths/potential of the Areas for possible nominations on the Green List of the Amazon Identify other standards.

	Coordinating with RedLac and other financing sources with the purpose of promoting the support to the monitoring and evaluation activities on the effectiveness of the management of protected areas.	Coordinate with the countries, assess the results of the project (RedLac). Coordinate effectiveness assessments with project impact assessments. Coordination of the financial sustainability group
	Generating a process or studying and learning to integrate the cultural subject into the effectiveness analysis in accordance with the needs of each one of the countries.	Cultural values learning process. Consult with RedParques what would be the mechanism to tackle the issue (a thematic group, workshops, training, others) Coordination with the governance thematic group
	Supporting analyses that include the results of the management effectiveness with governance variables and categories of management of protected areas.	Compile input on initiatives and experiences of the thematic groups
	Connecting research and monitoring programs for the conservation and sustainable use of the resources of PAs.	Socialize the implementation of those programs in the countries, to strengthen their engagement in the management effectiveness
	Adapting the tool in accordance with the areas and use categories, as applicable, in order to assessing the efficiency and efficacy of different types of governance and categories of protected areas.	
	Considering the possibility of including, as the case may be, information on governance and the social impacts and benefits of the PAs in the process of assessing the efficacy of PAs management.	Coordination with the governance group

Annex 5. Summary of the advancement in the implementation of the POWPA actions evaluated by Amazon Vision in the countries of the biome to 2012

Action / Country	1.1 To establish and strengthen national and regional systems of protected areas integrated into a global network as a contribution to globally agreed goals	1.2. To integrate protected areas into broader land- and seascapes and sectors so as to maintain ecological structure and function.	1.3. To establish and strengthen regional networks, trans boundary protected areas (TBPAs) and collaboration between neighboring protected areas across national boundaries	1.4. To substantially improve site-based protected area planning and management	1.5. To prevent and mitigate the negative impacts of key threats to protected areas	2.1 To promote equity and benefit-sharing	2.2 To enhance and secure involvement of indigenous and local communities and relevant stakeholders	3.4 To ensure financial sustainability of protected areas and national and regional systems of protected areas	4.2 To evaluate and improve the effectiveness of protected areas management
Bolivia	Partially complete	Partially complete	It has just started	Limited	It has just started	Just started, limited progress	Activity in development	Just started, limited progress	Limited
Brazil	Partially complete	Partially complete	It has just started	Activity in progress	It has just started	Just started, limited progress	Just started, limited progress	Just started, limited progress	Activity in progress
Colombia	Almost complete	Partially complete	Almost complete	Complete activity	Complete	Activity in development	Significant progress, activity almost finished	Activity in development	Complete activity
Ecuador	Partially complete	It has just started	It has just started	Activity in progress	Partially complete	Just started, limited progress	Just started, limited progress	Activity in development	Limited
Guyana	Partially complete	Partially complete	It has just started	Activity in progress	Partially complete	Just started, limited progress	Significant progress, activity almost finished	Just started, limited progress	Activity in progress
Peru	Almost complete (national)/ Partially complete (regional)	Almost complete	Partially complete (regional networks)/ No work (Trans- border PA)	Activity in progress	Almost complete	Activity in development	Significant progress, activity almost finished	Activity in development	Activity in progress

Note: French Guyana, Suriname and Venezuela do not have a ranking on the CDB web as they do not have advancement report and/ or it did not contain data to be interpreted at the CDB Secretariat. Source: Action Plans for the CBD POWPA Implementation on www.cbd.int/protecte/implementation/actionplans/



Protected Areas are deemed one of the best ways to conserve de biological diversity. A protected areas global network, where human activity is managed to preserve the structure and function of the ecosystems, is a successful strategy to obtain benefits for present and future generations and to reduce significantly the loss of biodiversity

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