









#### Author

Cesar Sabogal

#### Coordination

Amazon Regional Program (BMZ/DGIS/GIZ)

The technical cooperation project "Strengthening the Amazon Cooperation Treaty Organization", known as the Amazon Regional Program, is implemented by GIZ on behalf of the German and Dutch governments (BMZ-DGIS). The project responds to the need to strengthen the capacities of the regional organization ACTO so that the latter can deal with the demands of the Amazon countries (Brazil, Bolivia, Colombia, Ecuador, Guyana, Peru, Suriname and Venezuela) by means of regional initiatives and action for sustainable development in the Amazonia.

#### Contact

Horst.steigler@giz.de
Programa Regional Amazonía
Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH
SCN Quadra 1 Bloco C Sala 1501
Ed. Brasília Trade Center
70.711-902 Brasília/DF
T: +55 61 21012170
I www.giz.de

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# **REGIONAL REPORT**

# ON THE STATUS OF FORESTS IN THE AMAZON REGION

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## Permanent Secretariat - Amazon Cooperation Treaty Organization (PS/ACTO)

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Luis Francisco Sánchez Otero

#### **Address**

SHIS QI 05, Conjunto 16, Casa 21, Lago Sul CEP: 71615-160 Brasilia – DF, Brasil T: +(55 61) 3248 4119 | F: +(55 61) 3248-4238 www.otca-oficial.info

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Each Member Country has appointed a person to participate in the formulation process of the Regional Report and in the preparation of the National Report, together with a group of people. The country representatives are:

Mariela Flores Tito, on behalf of the Plurinational State of Bolivia, from the General Directorate for Forest Management and Development, (DGGDF) Ministry of Environment and Water of Bolivia

Joberto Veloso de Freitas, on behalf of Brazil, from the Brazilian Forest Service (SFB), Ministry of Environment (MMA), Brazil

Rubén Darío Guerrero, on behalf of Colombia, from the Ministry of Environment and Sustainable Development (MADS) María Gabriela Viteri, on behalf of Ecuador, from the Forest Monitoring National System, Ministry of the Environment of Ecuador (MAE)

James Singh, on behalf of Guyana, from the Guyana Forestry Commission (GFC)

Rocío Malleux Hernani, on behalf of Peru, from the National Forestry and Wildlife Service (SERFOR), Ministry of Agriculture and Irrigation (MINAGRI)

Rene Somopawiro, on behalf of Suriname, from de Foundation for Forest Management and Production Control (SBB)

Fidel Ferrer, on behalf of the Bolivarian Republic of Venezuela, from the General Directorate for Forest Patrimony, Ministry of People's Power for Ecosocialism and Water

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# **FOREWORD**

The vision of ACTO is to achieve the sustainable development in the Amazon Region reconciling use, protection and conservation of its resources with equitable conditions that ensure integral sustainable development, effective presence of the State in its different levels of Government and Amazonian populations that fully exercise their rights and obligations in the framework of the national laws in force and international agreements.

Based on this vision, the Amazonian Strategic Cooperation Agenda (ASCA) was created and approved in November 2010 by the Ministers of Foreign Affairs of each Member Country. The Agenda includes the conservation, protection and sustainable use of the forests aiming to integrate sustainable forest management and conservation that result in real benefits for the local populations. Since 2013, the Forest Authorities have been working on the preparation of a Regional Report on the state of the Amazon forest with the support of the Amazon Regional Program (PRA) (BMZ/DGIS/GIZ) and FAO.

The main goal of this report is to recognize the state of the Amazon forest in the national and regional context to enhance its general management and further promote its sustainable development.

During the 4th meeting of Forest Authorities, organized in Brokopondo, Suriname, in March, 2017, the support to elaborate the Regional Report was reiterated. As the Member Countries continued their work in cooperation with FAO and the consultant hired to finish the process, the preliminary results of the Regional Report on the State of Forestin the Amazon Region have been presented in the 12th meeting of the United Nations Forum on Forests, held in May, 2017, in New York.

Considering that the Amazon Region represents the biggest tropical forest surface in the world, we have the responsibility of developing our countries sustainably, taking into account the international agreements in the context of the CBD, UNFCCC and SDG. This Regional Report, together with other actions related to the forest monitoring in the Amazon region, will also work as an input and a way of implementation, while the revision and update of the ASCA, that comprehends these important international agreements, is under construction. Our efforts in conserving, protecting and sustainably managing the Amazon forest can be considered as an example worldwide.

The elaboration of the Regional Report has allowed the Member Countries to generate new information – or improvede the already existing ones - and the identification of some information gaps about the forests of the Amazon Region.

The process has also permitted an inclusive work with some key actors (agencies, public organs, projects, etc.) in the production of information context related to Amazonian issues and the harmonic contact between these institutions, contributing to the improvement of the capacities and to a deeper reflection on the importance of the forest and the wild fauna heritage in the Amazon areas that belong to the Member Countries of ACTO.

The effort to produce this Regional Report could not have been possible without the support received in the entire process from the United Nations Food and Agriculture Organization (FAO) and the Amazon Regional Program - PRA of German-Dutch cooperation (BMZ/GIZ/DGIS).

#### ABBREVIATIONS

CO² carbon dioxideha hectarekm² square kilometerm3 cubic meter

#### **ACRONYMS**

ACTO Amazon Cooperation Treaty Organization
ASCA Amazonian Strategic Cooperation Agenda

**BMZ** Bundesministerium für wirtschaftliche Zusammenarbeit und Entwicklung

(Federal Ministry for Economic Cooperation and Development)

**BNDES** National Development Bank (O Banco Nacional do Desenvolvimento)

**CDB** Convention on Biological Diversity

**DGGDF** Dirección General de Gestión y Desarrollo Forestal, Ministerio de Medio Ambiente y

Agua de Bolivia (General Directorate for Forest Management and Development, Ministry of Environment and

Water of Bolivia)

**DGIOFFS** Dirección General de Información y Ordenamiento Forestal y de Fauna Silvestre, Perú

(General Directorate for Information and Management of Forests and Wildlife, Peru)

DGIS Directorate-General for International CooperationFAO Food and Agriculture Organization of the United Nations

**FCMU** Forest Cover Monitoring Unit, Suriname **FRA** Global Forest Resources Assessment Program

FSC Forest Stewardship Council
GFC Guyana Forestry Commission

**GIZ** Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH

(German Agency for International Cooperation)

**IDEAM** Instituto de Hidrología, Meteorología y Estudios Ambientales, Colombia

(Institute of Hydrology, Meteorology and Environmental Studies, Colombia)

**IGAC** Geographical Institute Agustín Codazzi

INPE Instituto Nacional de Pesquisas Espaciais, Brazil (National Institute for Space Research, Brazil)

MADS Ministerio de Ambiente y Desarrollo Sostenible, Colombia

(Ministry of Environment and Sustainable Development, Colombia)

MAE Ministerio del Ambiente del Ecuador (Ministry of Environment of Ecuador)

**MC** Member Countries

MMAYA Ministerio del Medio Ambiente y Agua, Bolivia (Ministry of Environment and Water, Bolivia)

MMA Ministério do Meio Ambiente, Brasil (Ministry of the Environment, Brazil)

MPPEA Ministerio del Poder Popular para Ecosocialismo y Aguas, Venezuela
(Ministry of People's Power for Ecosocialism and Water, Venezuela)

**NFI** National Forest Inventory

**NFMS** National Forest Monitoring System, Suriname

PEFC Programme for the Endorsement of forest Certification
PRA Programa Regional Amazonia (Amazon Regional Program)

**REDD+** Reducing Emissions from Deforestation and forest Degradation, and the role of conservation, sustainable

management of forests, and enhancement of forest carbon stocks

**SBB** Foundation for Forest Management and Production Control, Suriname

**SDG** Sustainable Development Goal

**SERFOR** Servicio Nacional Forestal y de Fauna Silvestre, Perú (National Forestry and Wildlife Service, Peru)

**SFB** Serviço Florestal Brasileiro (Brazilian Forest Service)

SINACITSistema Nacional del Inventario Forestal, Venezuela (National Forest Inventory System, Venezuela)SINCHIInstituto Amazónico de Investigaciones Científicas, Colombia (Amazonian Institute of Scientific Research)SMBYCSistema de Monitoreo de Bosques y Carbono para Colombia (Forest and Carbon Monitoring System for

Colombia)

**SP/OTCA** Secretaría Permanente de la Organización del Tratado de Cooperación Amazónica (Permanent Secretariat of

the Amazon Cooperation Treaty Organization)

SUIA Sistema Único de Información Ambiental, Ecuador (Single System of Environmental Information)

**UNFCCC** United Nations Framework Convention on Climate Change

VMABCCGDF Viceministerio del Medio Ambiente, Biodiversidad, Cambios Climáticos y Gestión y Desarrollo Forestal,

Bolivia (The Viceministry for Environment, Biodiversity, Climate Change and Forest Management and

Development)

# **EXECUTIVE SUMMARY**

The need identified by the Member Countries of ACTO to rely on up-to-date information about the current situation of the amazon forest triggered the preparation of this first local report. The goal of the evaluation is to provide, for the member countries and for the international community, relevant, realistic, reliable and useful information to support national policies and/or programs about forestry issues. With FAO the collaboration of FAO, the experience in pattern and methodological application has been harnessed for the evaluation of the Global Forest Resources Assessment (FRA) from 2015. The Member Countries used a standard form to collect information/data, to allow them to analyze and share, among these countries, details about Amazon Forest and to create a local perspective on its management and conservation conditions through the regional report. Each country provided information about what, was identified as Amazon forest, on a national level, based on their own definition.

This report embraces several different topics, from the forest extension to the forest losses, the protective functions (the ecological integrity and biodiversity maintenance) and productive activities (timber and wood production) of the forest resources, the forest property rules and, also, some aspects of the forest sustainable management in the Member Countries. Subsequently, some of the results are demonstrated.

Forest Extension. The forests of the Amazon Region inside Member Countries of ACTO comprise approximately 544 million hectares, representing 70% of the total area. Between 2000 and 2015, the Amazon forest area has decreased 0,28% per year (almost 1,6 million hectares), however the rate of net loss during this period has decreased 50%, from 0,46 to 0,23%, this is equal to less than one million hectares per year in 2015.

### Biodiversity and ecological integrity

maintenance. Nearly 90 million hectares of the Amazon forest were mainly designated in 2015 to biodiversity conservation functions, as long as more than 212 million hectares (or 39%) of the Amazon forest were inside protected areas. Upon the last 15 years, these areas have increased in the region, especially the forest areas designated for the biodiversity conservation, resulting in more than 45 million hectares, the biggest part between 2005 and 2010. Almost ¼ of the forest designated for the biodiversity preservation in a global context is nestled in the Member Countries of ACTO, and corresponds mostly to the Amazon forest. The major part of this area is located in Brazil (46%) and in Peru (21%).

The Member Countries have earmarked, in 2015, almost 282 million hectares as forest areas inside the protected areas, representing 36% of the total forest area. In the Amazon Region, this proportion is even greater: 39% or something bigger than 212 million hectares. Venezuela and Brazil have dedicated a larger part of their forest areas inside protected zones: 96% and 48% in the Amazon Region, respectively.

**Forestry production.** 21% of the Amazon Forest (nearly 115 million hectares) was destined for production in 2015, increasing 47%, in 2000, mainly due to the enhancement registered in Brazil. The forest areas of multiple use in the Amazon Region represented almost 8% (38 million ha), in 2015, in the seven countries that reported (and that constitute 92% of the total area).

The average annual volume of wood (excluding firewood) extracted in the Amazon Region between 2011 and 2015 raised to more than 34 million cubic meters without bark per year in this period, considering that Brazil contributed with 86%. The firewood extraction, estimated at approximately 22,5 million cubic meters per year, on average, for the same period, represented 9% of the total wood extraction; although, the report on firewood presented information gaps in some countries.

Forest Ownership. In 2015, 80% of the Amazon forest was public property (and more than a half was in Brazil). The remaining 20% was under private ownership (18%) and unknown property (2%). During the last 15 years, an increase of private property in the Amazon Forest is registered, mainly in Brazil, Ecuador and Peru. In 2015, 18% of the Amazon Forest (approximately 89 million ha) was private property. Colombia was the one that showed the highest proportion (57%) of Amazon Forest in private property.

Sustainable Forest Management. All the Member Countries of ACTO have regulations associated to forest management policies and rules, that conduct the national operations of sustainable forest management. The legislation and laws that support the sustainable forest management specifically in the Amazon Region have already been developed in seven of the eight countries. From another perspective, Guyana, Peru, Suriname and Venezuela rely on explicit documents of forest policies, whereas in the other countries there are plans, programs, or strategies that, in general, work as forest policies for the long-term.

All the Member Countries have developed or are currently executing a forest national inventory that allows them to periodically evaluate and monitor, , the extension and the quality of the forest on the national level and in the Amazon Region. Ecuador is the country that mostly advanced the execution of its own Forest National Inventory, considering that the first step of measuring and reporting, also including the Amazon Forest has been finalized. Brazil, Bolivia, Colombia, Peru and Venezuela are in the process of the full execution of their national inventories, although in different levels of advance. Guyana and Suriname are developing proposals for multi-purpose national inventories in the framework of REDD + initiatives.

More than 1/5 (83%, or close to 416 million ha) of the Amazon forest area has been designated, by seven from eight Member Countries (92% of the total forest area) in 2015, to continue with a permanent forestry use of the land.

The total forest area controlled by a management plan was around 145 million hectares in 2015, which represent almost 20% of the total forest, highlighting Ecuador (43%), Suriname (41%), Peru (39%) and Guyana (33%) as the countries with the highest proportion of the forests with management plans in 2015. For the Amazon Region, it was reported (six countries or 91% of the Amazon forest area) more than 108 million hectares or 20% of the Amazon forest area are controlled by management plans in 2015. From this area, 21% are controlled by management plans for production and 79% by management plans for conservation.

The total forest area certificated in 2015 reached 11 million hectares in six Member Countries: 3/4 certificated by Forest Stewardship Council (FSC) and ¼, only in Brazil (2,7 million ha), by the Programme for the Endorsement of Forest Certification schemes (PEFC). Even though the certificated forest area had increased since 2000, it still represents a little more than 1% of the total forest area in that region. In the Amazon Region, in 2015, 0,6% of the forest area (3,3 million ha) was certificated in four countries (Bolivia, Brazil, Peru and Suriname). The biggest certificated area of the Amazon forest was registered between 2003 and 2008 in Bolivia, when more than 1,5 million hectares of the forest (representing almost 4% of the forest) was certified.

# The report highlights the following **recommendations**:

- Establish a roadmap with the Member
  Countries to resolve the information gaps and
  the confirmation of variables for the second
  regional report, the basis of definitions and
  general methodologies for the collection,
  analysis and report of data.
- Establish a periodicity (ideally every five years) to generate the regional report that is synchronized with FRA and that is harmonic with other reports formulated by Member Countries.
- It is a suggestion for the member countries to nominate a formal technical liaison, preferablyone with experience in FRA reports.
   Moreover, they could consider to join the Observation Rooms of the Forest Cover Monitoring Project in the Amazon Region of ACTO, to support the generation and preparation of information on the variables of the Regional Report in each country.

- Explore the available resources within the national systems in the Member Countries, with the main goal to maintain this type of reports.
- Promote the cooperation of the Member
  Countries on issues related to national forest
  inventories, especially in relation to the
  exchange of experiences and to standardize
  terms, definitions and variables that can
  contribute to the comparibility of the results
  and to the enhancement of future regional
  reports on the status of the forests in the
  Amazon Region. ACTO could contact the focal
  points of FRA in each member country to
  support the elaboration of the next report
  under their leadership.
- Support the dissemination of this regional report at national and sub-national levels, including governmental agencies, nongovernmental organizations, communities, private sector and organizations for financialand development cooperation.

# INTRODUCTION

# The Scope of the Report

Within the framework of the Amazonian Strategic Cooperation Agenda (ASCA) approved in 2010, the Amazon Cooperation Treaty Organization (ACTO) focused on increasing the current knowledge on the state of the resources of the Amazon forest in a national and regional context to improve their management and promote their sustainable development.

The need identified by the member countries of ACTO (Figure 1) to rely on up-to-date information on the current situation of the Amazon forest resulted in the preparation of this first report. The goal of this evaluation is to promote, for the member countries and for the international community, relevant, realistic, reliable and useful information, that could support national policies or/and programmes on forest issues.

For this, in collaboration with the Food and Agriculture Organization of the United Nations (FAO), the experience in methodological design and application for the evaluation of the global forest resources (FRA) in 2015 have been useful as well as the elaboration of the first regional report on the state of Mediterranean forests elaborated in 2013 by the *Committee on Mediterranean Forestry Questions - Silva Mediterranea*.

**Figure 1.** Member countries of ACTO and the Amazon Forest area. Source: www.otca-oficial.info.



The Member Countries used a standard form to collect details and information aiming to allow the Permanent Secretariat of the Amazon Cooperation Treaty Organization (PS/ACTO) and the Member Countries, to analyze and share information about theAmazon forests and to generate a local perspective about their current situation of management and conservation, through this regional report. Each country has provided information on what is identified as the Amazon forest on the national level, based on their own definition.

This form corresponds to the evaluation form of the Global Forest Resources Assessment (FRA -2015), whose format was adapted to facilitate the entry of datafrom the Amazon Region.

This regional report covers a range of topics, such as the loss and extension of the forest, the protective functions (the maintenance of ecological integrity and biodiversity) and the production activities (timber productions and firewood) of the forest resources, the property rules of the forests and some aspects of the sustainable forest management in the Member Countries.

### **Elaboration Process**

The process implemented to elaborate the present regional report was made between May, 2016 and May, 2017.

During this period, the PS / ACTO, in coordination and with the support of the FAO Forestry Department in Rome, organized In-person and virtual meetings with the MC mainly through the Focal Points designated by each country.

The First Regional Planning Workshop for the Preparation of the Regional Report on the Status of the Amazon Forest, was the first face-to-face meeting and it was held on May 30th and 31st, 2016 in the city of Lima, with the participation of delegates from Brazil, Colombia, Ecuador, Peru, Suriname and Venezuela. The goals were: (a) review and define the Amazon variables that will constitute the first regional report on the current situation of Amazon forest, (b) review and define the form or the questionnaire that the Member Countries will fill in to register and send official information, and (c) agree on an activity scheduele to elaborate the regional report until its publication and the coordination mechanisms for the proper follow-up.

In order to establish a joint agreement on which Amazonian variables would be part of the first regional report, the document of the Proposal of Amazonian Variables was elaborated and discussed in the workshop.

Furthermore, they considered the preliminary results of the Member Countries consultation related to the identification of the data and information available in each country on these proposed variables(ACTO variables).

For the selection of the Amazon variables that will constitute the first regional report, the criterium was established in this workshop, that at least five countries needed to inform totally or partially on these variables. In addition, some relevant aspects were pointed out to be considered in the definition of agreed variables and the subsequent elaboration of the regional report:

- **a.** Each country will report the information of the forests of the region that it considers as its Amazon within the framework of the ACTO.
- b. The Amazonian variables indicated as "... of which Amazonian forest" become "... of which forest in the Amazon region".
- **c.** The title of "Regional Report on the State of the Amazon Forest" is modified to "Regional Report on the Status of Forests in the Amazon Region".
- **d.** They will inform about the natural forest areas that includes FRA sub-categories in the primary forest or in other naturally regenerated forests. In the same way, they will inform the sub-category "... Natural forests in theAmazon Region".

As a result, they selected 11 variables to collect information on the forests in the Amazon Region, as they are represented in **Annex 1**.

A second work document, Form for the Collection of Data and Amazonian Informationwas also presented and discussed. This form allows the PS/ ACTO and its Member Countries to jointly analyze and share information on Amazonian forests and generate a regional vision on their management and conservation status, through a regional report.. This form, which maintains the main characteristics of the questionnaire that resulted in the report of FRA 2015, directs that the work of processing and recording data and information by MCs follows the same methodology and definitions used in FRA 2015, with the integration of the ACTO variables. The national details were taken from the National Reports of FRA 2015, available on the following link: http://www.fao.org/forestresources-assessment/current-assessment/ country-reports/es.

It was defined that, if countries have more up-to-date information on national variables, they would register it in the form. In **Annex** 2 is presented the form with the suggested modifications by the delegates of the MC.

**Teleconferences were also organized** (through Webex) with the MC. The first one was on August 24th, 2016 with the delegates from Bolivia, Brazil, Colombia, Ecuador, Guyana, Peru and Suriname, which aimed to know the progress in the preparation of the report. A second one was on November 18th and 25th, 2016.

In addition, there was regular communications with the MC through e-mail, telephone and Skype.

It is worth emphasizing that the FRA methodology implies an adjustment of the national definition to the FRA definition, anyway each country has its own definitions, some of which are shown in Annex 3.

It is important to mention that this report used the basic data of FRA 2015, whose data for 2015 are estimated. As this process was carried out in 2016 and 2017, the 2015 data may be different from the FRA 2015 data, as some of them have been updated.

With the support of FAO, two products resulting from the process are made available: a database (in Excel format) with the Amazonian variables reported in the national reports, and a formatted version of the eight national reports submitted by the MPs to SP / OTCA, in order to facilitate its use as a reference for subsequent updates that countries decide to make. These results are available on the ACTO website: A <a href="https://www.otca-oficial.org">www.otca-oficial.org</a>.

# **2** FOREST EXTENSION

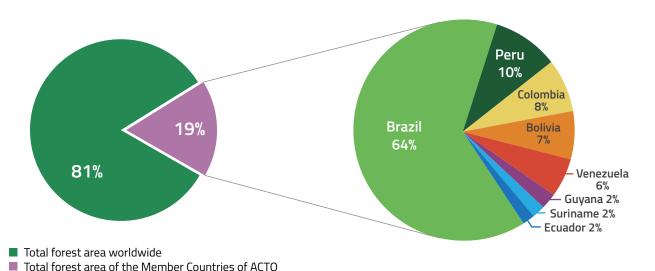
The forests from the Amazon Region in the Member Countries of ACTO cover about 544 million hectares, representing 70% of the total forest area. Between 2000 and 2015, the Amazon Forest area has decreased with 0,28% per year, but the net loss rate during this period has decreased with 50%, from 0,46 to 0,23%, which means less than 1 million hectares per year in 2015.

# Forest Extension and changes over time

The total forest area of the eight Member Countries of ACTO by 2015 was more than 770 million hectares, which represents nearly 1/5 of the global total area (around 4 billion hectares) (**Figure 2**), and 92% of the total forest area in

South America<sup>1</sup> (almost 850 million hectares), of which more than half is in Brazil. The forest area of the Amazon countries covered 58 percent of its land area (around 1.3 million hectares), compared to the world average of 31 percent.

**Figure 2.** Total forest area of the MC of ACTO in 2015: Proportion related to the global forest area and the distribution between the Member Countries.



In 2015, the Amazon forest represented 70% of the total forest area of the MC, or around 544 million hectares (**Table 1**). The proportion of the Amazon forest, as a percentage of the total forest, varies a lot between the countries. The forest area of

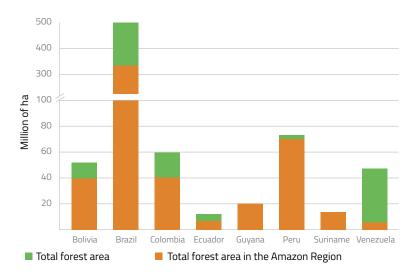
countries as Guyana and Suriname is equivalent to 100% of the Amazon forest. In Venezuela it is 11%, while Brazil represents more than half of the total forest area in the region (**Figure 2**).

¹ South America includes Argentina, Bolivia, Brazil, Chile, Colombia, Ecuador, Guyana, French Guyana, Paraguay, Peru, Suriname, Uruguay and Venezuela.

	Total F	orest area		Amazon Forest area	st area	
Country	(1 000 ha)	Total % of forest area	(1 000 ha)	Total % of forest at country level	% of the country surface	
Bolivia						
Brazil	493 422	64	342 809	69	41	
Colombia	59 629	8	41 437	69	37	
Ecuador	12 847	2	9 380	73	38	
Guyana	18 483	2	18 483	100	94	
Peru	73 973	10	70 544	95	55	
Suriname	15 314	2	15 314	100	98	
Venezuela	46 683	6	5 198	11	6	
Total	772 451	100	543 964	70		

**Table 1.** Forest area, total and in the Amazon Region in 2015.

Figure 3. Total forest area and in the Amazon Region in the Member Countries of ACTO in 2015.



The data on how the forest area, total and in the Amazon Region, has changed in the registration periods from 2000 until 2015, are presented in **Table 1 - Annex 5**, with the comments included in the national reports prepared for this regional report.

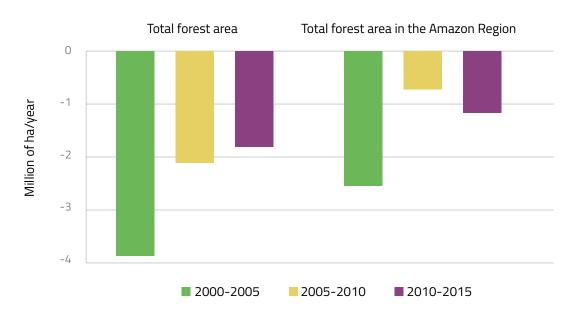
# Changes in the rate of the net forest loss

The Amazon forests areas decreased with 0,28% annually (about 1,6 million hectares) between 2000 and 2015, but the rate of net forest loss during this period reduced by 50% (from 0,46% to 0,23% of the annual exchange rate), from 1,81 to 0,92 million hectares (**Figure 4**). This declining rate is similar to the one registered globally (FAO 2016).<sup>2</sup>

At the level of the MC, the area of net forest loss shows signs of a decline since 2000, but it

is still high: around 2,2 million hectares in 2015 (**Table 2**). Brazil had the highest annual net loss of the Amazon forest in 2000 (more than 1,4 million hectares annually), however it reduced significantly its net loss rate to less than half a million hectares per year in 2015. Colombia, Ecuador and Venezuela followed the same reduction trend, but Bolivia, Guyana, Peru and Suriname increased the annual rate of Amazon forest loss.

<sup>&</sup>lt;sup>2</sup> Between 1990-2000 and 2010-2015, the rate of the net forest loss of the total forest área at a global level has decreased with more than 50%; this is the combined result of the reduction of the net forest loss in some countries and of the rising increase in others (FAO 2016).



**Figure 4.** The trend in annual forest loss , total and in the Amazon Region in the Member Countries of ACTO

**Table 2.** Net annual change in forests, total and in the Amazon Region between 2000 and 2015

Data on how the annual net forest loss, total and in Amazon Region during 2000 and 2015 have changed, are presented in **Table 2** - Annex 5, including the comments of the national reports prepared for this regional report.

	Net Annual Change (2000-2015)							
Country	Total Forest Area (1 000 ha)	Rate (%)	Total Forest Area (1 000 ha)	Rate (%)				
Bolivia	Rate (%)	-0.4	-193.3	-0.46				
Brazil	-1856.8	-0.37	-960.9	-0.27				
Colombia	-192.8	-0.32	-104.1	-0.25				
Ecuador	-58.9	-0.44	-26.3	-0.27				
Guyana	0.6	0.003	0.6	0.003				
Peru	-144.9	-0.19	-275.7	-0.38				
Suriname	-5.1	-0.03	-5.1	-0.03				
Venezuela	-164.5	-0.34	4.6	0.09				
Total	-2635.7	-0.33	-1560.2	-0.28				

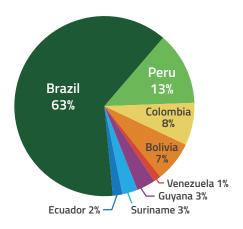
# Extension and changes in natural and planted forest areas<sup>3</sup>

From 2000 to 2015, almost 100% of the total forest area in the region was natural forest, 71% of which corresponds to Amazon natural forests (about 542 million hectares). These are distributed, mainly in Brazil (63% of the total), Peru, Colombia and Bolivia (**Figure 5**).

The changes in the natural forest area of the Amazon since the year 2000 are not significant: the area has decreased from 1,5 million hectares with an annual rate below 1%.

 $<sup>^{\</sup>rm 3}$  The total forest area is the sum of the natural forest area plus the planted forest area.

**Figure 5.** Planted forest area, total and in the Amazon Region in the MC of ACTO between 2000 and 2015.



In 2015, **planted forests** represented less than 1,5% (9,74 million hectares) of the total forest area in MC and less than 0,5% of the Amazon forests (around 735.000 hectares).

As reported by seven of the eight countries, the area with planted forest has increased by 44% in the past 15 years, mostly in Brazil, Colombia, Ecuador and Peru (**Table 3**). At the level of the Amazon Region, the situation is not clear due to information gaps in some countries, although in total there is an increase in the planted forest area above 100% in the last 10 years, mainly because of the reforestation activity in Brazil and Peru.

Data on how the planted and natural forest area, total and in the Amazon Region has changed over the registration periods from 2000 to 2015, are presented in **Table 3 - Annex 5** with the comments included in the national reports prepared for this regional report.

**Table 3.** Planted forest area, total and in the Amazon Region that belongs to the Member Countries (MC) of the Amazon Cooperation Treaty Organization (ACTO) between 2000 and 2015

Country		Planted Forest			Pla	Planted Forest in the Amazon Region			
Country	2000	2005	2010	2015	2000	2005	2010	2015	
Bolivia	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	
Brazil	5176	5620	7120	7801	n.d.	297	548	706	
Colombia	23.24	70.65	46.65	70.9	n.d.	n.d.	n.d.	n.d.	
Ecuador	70	65	60	141	0	0	0	0	
Guyana	0	0	0	0	0	0	0	0	
Peru	715	754	993	1157	39	10	32	15	
Suriname	14	14	14	14	14	14	14	14	
Venezuela	750	805	557	557	n.d.	n.d.	n.d.	n.d.	
Total	6748	7329	8791	9741	53	321	595	735	



# MANTAINING BIODIVERSITY AND ECOLOGICAL INTEGRITY

Some 90 million hectares of Amazon forest were designated in 2015 mainly for biodiversity conservation functions, whereas more than 212 million hectares (or 39%) of the Amazon forest were within protected areas. In the last 15 years, these areas have increased in the region, mainly in the forest designated for the biodiversity conservation, incorporating more than 45 million hectares, the biggest part between 2005 and 2010.

# Forest areas destined for biodiversity conservation

By 2015, the forest area designated for biodiversity conservation, just over 122 million hectares, occuppied 16% of the total forest in the MC. Nearly ¾ of this area (90 million hectares) was in the Amazon Region, representing 17% of the Amazon forest. In practically all the countries, more than half of the forest for biodiversity conservation is found in the Amazon Region (**Figure 6**).

Venezuela stands out for being the country with the highest percentage of forest destined mainly for the conservation of biodiversity: more than half of the total forest and 100% of the Amazon forest. Other countries with high percentages of the total forest designated for biodiversity conservation are Ecuador and Peru, respectively 37 and 27%.

Nearly ¼ of the forest designated for biodiversity conservation worldwide are within the MCs of ACTO, and correspond mainly to the Amazon forest. The majority of the total forest of ACTO MCs designated for biodiversity conservation is found in Brazil (38%) and Venezuela (20%), while the majority of the Amazon forest designated for biodiversity conservation in the ACTO MCs is found in Brazil (46%), followed by Peru (21%). (**Figure 7**).

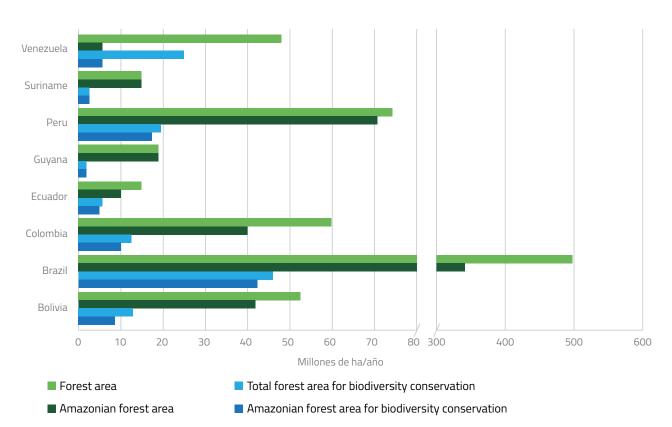
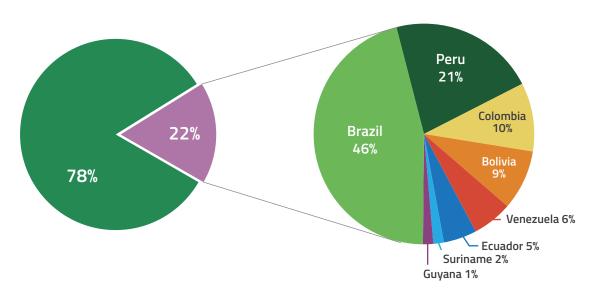


Figure 6 Forest area designated for biodiversity conservation, total and in the Amazon Region of the MC of ACTO in 2015





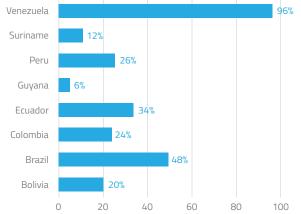
Forest area designated for conservation of biological diversity in the rest of the world

<sup>■</sup> Forest area designated for the conservation of biological diversity in the Member Countries of ACTO

# Forest Area within protected areas

In 2015, the MC have allocated nearly 282 million hectares as forest areas within their protective area systems, which represents 36% of the total forest area. In the Amazon Region this proportion is even higher: 39% or more than 212 million hectares. Venezuela and Brazil have devoted a higher proportion of their forest areas within protected areas (52% and 42%, respectively), this being even greater in the Amazon region (96% and 48%, respectively) (**Figure 8**). On the other hand, Guyana and Suriname have allocated smaller proportions of their forests, eitherfor biodiversity conservation or for protection.

**Figure 8.** Proportion of the Amazon forest area within protected areas in each MC of ACTO in 2015



From 2000 to 2015, forest areas destined conservation and within protected areas in general have increased in the region, mainly in Brazil, and to a lesser extent in Ecuador, Peru and Venezuela. In the case of the Amazon forest areas destined mainly for the conservation of biodiversity, they increased by more than 45 million hectares, with most of the increase between 2005 and 2010. This increase in the forest area within protected areas has been demonstrated worldwide, especially in tropical zones (FAO 2016). The data from the forest areas designated for biodiversity conservation and within protected areas, total and in the Amazon Region, and how they have changed over time, are presented in Table 4 - Annex 5.



# FOREST PRODUCTION

21% of the Amazon forest area (nearly 115 million hectares) was destined for production in 2015, increasing to 47% since 2000, largely due to the increase registered in Brazil. The forest areas of multiple-use in the Amazon Region accounted for almost 8% (38 million hectares) in 2015 in seven countries that reported

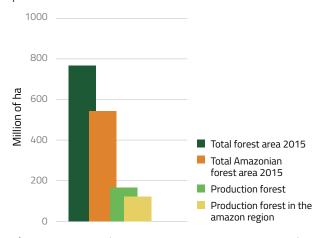
The average annual volume of wood, (excluding firewood) extracted in the Amazon Region between 2011 and 2015 amounted to slightly more than 34 million cubic meters without bark per year in this period, with Brazil contributing 86%. The extraction of firewood, estimated in approximately 22,5 million cubic meters on average for the same period, represented 9% of the total wood extraction; however, the report on firewood presented informations gaps in some countries.

# **Production Forest and Multiple-use Forests**

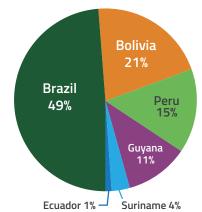
The total forest area destined for production in 2015 was nearly 147 million hectares and represented a little more than 20% of the total forest area in seven of the eight countries that reported this variable (which constitutes 92% of the total forest area) (**Figure 9**). However, this proportion varies a lot between countries, being higher in Guyana (68%), Bolivia (53%) and Venezuela (42%). Additionally, an equally variable trend is observed between 2000 and 2015: a reduction of the area in the case of Bolivia, Ecuador, Peru and Venezuela, but a significant increase in Brazil, while Guyana and Suriname have maintained the area of production forest practically constant over time.

At the level of the Amazon Region, six countries reported nearly 115 million hectares of forest destined for production (23% of the Amazon forest area of these countries). The proportion of forest area for production is concentrated in Brazil, Bolivia, Peru and Guyana. (**Figure 10**).

**Figure 9.** Total forest area and in Amazon forest destined for production in MC of ACTO in 2015



**Figure 10**. Proportion of the Amazon forest area destined for production in MC of ACTO in 2015\*



<sup>\*</sup> This information is not available for Colombia and Venezuela

Regarding the forest area destined for multipleuse, in 2015 the total was 104 million hectare, representing almost 15% of the total forest area in the seven countries that reported the variable (92% of the Amazon forest). This percentage is reduced to less than 8% (nearly 38 million hectares) when considering the Amazon region. Of all the countries, it is in Bolivia and Peru

were this category of forest use is of greater importance, representing around 20% of the area of the Amazon forest.

Data on how the total and Amazonian area of production forest and multiple use forest over the registration period from 2000 to 2015 have changed, are presented in **Table 5 of Annex 5**.

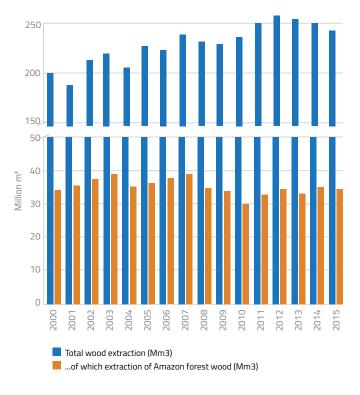
#### **Wood Extraction**

There are some gaps in the data of the total wood extraction, mainly in 2015, as the data was not available for two countries. Therefore, in order to estimate the production level, the average of the values reported from 2011 to 2015 was obtained (5 years in five countries, 4 years in one country and 3 years in two countries), amounting to more than 245 million m3 without bark per year for this period. 97% of this production correspond to Brazil. In the other countries, the production varies between 0,5 million to 3,8 million cubic meters per year, with Ecuador and Peru reporting the highest extraction4.

In the Amazon Region, the annual average of timber production between 2011 and 2015, was estimated at approximately 34,4 million cubic meters (this time, not including Venezuela), which represents 14% of the average total wood extraction in the countries that reported. Brazil was the country with the highest wood extraction fromthe Amazon forest (86% of the indicated value) in that period, followed by Peru, Ecuador, Bolivia and Venezuela. In general, the timber extraction in the countries had a tendency to increase over time: more than 50 million cubic meters between 2000 and 2015 (in both years with reports of seven countries). In the Amazon region,

wood extraction has remained less variable, eventhough in 2000 fewer countries (5) reported their variables than in 2015 (7). (**Figure 11**).

Figure 11. Wood extraction volumes from 2000 to 2015, total and in the Amazon Region in the MC of ACTO



<sup>&</sup>lt;sup>4</sup> The value reported by Ecuador correspond to a data at the national level according to the origin of the wood (types of vegetation cover) authorized by the Ministry of Environment, which are: Natural Forests, Pioneer Formations, Forest Plantations and Agroforestry Systems. The original data are presented in the national report.

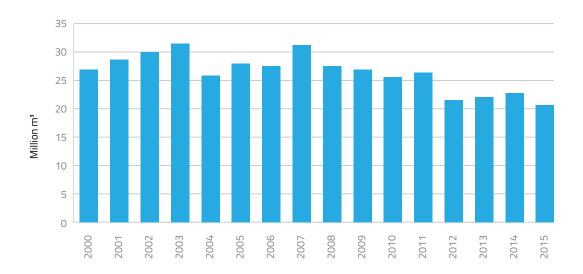
### Firewood Extraction

Six countries reported data (though not always completeon firewood extraction. Using the same reference period (average from 2011 to 2015), 22,5 million cubic meters of firewood extraction was obtained per year. This value represents 9% of the total wood extraction calculated as an average over the last 5 years for the six countries that reported (Bolivia and Colombia did not have available data). The countries with the highest volumes of firewood reported in the reference

period were Brazil (68%) and Peru (27%). Over the years there has been a variation of 10 million cubic meters in the levels of extraction of firewood (**Figure 12**).

Data on how the total and Amazon wood extraction and the data corresponding to firewood extraction have changed over the registration period from 2000 to 2015, are presented in **Table 6 - Annex 5**.

Figure 12. Total volumes of firewood extraction between 2000 and 2015 in the MC of ACTO





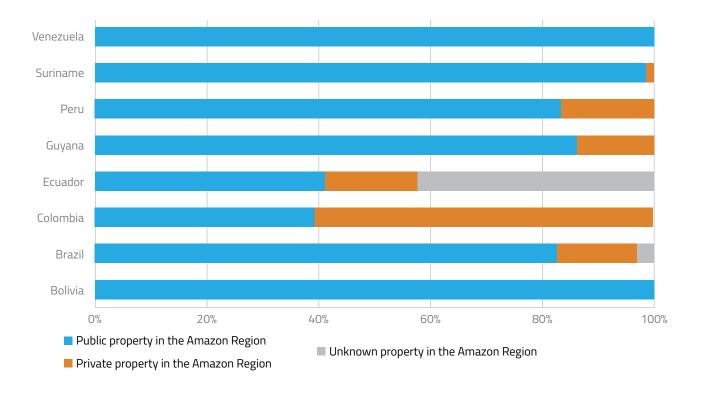
# 5 FOREST OWNERSHIP

In 2015, 80% of the Amazon forest was public property, and the remaining 20% was under private ownership (18%) and unknown property (2%). In the last 15 years, there has been an increase in the privately-owned area of the Amazon forest, mainly in Brazil, Ecuador and Peru.

81% of the Amazon forest in 2015 was public property (compared to 71% of the total forest), of which more than half was in Brazil. Compared to other ACTO MCs, Bolivia, Venezuela and Suriname had the highest proportion (100%) of the Amazon forest under public ownership. (**Figure 13**).In 2015, 18% of the Amazon forest

area (nearly 89 million hectares) was privately owned, considering six countries that reported this variable (92% of the Amazon forest). Colombia is the country that presented the highest proportion (57%) of the Amazon forest area under private ownership<sup>5</sup> (**Table 4**).

Figure 13. Proportion of the Amazon forest area that was public, private or unknown property within the MC of ACTO in 2015



<sup>&</sup>lt;sup>3</sup> At the national level, the data sent in 2010 are modified, since the areas correponding to the National Natural Parks system, by definition, are areas of public and private property (Decree Law 2811 of 1974), so they cannot be assumed to be full public property. However, these areas correspond entirely to public administration. Additionally, the oficial data on collective territories, both for indigenous, and afro descendent communities, comes from the Ministry of Interior and Justice and its cartography is made by IGAC. So the oficial adjustment is made for this report. Table 18b assumes the following conceptes: as public administration, the areas of the National System of National Natural Park are understood.

Table 4. Forest areas under public, private or unknown property, total and in the Amazon Region (2015)

	Forest Area (1 000 ha)			Forest Area in theAmazon Region (1 000 ha)			
Country	Public Property	Private Property	Unknown Property	Public Property	Private Property	Unknown Property	
Bolivia	52 100	n.d	n.d	40 800	n.d.	n.d.	
Brazil	310 705	106 024	76 639	286 600	50 230	5 979	
Colombia	n.d	n.d	n.d	17 877	23 558	n.d	
Ecuador	5 086	1 618	6 143	4 101	1 222	3 929	
Guyana	15 900	2 582	0	15 900	2 582	0	
Peru	62 260	11 713	0	55 788	10 941	0	
Suriname	15 227	87	0	15 227	87	0	
Venezuela	46 539	144	0	5 198	n.d	n.d	
Total	507 817	122 168	82 782	423 614	65 061	9 908	

Data on the forests property, total and in the Amazon Region and how they have changed overtime are presented in **Table 7 - Annex 5**.



# **5** SUSTAINABLE FOREST MANAGEMENT

More than ½ (around 416 million hectares) of the Amazon forest area were destined by the countries to maintain a permanent forestry land use in 2015. 20% or 108 million hectares of the Amazon forest (from six countries that reported) were counting on management plans this year. From this area, 21% were with management plans for production and 79% with management plans for conservation.

# Forests Management Policies and Legal Framework

All the ACTO Member Countries have policies and regulations that govern and guide the sustainable forest management operations at the national level. The legislation and regulations that support the sustainable forest management specifically for the Amazon forests have already been developed in seven of the eight countries.

Guyana, Peru, Suriname and Venezuela have explicit forest policy documents. In the other countries there are programmes, plans or strategies that generally function as a long-term forest policy. Colombia has a National Plan that establishes a strategic framework that actively incorporates the forestry sector into national development. Brazil, Bolivia and Ecuador have a set of laws and/or supreme decrees as instruments to promote and regulate the forest sector.

On the other hand, in all countries there is a large body of legislation and regulations of different hierarchy over forest resources.

This legal - regulatory framework establishes definitions and principles on forest resources, land use, the use and management of forests,

partial or total land use change, and non - forest uses and agrarian uses. Furthermore, on the institutional regime and its competences; provisions on forests to be managed and harvested sustainably, forests to be protected and / or conserved, and measures to reduce deforestation and degradation.

There are also numerous regulations on management tools (forest management plans), forest approval, monitoring and control processes; specifications on cutting volumes, harvesting techniques; processing, transportation and marketing of timber and non-timber forest products; specifications or rules for protection against fires or clearing, reforestation and afforestation, and restoration or recovery of forest and degraded lands. In addition, regulations on promotion, financing, incentive and promotion measures considering different local actors, among other aspects.

The policy and legislation instruments that exist in the MC to support the sustainable forest management, according to what was reported in the national reports received for this regional report, are presented in **Annex 6**.

# National Forest inventory and advances in Amazon Region

In most of the MC the National Forest Inventory (NFI) is in execution and only a minor part is completing the national inventory, while some countries are planning the national forest inventory implementation.

Ecuador is the country that has most advanced in the execution of the NFI, having completed its first phase of measurement and reporting, including the Amazon forest. Brazil, Bolivia, Colombia, Peru and Venezuela are full execution of their national inventories, albeit in differente degrees of progress. Guyana and Suriname are developing proposals for multi-purpose national inventories under REDD+ initiatives.

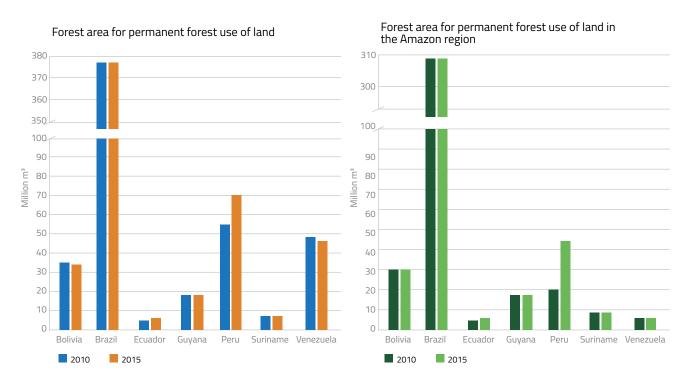
**Annex 7** presents the information reported by the countries on forest inventories at the national level and in the Amazon region and other instruments for the evaluation or monitoring of forest resources.

# Forest Area designated to be maintained in the long term

More than % (83% or nearly 416 million hectares) of the Amazon forest area has been allocated by seven of the eight countries (92% of the total forest areato maintain permanent forest land

use in 2015 (**Table 5**) In Guyana and Venezuela it is 100% and between 90 and 95% in the case of Brazil and Peru (**Figure 14**).

**Figure 14.** Forest area destined to be maintained for permanent forest land use, total and in Amazon region of ACTO MC between 2010 and 2015



<b>Table 5.</b> Area of permanent forest	land use . total and in Amazor	n region of MC of ACTO between 2010 and 2015

Country	Forest Area for Permanent use of the land (millones de ha)		use of the land		% of the total Forest (2015)	land	for Permanent use of the in Amazon Region nillones de ha)	% of Amazon Forest (2015)
	2010	2015		2010	2015			
Bolivia	35	34	66	30	30	73		
Brazil	378	378	77	309	309	90		
Ecuador	4	5	37	3	4	47		
Colombia*	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.		
Guyana	18	18	100	18	18	100		
Peru	53	70	95	20	42	60		
Surinam	7	7	47	7	7	47		
Venezuela	48	47	100	5	5	100		

<sup>\*</sup> Although Colombia does not report areas of forest for permanent forest use, recently the Ministry of Environment and Sustainable Development, within the framework of compliance with the Peace Agreements, has developed a Policy to combat deforestation and the Strategy for integral control of deforestation and sustainable forest management, where this concept has been incorporated and it is expected that by the end of 2017 or beginning of 2018 the process of defining these areas for the country will begin.

The details about this variable in the total area and in Amazon region for the period between 2010 and 2015 are presented in **Table 8** del **Anexo 5**.

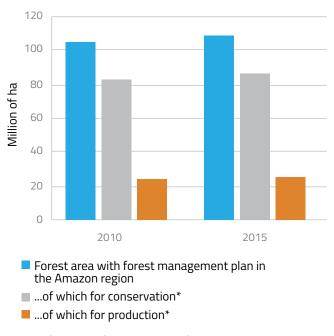
# Forest Management Plans

The total forest area under a management plan in the MC was almost 145 million hectares in 2015, representing nearly 20% of the total forest area. Highlighting Ecuador (43%), Suriname (41%), Peu (39%) and Guyana (33%) as the countries with the highest proportion of their forests with management plans in 2015.

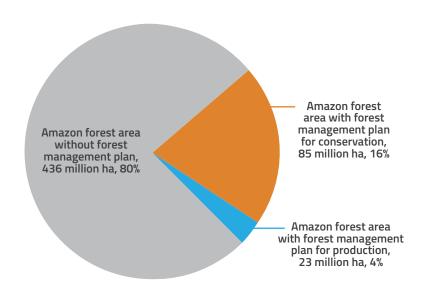
The total forest area with management plans for production and conservation in 2015 represented 5 and 13%, respectively.

For the Amazon Region, a little more than 108 million hectares or 20% of the Amazon forest area (six countries, accounting for 91% of the total Amazon forest) were reported with management plans in 2015. Of this area, 21% is covered by management plans for production and 79% are management plans for conservation (**Figures 15 and 16**) From 2010 to 2015, there was a greater increase in areas with management plans for conservation than for production.

**Figure 15.** Amazon forest area with forestry management plans in the MC of ACTO in 2015



<sup>\*</sup> Information not available for Colombia and Venezuela. The data refers to 91% of the total forest area.



**Figure 16.** Proportion of the forest area in Amazon region with forestry management plans for production and conservation in MC of ACTO in 2015\*

The details about this variable in total area and in Amazon Region between 2010 and 2015 are presented on **Table 9** del **Anexo 5**.

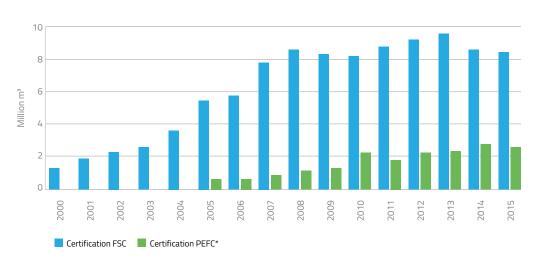
# **Forest Management Certifications**

The total certified forest area in 2015 was over 11 milion hectares in 6 of the MC, 3/4 were certificated by the Forward Stewardship Council (FSC) system and ¼ by the Programme for the Endorsement of forest Certification (PEFC), which only occurs in Brazil (2,7 million ha). Since 2000 Bolivia and Brazil were in the lead as the countries with more certificated forest area, but they had different trayectories: in the case of Bolivia, the increase of the certified area was maintained until 2007/2008, decreasing until 2015, almost to the same level of 15 years befores, while in Brazil the area doubled in this period of 15 years. Between 2006 and 2009, there was an increase in the total area of certified forest in several countries, notably

in Peru, Suriname and Colombia. Overall, althoughcertified forest area has increased since 2000, it still accounts for just over 1% of the total forest area in the region (**Figure 17**).

At the level of the Amazon Region, by 2015, 0,6% of the forest area (3,3 million ha) was certified in four of the countries (Bolivia, Brazil, Peru and Suriname). From 2000 to 2008 an annual increase of the certified area was registered, but soon a reduction trend began until 2014, with an increase in 2015. The largest area of certified Amazon forest was registered between 2003 and 2008 in Bolivia, when more than 1,5 million hectares of forest (representing almost 4% of the forest) were certified.

<sup>\*</sup>Information not available for Colombia and Venezuela. Data reported refer to 91% of the total area of Forest In Amazon Region.



**Figure 17**. Forest area certifiedby the Forward Stewardship Council (FSC) and by the Programme for the Endorsement of forest Certification (PEFC)<sup>6</sup> in the MC of ACTO in 2015

Data on certified forest areas, total and in the Amazon Region, how they changed overtime, are presented on **Table 10 - Annex 5**.



<sup>&</sup>lt;sup>6</sup> Brazilian Certification Programme. For more information, acces: http://www.pefc.es/pefc.html

<sup>\*</sup> These data are only from Brazil in an entire country level.

# DISCUSSION AND RECOMMENDATIONS

#### Discussion

### Availibility and quality of data

From the tables in **Annex 5**, with data available by country for the variables considered in this report, there is generally a good availability of data for at least six of the Member Countries in the different variables. However, there are data gaps for some important variables, although the trend is to have fewer gaps for the most recent years.

The variables that presented the greatest difficulty were: Extraction of firewood, Area of forest designated for conservation and Area of planted forest. In some countries there were gaps for the Amazon region. This situation regarding the absence of data could be explained by: lack of data (especially in the first two reporting years, 2000 and 2005) or collection of data in process, difficulties in reconciling data from different sources or decentralized agencies, or difficulties with some definitions or concepts adopted for purposes of the report that differ from what is in the country, among others. Some specificities on data at the country level:

- Colombia did not report data for areas of production forest or multiple use forest (for lack of available data), extraction of firewood, forest area destined to maintain permanent forest land use (for lack of adequate projection to estimate this area), and areas of forest with a different management plan for production or conservation.
- Bolivia did not report data on forest plantations established in the country (because they are still in the process of monitoring and evaluating) or on firewood extraction; in addition, the data for wood extraction only covers from 2011.

- Venezuela did not report data for the Amazon region of the planted forest area, area of production forest, timber extraction and forest ownership; in addition, of the forest area within protected areas for 2000 and 2005.
- Peru did not report data for the forest area designated for conservation or forest within protected areas in 2000 and 2005.
- Guyana had no data available from the forest area designated for conservation between 2000 and 2010 at the time of its national report.

Clearly, data availability and reliability vary across countries, reflecting to a large extent differences between countries with well-established forest inventory and monitoring programs and those still building those capacities.

A relevant reference in this sense is found in a study developed on the basis of information from the FRA 2015 (Romijn et al., 2015), which analyzes the national capacities for the remote monitoring and detection of the forest area between 2005 and 2015. Using part of the data of this study, Table 6 shows that Bolivia, Brazil, Colombia and Peru have developed for a decade a very good capacity for the monitoring of the change in the area of forest and its capacities in remote sensors; besidesn, the capacities for forest inventory are generally more limited (Romijn et al., 2015).

**Table 6.** Indicator values of the capacities of ACTO Member Countries to monitor changes in the area of forest and remote sensing, and for the forest inventory, between 2005 and 2015. Source: Romijn et al. 2015)

Country	Monitoring of changes in forest area and capacity of remote sensing*			Capacity for forest inventory*		
	2005	2010	2015	2005	2010	2015
Bolivia	5	5	5	4	4	4
Brazil	5	5	5	3	3	3
Colombia	5	5	5	1	2	4
Ecuador	4	4	5	1	1	4
Guyana	1	1	5	1	2	4
Peru	5	5	5	4	4	4
Surinam	4	4	5	2	2	3
Venezuela	4	4	5	1	1	1

<sup>\*</sup> The codes correspond to the following indicator values: 1 = low, 2 = limited, 3 = medium, 4 = regular, 5 = good.

### **Unreported Variables**

The 11 Amazon variables reported in this report are part of a broader set of variables initially proposed (Annex 1), of which, in agreement among Member Countries the following variables were excluded:

Topic II: PRODUCTION

- Growing stocks and forest growth rate, and their changes overtime
- Biomass above ground

Topic V: ALTERATIONS AND FOREST DEGRADATION

Number of fires ( of which forest fires)

Topic VII: ECONOMY/ LIVELIHOODS

• o Formal employment in the forest sector

For these variables some countries indicated difficulties to report (either at the national level,

and / or particularly in the Amazon region) due to the lack of (reliable) data or even because of the use of a different indicator for the variable (such as the number of heat sources instead of the number of forest fires).

Undoubtedly, inclusion in this report of these variables (and other equally relevant variables reported for FRA 2015) would have provided a better information base on the status of the forest and its contributions to sustainable development, as well as an adequate promotion of the sector. For example, having data on forest fires can help explain some of the natural forest loss. Information on biomass and carbon stocks in forests are important indicators of the productive potential, energy potential and carbon sequestration capacity of forests (FAO 2016). Data on the number of jobs generated by activities in the forest make it possible to quantify the social and economic benefits of forests, including non-timber products

### Trends on Forest in the Amazon Region

The informations presented in the national reports allow us to detect some trends in the forest state in the Amazon Region. Positive trends include:

- There is a clear trend towards a reduction in the rate of forest loss in the Amazon regionof 50% between 2000 and 2015.
- There was an increase in the area of planted forest above 100 % in the last 10 years, mainly due to activity in Brazil and Peru.
- The area designated for biodiversity conservation: duplicated in the last 15 years, increasing to more than 90 million hectares (17% of the Amazon forest area in 2015).
- Forest area within protected areas: Increased by more than 50 percent in the last 15 years, accounting for about 2/5 of the Amazon forest area in 2015 (212 million hectares).

On the other hand, as far as the data allow, there are certain trends that deserve to be analyzed with more information, such as:

- The relative stagnation of timber production in the region
- Reduction in certified Amazon forest area

#### Sustainable Management of the Amazon forest

In terms of forest management, the data generated in this report show the following:

 All countries have policies and regulations that govern and guide sustainable forest management operations at the national level. Legislation and regulations that support sustainable forest management specifically for Amazonian forests have already been developed in seven of the eight countries.

- All the countries have carried out or have in execution a national forest inventory that allows to evaluate and to monitor in time the extension and quality of the forest, at national level as in the Amazon region.
- More than 80 percent of the Amazon forest has been allocated by countries to maintain permanent forest land use, which is a clear indication of favorable policies by governments towards the conservation of forests for their permanent use.

However, only 11 percent of the Amazon forest in six countries that reported, had management plans in 2015. Although the area with management plans is increasing, it is still a very low proportion. There are no estimates of the level of effective implementation of these plans in the field.

Regarding forest certification by 2015, 0.3% of the Amazon forest area (1.7 million hectares) was certified in four of the MCs and the tendency was rather to reduce this area.

This situation of few areas of the Amazon forest intended primarily for production and multiple use differs with the significant increase in forest areas designated for biodiversity conservation and within protected areas.

The existing regulatory framework for productive activity in Amazonian forests is often restrictive for most of the direct actors in the use and management of forests (Martínez Montaño 2008, Carvalheiro et al., 2008, Ibarra et al., 2008, Sabogal et al. al. 2008, FAO 2012a, b). This may be one of the causes for lower production and a relative reduction of forest areas for production purposes, although they have a much greater potential for extraction using good management practices.

### Recommendations

- Establish a road map together with Member Countries to overcome information gaps and the approval of variables for a second regional report, based on common definitions and methodologies for collecting, analyzing and reporting data.
- Establish a frequency (preferably five years)
  for the generation of the regional report that
  has a type of synchronization with the FRA and
  that harmonizes with other reports that the MC
  must elaborate.
- MC are suggested to formally nominate a technical liaison for the preparation of the Regional Report, preferably with experience in FRA reports. Likewise, consider the participation of the Observation Rooms of the Forest Cover Monitoring Project in the Amazon Region of ACTO, to support the generation and preparation of information on the variables of the Regional Report in each country.

- Ensure that resources are available within national systems in the MC, in order to maintain such reports.
- Promote the cooperation of MC in the area of national forest inventories, especially with a view to sharing experiences and harmonizing terms, definitions and variables that contribute to the comparability of results and improvement of future regional reports on the status of the forests of the Amazon region. To do this, ACTO could contact FRA focal points in each MC for the work of an upcoming report to be prepared under its leadership.
- Support the wide dissemination of this regional report at the national and subnational levels, including government agencies and nongovernmental organizations, communities, the private sector, and financial and development cooperation agencies.

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# **ANNEXES**

#### **ANNEX 1**

#### Variables of Data and Information collection

#### Introduction

The present form is a document, to collect information, that allows the Permanent Secretariat of the Amazon Cooperation Treaty Organization (ACTO) and its Member Countries to jointly analyse and share, information the Amazon forests and to generate a regional perspective on its management and conservation state, through a regional report.

This form, which maintains the main characteristics of the questionnaire generated by the global forest resources assessment report "FRA-2015", guides the work of processing and recording data and information that the Member Countries collected for the first regional report on the status of the Amazon forest, and follows the methodology and definitions used in the FRA-2015, but focuses only on the selected "ACTO variables".

The form also presents, as a reference, the national variables of the FRA-2015, from which the the "ACTO variables" are derived. They have been worked on by the Member Countries in the development of FRA-2015, and their data and information have already been processed and validated the national level, being available for their eventual use in the analysis stage of the results for the Amazon regional report.

This is the first time that ACTO has prepared a regional report on the status of the Amazon forest , using a data collection form as a tool. Surely there will be some stages that can be improved, but at the same time we believe that the collaborative work between the Member Countries in the development of this report will overcome the potential obstacles to be found.

We hope the structure of the form is adequate and clear. In case of questions, please write to:

Theresa Castillion Environment Coordinator of ACTO <u>theresa.elder@otca.org.br</u>

# Classification of topics, questions and ACTO variables chosen for the first regional report on the status of the Amazon forest

Included are 8 topics from CFRQ - Collaborative Questionnaire on Forest Resources prepared by FAO together with ITTO, Forest Europe (FE), the Central African Forestry Observatory (OFAC), United Nations Economic Commission for Europe(UNECE) and the The Montréal Process Working Group (MPWG) in order to reduce the entry and reporting of data that many countries are required to do. The FRA column (Evaluation of World Forest Resources) corresponds to the variables reported in FRA-2015.

The form for the collection of Amazon data and information from the member countries which includes the topics, questions and the chosen ACTO variables can be found in Annex II.

#### **Categories and Definitions of FRA 2015**

	Topic I: forest area and its characteristics					
Question 1: What is the forest	Question 1: What is the forest area and other forested land and how have they changed overtime?					
CATEGORY	DEFINITION					
Forest	Lands that extend for more than 0.5 hectares with trees of a height greater than 5 m and a canopy cover greater than 10 percent, or trees capable of reaching this height in situ. Does not include land subject to predominantly agricultural or urban use					
Deforestation	The conversion of the forest to other land uses or the permanent reduction of canopy cover below the minimum threshold of 10 percent					
Question 2: What are the natu	ural and planted forest areas and how have they changed overtime?					
CATEGORY	DEFINITION					
Forest	Lands that extend for more than 0.5 hectares with trees of a height greater than 5 m and a canopy cover greater than 10 percent, or trees capable of reaching this height in situ. Does not include land subject to predominantly agricultural or urban use					
Deforestation	The conversion of the forest to other land uses or the permanent reduction of canopy cover below the minimum threshold of 10 percent					
	Topic II: PRODUCTION					
Question 4: What is the forest	t production situation and how has it changed overtime?					
CATEGORY	DEFINITION					
Production forest	Forest Area mainly designated for timber, fiber, bioenergy and non-timber forest products.					
Multiple use Forest	Forest Area mainly designated for more than one function and none of them can be considered as a predominant one.					
Total timber extraction	The total of commercial roundwood and firewood extracted					
of which is firewood	The wood extracted for energy production, independently if it is for industrial, commercial or domestic use.					
	Topic IV: BIODIVERSITY / CONSERVATION					
Question 6: Which is the forest overtime?	st area protected and designed for biodiversity conservation and how has it changed					
CATEGORY	DEFINITION					
Biodiversity Conservation	Forest Area mainly designated for biodiversity conservation. It includes, but is not limited to, the areas designated for the conservation of biodiversity within protected areas					
Forest Area within protected areas	Forest area located within officially established protected areas, regardless of the purposes for which these protected areas have been established.					

	Topic V: ALTERATIONS AND FOREST DEGRADATION
Question 8: What is the fores	
CATEGORY	DEFINITION
Number of fires	Number of fires per year.
Burned land area	Burned area per year
of which is forest	Burned area per year that is forest
Burned land area in the Amazon Region	Burned area per year in the Amazon Region
of which is forest in the Amazon Region	Burned forest area per year in the Amazon Region
Topic VI: ME	ASURING THE PROGRESS MADE TOWARDS SUSTAINABLE FOREST MANAGEMENT
i: Enabling	genvironment for sustainable forest management at the national level
Question 10: What is the fore sustainable forest manageme	st policy and the regulatory framework that exists to support the implementation of ent?
CATEGORY	DEFINITION
Legislation and regulations that support sustainable forest management	Legislation, regulations and programmes that govern and guide sustainable forest management, operations and use.
Question 12: What forest are	ea is destined to permanent forest use of the land and how has it changed overtime?
CATEGORY	DEFINITION
Forest area destined for permanent forest use of land	Forest area that has been designated or expected to be reserved as forest and has little probability to be converted in other land use.
of which in permanent forest zone (subcategory)	Forest area that has been designated by law or regulation to be reserved in the quality of forest and cannot be converted in another type of land use.
Forest area in the Amazon Region destined for permanent forest use of the land	Forest area in the Amazon Region that has been designated or is expected to be reserved as forest and has little probability to be converted into other land use.
of which permanent forest use in the Amazon Region (subcategory)	Forest area in the Amazon Region that has been designated by law or regulation to be reserved in forest quality and cannot be converted to another type of land use.
Question 13: How does your o	country measure and inform on the progress made towards sustainable forest management
CATEGORY	DEFINITION
Forest area monitored by a national forest monitoring framework.	Forest area monitored through a national framework or system(s) that provides basic measurement in the periodical monitoring of the extension and quality of the forest .
ii. Pros	gress at operational scale towards sustainable forest management
Question 14: What is the fore	st area with a forest management plan and how is it monitored?
CATEGORY	DEFINITION
Forest area with a forest management plan	Forest area with a management plan in long term, documented, with determined management objectives, and that is periodically revised.
of which for production (subcategory)	Forest management plan that is mainly focused on production.
of which for conservation(subcategory)	Forest management plan that is mainly focused on conservation.
Question 16: What forest area	a is under an forest certification scheme independently verified?

CATEGORY	DEFINITION	
FSC Certification	Forest area certified by the certification scheme: Forest Stewardship Council	
PEFC Certification	Forest area certified by the forest certification scheme: Programme for the Endorsement of Forest Certification	
Other	her Forest area certificated by other national or international forest certification schemes	
	Topic VII: ECONOMY/ MEANS OF SUBSISTENCE	
Question 18: Whose forests a	re these, who manages them and how has it changed overtime?	
CATEGORY	DEFINITION	
Public Property	State property forest; or administrative units of public institutions; or property institutions or corporations of public administration.	
Private Property	Forest that belongs to individuals, families, communities, private cooperatives, corporations or other private commercial entities, religious institutions or private learning centers, private pension or investment funds, non-governmental organizations (NGO), associations for the nature conservation and other private institutions.	
Unknown property	Forest area where the owner is unknown, including the areas where the property is under discussion or it is not clear.	
Question 19: How many peop	le are directly employed in the forest sector?	
CATEGORY	DEFINITION	
Formal employment equivalent to complete dedication (EDC)	Unit of measure equivalent to a person working an entire journey during a specific reference period.	
Formal employment in the forest sector	Formal employment in activities related to the production of goods derived from forests. This category corresponds to ISIC/NACE Rev. 4 activity A02 (Forestry and timber extraction).	

#### **ANNEX 2**

#### REPORT ON THE STATUS OF FORESTS IN THE AMAZON REGION



Form for the Collection of Amazon Data and Information (NAME OF THE COUNTRY)

#### Introduction

The present form is a document, to collect information, that allows the Permanent Secretariat of the Amazon Cooperation Treaty Organization (ACTO) and its Member Countries to jointly analyse and share, information the Amazon forests and to generate a regional perspective on its management and conservation state, through a regional report.

This form, which maintains the main characteristics of the questionnaire generated by the global forest resources assessment report "FRA-2015", guides the work of processing and recording data and information that the Member Countries collected for the first regional report on the status of the Amazon forest , and follows the methodology and definitions used in the FRA-2015, but focuses only on the selected "ACTO variables".

The form also presents, as a reference, the national variables of the FRA-2015, from which the "ACTO variables" are derived. They have been worked on by the Member Countries in the development of FRA-2015, and their data and information have already been processed and validated the national level, being available for their eventual use in the analysis stage of the results for the Amazon regional report.

This is the first time that ACTO has prepared a regional report on the status of the Amazon forest , using a data collection form as a tool. Surely there will be some stages that can be improved, but at the same time we believe that the collaborative work between the Member Countries in the develoment of this report will overcome the potential obstacles to be found.

We hope the structure of the form is adequate and clear. In case of questions, please write to:

Theresa Castillion Environment Coordinator of ACTO theresa.elder@otca.org.br

# CLASSIFICATION OF THE TOPICS, QUESTIONS AND ACTO VARIABLES

		CFRQ*	FRA	OTCA
	Topic I: FOREST AREA AND ITS CHARACTERISTIC	CS		
Question 1: Wh	at are the forests areas and other forested land areas and how have	they changed over	time?	
	1.1 Forest	X		
	of which forest in the Amazon Region			Х
	1.2 Other forested lands	X		
	1.3 Other lands	X		
	1.3.1of which covered by trees	X		
	1.4 Continental Waters	X		
	1.5 Total country area	X		
Variables	1.6 Forest expansion	X		
	1.6.1of which afforestation	X		
	1.6.2of which natural forest expansion	X		
	1.7 Deforestation	X		
	of which in forest in the Amazon Region			Х
	1.7.1of which caused by man	X		
	1.8 Reforestation	X		
	1.8.1of which artificial reforestation	X		
uestion 2: Wh	at are the natural and planted forest areas and how have they chan	ged overtime?		
<u> </u>	2.1 Natural Forest	X		Х
	of which natural forest in the Amazon Region			Х
	2.2. Other forests regenerated naturally	X		
	2.2.1 of which with introduced species	X		
	2.2.1.1of which Naturalized	X		
	2.3 Planted forest	X		
Variables	of which planted forest in the Amazon Region			Х
	2.3.1of which with introduced species	X		
	2.4 Primary forest transition matrix		Х	
	2.5 Mangrove areas		Х	
	2.5.1 of which are planted		Х	
	de la cual en bosque en la región amazónica			X
	Topic II: PRODUCTION			
Question 3: Whovertime?	at are the existences in formation and what is the rate of forest grow	wth? And how have	both chan	ıged
	3.1 Volume in formation in the forests	X		Х
	3.1.1of which conifers	X		
	3.1.2 of which broadleaf	X		
	3.1. 3of which in the Amazon Region**			Х
	3.2 Existences in formation in other forested lands	X		
Variables	3.2.1 of which conifers	X		†
	3.2.2 of which broadleaf	X		†
	3.3 Volume of the 10 most common species	X		+
	3.4 Net annual increment	X		
	3.41 of which conifers	X		
	3.4.2 of which broadleaf	X	-	+

	3.5 Biomass on the soil	X		
	in the Amazon Region**	//		Х
	3.6 Biomass under the soil	X		
	3.7 Dead wood	X		
	3.8 Carbon in the biomass on the soil	X		
Variables	of which in the Amazon Region**	^		X
	3.9 Carbon in the biomass under the soil	X		
	3.10 Carbon in dead Wood	X		
	3.11 Carbon in fallen leaves	X		
	3.12 Carbon on the soil	X		
uestion 4: Wh	at is the forest production situation and how has it changed overtime?	^		
ucstion 4. Will	4.1 Production forest	Х		
	of which production forest in the region			x
	4.2 Multiple-use forest	X		
Variables	of which multiple use in the region			х
	4.3 Commercial value of non-timberforest products	l <sub>X</sub>		
	4.4 Total timber extraction	X		
	of which total timber extraction in forest in the Amazon Region***			Х
	Topic III: PROTECTIVE FUNCTIONS AND SELECTIVE ECOSYSTEM SER			74
uestion 5: Wha	at forest areas are managed for soil and water resources protection and for		m service	s?
<u> </u>	5.1 Soil and water resources protection	X		
	5.1.1 of which production of clean water	Х		
	5.1.2 of which coastal stabilization	Х		
	5.1.3of which desertification control	Х		
	5.1.4 of which landslide control	Х		
	5.1.5 of which soil erosion, protection against floods or for reduction	Х		
Variables	5.1.6 of which others	Х		
	5.2 Ecosystem services, cultural and spiritual values		X	
	5.21 of which public recreation		Х	
	5.2.2 of which storage or carbón fixation		Х	
	5.2.3 of which cultural or spiritual services		Х	
	5.2.4 of which others		Х	
	Topic IV: BIODIVERSITY/CONSERVATION			
uestion 6: Wh	at forest area is protected and designed for biodiversity conservation and h	now has it	changed	overtime
	6.1 Biodiversity Conservation	X		
Variables	of which biodiversity conservation in the region			Х
variables	6.2 Forest Area within protected areas	X		
	of which in protected áreas in the Amazon Region			Х
	Topic V: ALTERATIONS AND FOREST DEGRADATION			
uestion 7: Wha	at forest area is affected by invasive woody plant species?			
Variables	7.1 Invasive woody plant species list		X	
va. labtes	7.2 Forest areas affected by invasive woody plant species		X	

	8.1 Total area of burned land	X		
	8.1.1of which in the forest area	X		
	8.2 Number of fires	X		
Variables	8.21of which wildfires	X		
variables		^		X
	of which wildfires in Amazon Region	X		^
	8.3 Forest area damaged by: insects, diseases and severe weather events outbreaks	^		
uestion 9: Wh	at is the forest area with a reduced canopy?			
Variables	9.1 Forest area with a reduced canopy		Х	
	Topic VI: MEASURING PROGRESS MADE TOWARDS THE SUSTAINABLE FOREST	MANAG	EMENT	
	i. Enabling environment for sustainable forest management on nat	ional le	vel	
	hat forest policy and regulatory framework exists to support the implement	ation of	the sustai	nable for
nanagement?	10.1 Policies that support the sustainable forest management		X	
	10.11of which in public property forests		X	
	10.1.2 of which in private property forests		X	
	10.2 Legislation and regulations that support the sustainable forest		X	
Variables	management		^	
	10.2.1 of which in public property forests		X	
	10.2.2 of which in private property forests		Х	
	10.2.3of which in the Amazon Region****			х
Question 11: Is policy?	there a national platform that promotes the participation of actors in the de	evelopm	ent of the	forest
/ariables	11.1 Platform of actors at national level		X	
	11.1 Platform of actors at national level That forest area is destined for permanent forest use of land and how h	as it cha		rtime?
		as it cha		rtime?
Question 12: W	that forest area is destined for permanent forest use of land and how h	T		rtime?
	That forest area is destined for permanent forest use of land and how had 12.1 Forest area destined for permanent forest use of land 12.1.1 of which permanent forest zone of which is permanent forest use of land in the Amazon	Х		rtime?
Question 12: W  Variables  Question 13: Ho	That forest area is destined for permanent forest use of land and how had 12.1 Forest area destined for permanent forest use of land 12.1.1 of which permanent forest zone	X	anged over	X
Question 12: W  Variables  Question 13: Ho	that forest area is destined for permanent forest use of land and how had 12.1 Forest area destined for permanent forest use of land 12.1.1 of which permanent forest zone  of which is permanent forest use of land in the Amazon Region  we does your country measure and report on progress made towards susta	X	anged over	X
Variables	that forest area is destined for permanent forest use of land and how had 12.1 Forest area destined for permanent forest use of land 12.1.1 of which permanent forest zone of which is permanent forest use of land in the Amazon Region	X	orest mana	X
Question 12: W  Variables  Question 13: Ho	That forest area is destined for permanent forest use of land and how had 12.1 Forest area destined for permanent forest use of land 12.1.1 of which permanent forest zone of which is permanent forest use of land in the Amazon Region  www.does.your.country.measure.and.report.on.progress.made.towards.susta	X	orest mana	X
Question 12: W  Variables  Question 13: Ho	that forest area is destined for permanent forest use of land and how had 12.1 Forest area destined for permanent forest use of land 12.1.1 of which permanent forest zone  of which is permanent forest use of land in the Amazon Region  w does your country measure and report on progress made towards susta 13.1 Forest area monitored by a National Forest Inventory 13.2 Forest area monitored by other national field evaluations 13.3 Forest area monitored by upgrades of other national resources	X	prest mana	X
Question 12: W Variables Question 13: Ho national level?	that forest area is destined for permanent forest use of land and how had 12.1 Forest area destined for permanent forest use of land 12.1.1 of which permanent forest zone  of which is permanent forest use of land in the Amazon Region  w does your country measure and report on progress made towards susta  13.1 Forest area monitored by a National Forest Inventory  13.2 Forest area monitored by other national field evaluations  13.3 Forest area monitored by upgrades of other national resources nacionales	X	prest mana	X
Question 12: W  Variables  Question 13: Ho	That forest area is destined for permanent forest use of land and how had 12.1 Forest area destined for permanent forest use of land 12.1.1 of which permanent forest zone  of which is permanent forest use of land in the Amazon Region  w does your country measure and report on progress made towards susta  13.1 Forest area monitored by a National Forest Inventory  13.2 Forest area monitored by other national field evaluations  13.3 Forest area monitored by upgrades of other national resources nacionales  13.4 Forest area monitored by national experts estimate	X	prest mana	X
Question 12: W Variables Question 13: Ho national level?	That forest area is destined for permanent forest use of land and how had 12.1 Forest area destined for permanent forest use of land 12.1.1 of which permanent forest zone  of which is permanent forest use of land in the Amazon Region  who does your country measure and report on progress made towards susta  13.1 Forest area monitored by a National Forest Inventory  13.2 Forest area monitored by other national field evaluations  13.3 Forest area monitored by upgrades of other national resources nacionales  13.4 Forest area monitored by national experts estimate  13.5 Type of report on forest used national level	X	prest mana	X
Question 12: W Variables Question 13: Ho national level?	That forest area is destined for permanent forest use of land and how had 12.1 Forest area destined for permanent forest use of land 12.1.1 of which permanent forest zone  of which is permanent forest use of land in the Amazon Region  we does your country measure and report on progress made towards susta  13.1 Forest area monitored by a National Forest Inventory 13.2 Forest area monitored by other national field evaluations 13.3 Forest area monitored by upgrades of other national resources nacionales 13.4 Forest area monitored by national experts estimate 13.5 Type of report on forest used national level 13.5.1 Report on criteria and indicators	X	orest mana	X
Question 12: W Variables Question 13: Ho national level?	That forest area is destined for permanent forest use of land and how had 12.1 Forest area destined for permanent forest use of land 12.1.1 of which permanent forest zone  of which is permanent forest use of land in the Amazon Region  who does your country measure and report on progress made towards susta  13.1 Forest area monitored by a National Forest Inventory  13.2 Forest area monitored by other national field evaluations  13.3 Forest area monitored by upgrades of other national resources nacionales  13.4 Forest area monitored by national experts estimate  13.5 Type of report on forest used national level  13.5.1 Report on criteria and indicators  13.5.2 National periodic report on the state of the forests	X	prest mana	X
Question 12: W Variables Question 13: Ho national level?	That forest area is destined for permanent forest use of land and how had 12.1 Forest area destined for permanent forest use of land 12.1.1 of which permanent forest zone  of which is permanent forest use of land in the Amazon Region  we does your country measure and report on progress made towards susta  13.1 Forest area monitored by a National Forest Inventory  13.2 Forest area monitored by other national field evaluations  13.3 Forest area monitored by upgrades of other national resources nacionales  13.4 Forest area monitored by national experts estimate  13.5 Type of report on forest used national level  13.5.1 Report on criteria and indicators  13.5.2 National periodic report on the state of the forests  13.5.3 Others	X	orest mana  X  X  X  X  X  X  X  X	X

estion 14: WI	<ul> <li>ii. Progress on a operational scale towards sustainable forest management plan and how is it monitored</li> </ul>			
C3C1011 14. W	14.1 Forest area with a forest management plan		X	
	14.1.1 of which for production		Х	
	of which for production in the Amazon Region			Х
	14.1.2 of which for conservation		Х	
	of which for conservation in the Amazon Region			Х
Variables	14.2 Monitoring of the forest management plans		Х	
variables	14.2.1 Soil and water management		Х	
	14.2.2 Forest definition with a high conservation value		Х	
	14.2.3 Considerations of a social nature\ and community participation		Х	
	14.3 Percentage of forest area with a forest management plan that is monitored annualy		Х	
uestion 15: Ho	w do different actors participate in making decisions on thet managemen	t of publ	ic owned fo	orests?
	15.1 Type of contributions of different actors		Х	
Variables	15.1.1 In planning stage		Х	
variables	15.1.2 In operations stage		X	
	15.1.3 In the review of the operations		X	
uestion 16: Wl	nat is the area of forest under an independent forest certification scheme?			
	16.1 Forest area certificated that uses a national and\or international certification of forest management.	X		X
	16.1.1 of which FSC	X		
Variables	16.1.2of which PEFC	X		
	16.1.2of which others			X
	of which FSC, PEFC and/or others in Amazon Region			Х
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Variables	17.1 Forest tickets		Х	
variables	17.2 Public expenses in the forest sector		Х	
uestion 18: Wl	no owns the forests , who manages themand how has it changed overtime?	•		
	18.1 Public Property	X		
	18.1.1 of which State property at national level	X		
	18.1.2 of which State property at the local or sub-national government level	Х		
	18.1. 3of which public property in the Amazon Region			X
	18.2 Private Property	Х		
Variables	18.2.1of which individual property	Х		
	18.2.2 of which owned by commercial entities and institutions	Х		
	18.2.3 of which owned by local communities, indigenous and tribal communities	Х		
	18.2. 4 which is privately owned in the Amazon Region			Х
	18.3 Unknown property	Х		
	which is unknown property in Amazon Region****			Х

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	18.5 Holder of management rights and use of public forests - Individuals	X		
Variables	18.6 Holder of management rights and use of public forests - Private Companies	X		
	18.7 Holder of management rights and use of public forests – Communities	X		
	18.8 Holder of management rights and use of public forests – Others	X		
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	19.1 Formal employment in the forest sector	Х		Х
Variables	of which formal employment in the forest sector inAmazon Region***			х
	19.1.1of which womem	Х		
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<sup>\*</sup>CFRQ - Collaborative Questionnaire about forest resources: It is a questionnaire elaborated by FAO, ITTO, Forest Europe (FE), Central African Forest Observatory (OFAC), United Nations Economic Commission for Europe (UNECE) and the the Montréal Process Working Group (MPWG) in order to reduce the entry and reporting of data that many countries need to doe. The Collaborative Forest Resources Questionnaire (CFRQ) is part of the process of evaluating the world's forest resources FRA-2105.

<sup>\*\*</sup> A new variable identified with the potential to be sellected. Its incorporation will be defined in the next virtual meeting in the process of preparing the report.

<sup>\*\*\*</sup> ACTO variable proposed and not yet selected, due to the need for a longer period of time for internal analysis in four or more countries. Its incorporation will be defined in the next virtual meeting to accompany the process of preparing the

<sup>\*\*\*\*</sup> A new variable identified and selected to be incorporated in the report.

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# Elaboration of the report and referred functionarissen

The present report has been elaborated by:

(FAMILY NAME, Name)	Institution / DIRECTIE	E-mail address

# Introduction (Optional)

### **Topic I: FOREST AREA AND ITS CHARACTERISTICS**

# 1 Question 1: What are the forest and other forest land areas and how have they changed overtime?

#### 1.1 Categories and Definitions of FRA 2015

Category	Definition
Forest	Lands that have an extension of at least 0,5 ha with trees higher than 5m and a canopy higher than 10 per cent, or with trees that have the capacity to reach this height in situ. It does not include the land that is predominantly used for agriculture or for urban occupation.
Deforestation	Forest conversion into other uses of land or the permanent reduction of the canopy to less than 10 per cent.

### 1.2 National Data

#### 1.2.1 Data Sources

#	The data sources references	Variable(s)	Year(s)	Additional Comments
1				
2				
3				
4				

#### 1.2.2 Classification and Definitions

National Class	Definition

#### 1.2.3 Original Data

1.3 Analysis and processing of national data

1.3.1 Estimation and Projection

#### 1.4 Datas

#### Table 1a

Catagonia	Area (1000 hectares)				
Category	2000	2005	2010	2015¹	
Forest					
of which in the Amazon Region					

<sup>&</sup>lt;sup>1</sup> In this space the available data is reported , the most updated as possible eventhough they are from previous years (2011, 2012, 2013, 2014) and with the proper reference.

#### Table 1b

Catagory	Establishment /Annual forest loss (1000 hectares/Year) <sup>2</sup>				
Category	2000	2005	2010	2015	
Deforestation					
of which in the Amazon Region					

<sup>&</sup>lt;sup>2</sup> The numbers from the years informed refer to the average for periods of 5 years , respectively 1998-2002, 2003-2007 and 2008-2012, respectively.

Comments related to data, definitions, estimates, sources, etc.		

#### Question 2: What are the natural and planted forest areas and how have they changed overtime?

#### 2.1 Categories and Definitions of FRA 2015 (adapted)

Term	Definition
Natural Forest	Primary forests and other naturally regenerated forests.
Planted forest	Forest predominantly composed of trees established through planting and/or deliberate sowing.

#### 2.2 National Data

#### 2.2.1 Data Sources

#	Data sourcereferences	Variable(s)	Year(s)	Additional Comments
1				
2				
3				
4				

#### 2.2.2 Classification and Definitions

National Class	Definition

## 2.2.3 Original Data

## 2.3 Analysis and processing of national data

### 2.3.1 Estimation and Projection

#### 2.4 Data

Table 2

Catagory	Forest Area (1000 hectares)					
Category	2000	2005	2010	2015		
Natural Forest						
of which natural forest in the Amazon Region						
Planted forest						
of which in the Amazon Region						
TOTAL						

Comments related to the data, definitions, estimate, sources, etc.		

## **Topic II: PRODUCTION**

## Question 4: What is the forest production situation and how has it changed overtime?

## 4.1 Categories and Definitions of FRA 2015

Term	Definition
Production forest   Forest area mainly designated for timber producction, fiber, bioenergy and/or nor forest products.	
Multiple-use Forest  Forest area mainly designated for more than one function and none of them can be considered as a predominant one.	
Total timber extraction   Total of commercial roundwood and firewood extracted	
of which firewood	The wood extracted for energy production, regardless if it is for industrial, commercial or domestic use.

#### 4.2 National Data

#### **4.2.1 Data Sources**

#	Data sourcereferences	Variable(s)	Year(s)	Additional Comments
1				
2				
3				
4				

#### 4.2.2 Classification and Definitions

National Class	Definition

# 4.2.3 Original Data

# 4.3 Analysis and processing of national data

# 4.3.1 Estimation and Projection

#### 4.4 Data

Table 4a

Catagory	Forest Area (1000 hectares)				
Category	2000	2005	2010	2015	
Production forest					
of which in the Amazon Region					
Multiple-use Forest					
of which in the Amazon Region					

Table 4b (filling this form is an outstanding activity until the decision to incorporate this variable in five or more countries)

	Category (1000 m3 without bark)		
Year	Total timber extraction	of which timber extraction in the Amazon Forest	of which is firewood extraction
2000			
2001			
2002			
2003			
2004			
2005			
2006			
2007			
2008			
2009			
2010			
2011			
2012			
2013			
2014			
2015			

Comments related to the data, definitions, estimate, sources, etc.		

#### Topic IV: BIODIVERSITY/CONSERVATION

# Question 6: What forest area is protected and designated for biodiversity conservation and how has it changed overtime?

## 6.1 Categories and Definitions of FRA 2015

Category	Definition
Biodiversity Conservation	Forest area mainly designated for biodiversity conservation. Including, but not limited to, areas designated for biodiversity conservation within protected areas.
Forest Area within protected areas	Forest area t within officially established protected areas

## 6.2 National Data 6.2.1 Data Sources

#	Data sourcereferences	Variable(s)	Year(s)	Additional Comments
1				
2				
3				
4				

#### 6.2.2 Classification and Definitions

National Class	Definition

## 6.2.3 Original Data

## 6.3 Analysis and processing of national data

## **6.3.1 Estimate and Projection**

#### 6.4 Data

Catagory	Forest Area (1000 hectares)				
Category	2000	2005	2010	2015	
Conservation of Biodiversity					
of which conservation of biodiversity in the Amazon Region					
Forest Area within protected areas					
of which in the protected áreas of the Amazon Region					

Comments related to the data, definitions, estimate, sources, etc.			

## **Topic V: ALTERATIONS AND FOREST DEGRADATION**

## Question 8: What forest area is damaged every year?

## 8.1 Categories and definitions

Category	Definition
Number of fires	Number of fires per year.

## 8.2 National Data

#### 8.2.1 Data Sources

#	Data sourcereferences	Variable(s)	Year(s)	Additional Comments
1				
2				
3				
4				

#### 8.2.2 Classification and Definitions

National Class	Definition

## 8.2.3 Original Data

# 8.3 Analysis and processing of national data

## 8.3.1 Estimate and Projection

#### 8.4 Data

Table 0		
Year	Number of Wildfires	wildfires in the Amazon Region
2000		
2001		
2002		
2003		
2004		
2005		
2006		
2007		
2008		
2009		
2010		
2011		
2012		
2013		
2014		
2015		

Comments related to the data, definitions, estimate, sources, etc.		

#### Topic VI: MEASURING THE PROGRESS MADE TOWARDS THE SUSTAINABLE FOREST MANAGEMENT

#### i. Enabling environment for sustainable forest management on national level

Question 10: What forest policy and regulatory framework is there to support the implementation of sustainable forest management

### 10.1 Categories and Definitions of FRA 2015

Category	Definition
Legislation and regulations that support the sustainable forest	Legislation, regulations and programmes that guide the sustainable forest management, operations and use.
management	

## 10.2 National Data 10.2.1 Data Sources

#	Data sourcereferences	Variable(s)	Year(s)	Additional Comments
1				
2				
3				
4				

#### 10.2.2 Classification and Definitions

National Class	Definition

## 10.2.3 Original Data

# 10.3 Analysis and processing of national data

## **10.3.1 Estimate and Projection**

#### 10.4 Data

Category		Check the boxes			
		National .		Subnational	
				of which directed in the Amazon Region	
Legislation and regulations that support the		Yes		Yes	
sustainable forest management		No		No	

Comments related to the data, definitions, estimate, sources, etc.		

# Question 12: What forest area is destined for permanent forest use of the land and how has it changed overtime?

## 12.1 Categories and Definitions of FRA 2015

Category	Definition
Forest area destined for permanent	Forest area that has been designated or is expected to be reserved as
forest land use	forest and has little probability to be converted in other land use.

## 12.2 National Data 12.2.1 Data Sources

#	Data sourcereferences	Variable(s)	Year(s)	Additional Comments
1				
2				
3				
4				

#### 12.2.2 Classification and Definitions

National Class	Definition

## 12.2.3 Original Data

# 12.3 Analysis and processing of national data

## 12.3.1 Estimate and Projection

#### 12.4 Data

Category	Forest Area 2010 (1000 hectares)	Forest Area 2015 (1000 hectares)
Forest area destined for permanent forest land use		
of which permanent forets land use in the Amazon Region		

Comments related to the data, definitions, estimate, sources, etc.		

# Question 13: How does your country measure and inform on the progress madetoward the sustainable forest management at national level?

## 13.1 Categories and Definitions of FRA 2015

Category	Definition
Forest area monitored by a national forest monitoring framework	Forest area monitored through national framework system (s) that provides measurements based on periodic monitoring of the extension and quality of forests.
National forest report	National report on the extension and the characteristics of forests that includes some measurement of the achieved progress towards sustainable forest management.

## 13.2 National Data 13.2.1 Data Sources

#	Data sourcereferences	Variable(s)	Year(s)	Additional Comments
1				
2				
3				
4				

#### 13.2.2 Classification and Definitions

National Class	Definition

## 13.2.3 Original Data

## 13.3 Analysis and processing of national data

## 13.3.1 Estimate and Projection

#### 13.4 Data

Category	Check Count on a national forest inventory in execution		of which % of advance in the Amazon Region		
Forget Inventory		Yes		%	
Forest Inventory	No			%	

Comments related to the data, definitions, estimate, sources, etc.				

## ii. Progress towards the operational scale to sustainable forest management

## Question 14: What is the forest area with a forest management plan and how is it monitored?

#### 14.1 Categories and Definitions of FRA 2015

Category	Definition
Forest area with a forest management plan	Forest area with a long term management plan , documented, with determined management objectives, and that is periodically revised.
of which for production (subcategory)	Forest management plan mainly focused on production.
of which for conservation (subcategory)	Forest management plan mainly focused on conservation.

### 14.2 National Data

#### 14.2.1 Data Sources

#	Data sourcereferences	Variable(s)	Year(s)	Additional Comments
1				
2				
3				
4				

## 14.2.2 Classification and Definitions

National Class	Definition

## 14.2.3 Original Data

## 14.3 Analysis and processing of national data 14.3.1 Estimate and Projection

## 14.4 Data

Tipo de plan forestal	Forest Area 2010 (1000 hectares)	Forest Area 2015 (1000 hectares)
Forest area with a forest management plan		
of which for production		
of which for production in the Amazon Region		
of which for conservation		
of which for conservation in the Amazon Region		

## Question 16: Which forest area is under independently verified forest certification scheme?

# 16.1 Categories and Definitions of FRA 2015 (adapted)

Category	Definition			
Certification FSC Forest area certified by the certification scheme: Forest Stewardship Council				
Certification PEFC	Forest area certified by the forest certification scheme: Programme for the Endorsement of Forest Certification			
Others	Forest area certified by other national or international forest certification schemes			

#### 16.2 National Data 16.2.1 Data Sources

#	Data sourcereferences	Variable(s)	Year(s)	Additional Comments
1				
2				
3				
4				

#### 16.2.2 Classification and Definitions

National Class	Definition

## 16.2.3 Original Data

## 16.3 Analysis and processing of national data 16.3.1 Estimate and Projection

#### 16.4 Data

Forest management	Forest Area (1000 hectares)								
certification	2000	2001	2002	2003	2004	2005	2006	2007	2008
FSC									
PEFC									
Others									
of which FSC, PEFC and in the Amazon Region									
	2000	2001	2002	2003	2004	2005	2006		
FSC									
PEFC									
Others									
of which FSC, PEFC and or in the Amazon Region									

omments related to the data, definitions, estimate, sources, etc.	

## Topic VII: ECONOMY/ MEANS OF SUBSISTENCE

## Question 18: Whose forests are these, who manages themand how has it changed overtime?

## 18.1 Categories and definitions of FRA 2015

Category	Definition
Public Property	State property forest; or that belongs to administrative units of the public institutions; or to the institutions or corporations of public administration.
Private Property	Forest that belongs to individuals, families, communities, private cooperatives, corporations or other private commercial entities, religious institutions and private learning centers, private pension or investment funds, non-governmental organizations, associations for the nature conservation and other private institutions.
Unknown property	Forest area where the owner is unknown, including the areas where the property is under discussion or it is not clear.

#### 18.2 National Data 18.2.1 Data Sources

#	Data sourcereferences	Variable(s)	Year(s)	Additional Comments
1				
2				
3				
4				

#### 18.2.2 Classification and Definitions

National Class	Definition

## 18.2.3 Original Data

# 18.3 Analysis and processing of national data

#### 18.3.1 Estimate and Projection

#### 18.4 Data

Catagory	Forest Area (1000 hectares)			
Category	2000	2005	2010	2015
Public Property				
of which public property in the Amazon Region				
Private Property				
of which private property in the Amazon Region				
Unknown property				
of which unknown property in the Amazon Region				
TOTAL				

Comments related to the data, definitions, estimate, sources, etc.	

## Question 19: How many people are directly employed in the forest sector?

## 19.1 Categories and Definitions of FRA 2015 (adapted)

(Filling this form is pending until the definition of the incorporation of the variables by five or more countries)

Category	Definition
Formal employment equivalent to complete dedication (EDC)	Unit of measurement equivalent to a person working full time during a specific reference period.
Formal employment in the forest sector	Formal employment in activities related to the production of goods derived from forests. This category corresponds to ISIC/NACE Rev. 4 activity A02 (Forestry and timber extraction).

# 19.2 National Data

#### 19.2.1 Data Sources

#	Data sourcereferences	Variable(s)	Year(s)	Additional Comments
1				
2				
3				
4				

#### 19.2.2 Classification and Definitions

National Class	Definition

#### 19.2.3 Original Data

## 19.3 Analysis and processing of national data

## 19.3.1 Estimate and Projection

#### 19.4 Data

Catagony	Employment (1000 years EDC)			
Category	2000	2005	2010	2015
Formal employment in the forest sector				
of which formal employment in the Amazon Region				

Comments related to the data, definitions, estimate, sources, etc.	

# **ANNEX 3**

Some used definitions by the Member Countries in the national reports

Forest	
FRA	Extended territories for more than 0,5 ha with trees higher than 5 meters and a canopy cover larger than 10%, or trees capable of reaching this height in situ. Does not include land subject to predominantly agricultural or urban use.
Bolivia	Extension greater than 0,5 ha territories that are characterized by being widely covered by trees, may be constituted by different trees species or by a predominant one, as well as undergrowth (sotoForest). Forests are made up of living agents (animals, insects, microorganisms, living beings, etc.) and non-linving organisms (water, air, soil, etc.)
Brazil	The classification of vegetation typologies into the categories of "Forest" used by FAO was defined by experts on each biome, who were involved in the preparation of FRA 2005. The definitions of each typology are described in the IBGE Vegetation Manual.
Colombia	Land occupied mainly by trees, that may contain shrubs, palms, guaduas, herbs and lianas, in which the tree canopy predominates with a minimun canopy density of 30%, a minimum height of the canopy ( in situ) of 5 meters at the moment of its identification and a minimum area of 1.0 ha. Tree cover from commercial forest plantations, palm crops, and trees planted for agricultural production are excluded
Ecuador	Plant community of at least one hectare, with trees of 5 meters tall and with a minimum of 30% coverage of the canopy or vegetal aerial layer. Includes: areas covered with bamboo and native palms, as long as these reach the minimum limit established in terms of height and canopy cover. Excludes: tree formations used in agricultural production systems, for example, fruits and african palm plantations, and agroforestry systems. Trees that grow in urban parks and gardens are also excluded.
Guayana	Forest land: Land classified as forest follows the definition as outlined in the Marrakech Accords (UNFCCC, 2001), Guyana has elected to classify land as forest if it meets the following criteria: tree cover of minimum 30%, at a minimum height of 5 meters, over a minimum area of 1 ha. Includes mixed forest, montane and steep forest, Wallaba/Dakama/Muri scrub swamp and marsh forest and mangrove forest. evergreen forest
Peru	Predominant arboreal ecosystem with a minimum cover of 10% in the projection of the treetops on the surface of the ground; the trees are of wood consistency and a minimum height of 5 meters for the Amazon Forest, on surfaces greater than 0.5 ha and with a minimum width of 20 meters . In the case of dense forest, it is structured in several layers.
Suriname	Land mainly covered by trees which might contain shrubs, palms, bamboo, grass and vines, in which tree cover predominates with a minimum canopy density of 30%, a minimum canopy height (in situ) of 5 m at the time of identification, and a minimum area of 1.0 ha
Venezuela	Vegetal community dominated by typically arboreal elements that form at least a more or less continuous layer of canopies (canopy), generally more than 5 m high. This term also includes the riparian forest, mangrove and forest plantation. Ecosystem covering areas equal to or greater than half a hectare (0.5 ha.), which has been formed spontaneously through the interplay between the specific biotic and abiotic factors of a given geographical area, characterized by dominance of individuals of tree forest species (Forest Law , 2013).
Deforestation	
FRA	The conversion of the forest to other land uses or the permanent reduction of canopy cover below the minimum threshold of 10 percent.
Bolivia	It is a process generally caused by human action which destroys the entire forest area of a determined area, mainly due to logging, burning and "chaqueos"
Brazil	Conversion of areas of primary forest type by anthropogenic actions for the development of agrosilvopastoral activities, detected from orbital platforms. Deforestation measured in the Amazon by clearcutting, is when the total forest cover is removed, being identified by areas with a shallow cut greater than 6.25 ha . Partial forest felling resulting from burning and selective logging is not recorded (Sources: INPE reports: Amazon Forest Cover Monitoring by Satellites - PRODES, DETER, DEGRAD Systems - 2008 and burnings 2007-2008 and monitoring of Amazon forest cover by satellites - 2008)
Colombia	Direct and/or induced conversion of forest cover to another type of land cover in a determined period of time (DeFries et al., 2006; GOFC-GOLD, 2009).

Ecuador	Complete deforestation is a process of anthropic conversion of the forest into other cover and land use; under the thresholds of height, canopy cover or area established in the definition of forest in a period of time, without considering areas of regeneration during the same period. The term excludes the areas of forest plantations removed as a result of harvesting or felling and the areas where the trees were extracted due to the forest harvesting, and where the forest is expected to regenerate naturally or with the help of silviculture techniques, unless harvesting is followed by logging of the remaining trees to introduce alternative land uses (Ministerial Agreement 116). Net deforestation is the difference between the loss and the gain on the forest surface (gross deforestation minus natural regeneration forests) over a period of time (Ministerial Agreement 116)).
Guyana	The long-term or permanent conversion of land from forest use to other non-forest uses (GOFC-GOLD, 2010).
Peru	Forest loss: Conversion of primary forest to secondary forest or agriculture.
Suriname	Defined as the direct and/or induced conversion of forest cover to another type of land cover in a given timeframe.
Venezuela	Natural or induced action that causes the removal of the forest cover in a determined area.
Natural Fore	st
FRA	Primary forests and other forests regenerated naturally
Bolivia	Natural or native forest: It is that forest where man has not intervened in its formation or repopulation.
Brazil	Correspond to the forests according to the brazilian definition, with the exception of planted forests.
Ecuador	<u>Native forest:</u> is the plant community that is characterized by the dominance of trees of different native species, ages and sizes, with one or more strata (Environment Ministry, 2011. Operational definition of the legend of the coverage and land use map ).
Guyana	Primary forest: Natural forest of native species, where there are no clearly visible indications of human activities and the ecological processes are not significantly disturbed. Forest lands unallocated and Protected areas
Peru	Primary forest: Forest ecosystem with original vegetation, characterized by the abundance of mature trees of upper or dominant canopy species, which has evolved naturally and has been little disturbed by human activities or natural causes.
Venezuela	Ecosystem covering areas equal to or greater than half a hectare (0.5 ha), which has been formed spontaneously through the interrelation between the specific biotic and abiotic factors of a given geographical area, characterized by dominance of individuals of tree forest species (Article 43 of The Forest Law, 2013).
Planted fore	st
FRA	Forest predominantly composed of trees established by planting and/or deliberate seeding.
Bolivia	Forest Implanted: The forest where the man has intervened in its formation or repopulation, also called forest plantations.
Brazil	Forest composed of trees established through planting. Area planted with Eucalyptus spp, Pinus spp, Acacia sp, Hevea brasiliensis, Schizolobium Amazonicum, Tectona sp, Araucaria angustifolia, Populus sp and other species
Colombia	Forest plantation: forest originated by reforestation (Decree law 2811 from 1974)
Ecuador	<u>Forest plantation:</u> Arboreal mass established anthropically with one or more forest species. (Ministry of Environment, 2011. Operational definition of the legenda of the coverage and land use map).
Guyana	Forest predominantly composed of trees established through planting and/or deliberate seeding.
Peru	Forest plantation (Planted forest or Planted forest of introduced species): Land in which trees of one or more forest species, native or exotic, have been installed for the purpose of production, protection or provision of environmental services, or a combination thereof.
Venezuela	Forest planted or Forest plantation: Ecosystem dominated by arboreal individuals created by human action from the establishmenet on areas equal to or greater than 0,5 ha of one or more forest species. (Article 44, Forests Law, 2013). They are areas for the production of wood for commercial purposes.

Production •	forest
FRA	Forest area mainly designated for the production of wood, fibers, bioenergy and/or non-timber forest products
	According to the National Unit Conservation System (Yesstema Nacional de Unidades de Conservação - SNUC), the catagories considered as production forest are: National/State Forest, Federal/State/County Extractive Reserve, Federal/State/County Sustainable Developmente Reserve and Planted Forest. The planted forests are also used for production
	Permanent preservation area: Protected area covered or not by native vegetation, with the environmental function to preserve water resources, the landscape, the geological stability, the biodiversity, the gene flow of plants and animals, soil protection and assure the well-being of the human populations
Brazil	Conservation Unit: Territorial space and its environmental resources, including jurisdictional waters, with relevant natural characteristics, legally instituted by the Government, with conservation objectives and limits, under special administration, which apply adequate assurances protection
	Indigenous land: Lands traditionally occupied and permanently inhabited by indigenous people, which are used for their productive activities, and essential for the conservation of environmental resources necessary for their well-being and necessary for their physical and cultural reproduction, according to their uses, customs, and traditions
	Non-Designated Public Forest, natural or planted, located in different biomes under the control of the government without a defined destination
Ecuador	Equivalent to the planted forest area whose purpose is timber harvesting and other non-timber forest resources.
Guyana	Refers to the forested areas that lies within the gazetted State Forest boundaries, specifically allocated for all commercial logging.
Peru	Permanent forest production: Constitutes a Forest Management Unit, established by Ministerial Resolution, in forests of categories I and II, with the goal of permanent production of wood and other forest products other than wood, as well as wild fauna and the provision of ecosystem services.
Venezuela	It includes the continuous development of a specific area from the allocation of forest land use until the generation of its products, with the objective of maintaining the structure and functions of the forest ecosystem and generating environmental, social and economic benefits (Article 63 of the forest law, 2013).
MULTIPLE U	SE FOREST
FRA	Forest area mainly designated for more than one function, and none of these functions can be considered as a predominant function.
Brazil	In public lands, according to the National System of Units of Conservation, the category that allows multiple use corresponds to the Permanent Preservation Areas. These areas are generally extensive, with a certain degree of human occupation, endowed with abiotic, biotic, esthetic or cultural attributes that are especially important for the quality of life and well-being of human populations, and whose basic objectives are to protect the biological diversity, the process of occupation and ensure the sustainability of the use of natural resources.
Ecuador	Correspond to the category of protective forests (only the area that corresponds to the category of native forest). They have an outstanding importance for providing goods, services and protective functions related mainly to the provision of water for different uses, regulation and control of floods and continuity of ecological processes They are also important areas for the development of the communities present there, through the multiple and sustainable use of natural resources. These areas allow links between terrestrial ecosystems or between protected areas. (Ministry of Environment, 2007, Policies and strategic plan of the Protective System Areas of Ecuador).
Guyana	Forest area designated primarily for more than one purpose and where none of these alone is considered as the predominant designated function.
Suriname	Within this class, forest areas that are issued to communities as community forest are included. Within community forest timber production is allowed, but also collection of NTFPs, including hunting, fishing and shifting cultivation

# Venezuela

Areas declared by the State whose purpose is the conservation, exploitation and management of forests and forest heritage under a systemic and holistic approach, considering the multiple goods and benefits that they produce simultaneously, seeking the combination of uses that maximize collective well-being and guarantee environmental, social and economic sustainability. (Article 3, number 2 of the Forests Law, 2013)

Forest area	destined for permanent forest land use					
FRA	Forest area designated or expected to be reserved as forest and is unlikely to be converted to other land use.					
Bolivia	Land of permanent forest production are those that, due to their characteristics, have this current capacity or potential for greater use, can be fiscal or private. Land with forest cover suitable for different uses: Land with forest cover suitable for other uses, those, properly classified, which by their potential capacity of greater use can be converted to agriculture, livestock or other uses.					
Brazil	Areas with the intention of being permanently maintained as forest. It includes the Areas of Permanent Preservation, forests in Legal Reserve and the areas present in the National Register of Public Forests.					
Ecuador	Native forest area that is within protected areas and state programmes of conservation.					
Guyana	Forest area that is designated or expected to be retained as forest and is highly unlikely to be converted to other land use. It consists of Forested state forest area and protected areas.					
Venezuela	Areas declared by the State under the figures of Ordinary Regime and Areas under Special Administration Regime with forest cover, other forms of vegetation associated with the forest and forest lands, whose purpose is sustainable forest management and are intended for permanent forest production (Article 51 of the Forest Law, 2013).					

# **ANNEX 4**

Institutions that provided information for National Reports

Country	Institución
	Ministry of Environment and Water, General Directorate of Forest Management and Development (DGGDF)
Bolivia	Supervision Authority and Social Control of Forests and Lands (ABT)
(Plurinational Republic of)	National System of Protected Areas (SNAP)
Republic 017	National Institute of Agrarian Reform of Bolivia (INRA)
	Bolivia Council for Voluntary Forest Certification(CFV)
	Ministry of Environment (MMA), Brazilian Forest Service (SFB)
	Ministry of Environment (MMA), Project for the Conservation and Use of Brazilian Biological Diversity (PROBIO)
	Ministry of Environment (MMA), Brazilian Institute of Environment and Renewable Natural Resources (IBAMA), Remote Sensing Center (CSR)
	Ministry of Environment (MMA), Department of Protected Areas (DAP), National Register of Conservation Units (CNUC)
Brazil	National Institute for Space Research (INPE) - Monitoring Project of the Brazilian Amazonian Forest by Satellite (PRODES)
	Brazilian Institute of Geography and Statistics (IBGE)
	National Water Agency (ANA)
	National Indian Foundation (FUNAI)
	Brazilian Company of Agricultural Research (EMBRAPA) Forests
	Chico Mendes Institute for Biodiversity Conservation (ICMBio)
	Institute of Man and the Environment of the Amazon (IMAZON)
	Brazilian Association of Planted Forest Producers (ABRAF)
	Ministry of Environment and Sustainable Development (MADS) - Directorate of Forest, Biodiversity and Ecosystems Services
	Institute of Hydrology, Meteorology and Environmental Studies (IDEAM)
Calambia	Amazon Scientific Research Institute (SINCHI)
Colombia	Geographical Institute Agustín Codazzi(IGAC)
	Research Institute of Biological Resources Alexander von Humboldt (
	Humboldt Institute)
	Ministry of Agriculture and Rural Development (MADR)
Ecuador	Ministry of Environment of Ecuador (MAE), Unique System of Environmental Information (SUIA)
	Ministry of Natural Resources and Environment (MNRE), Guyana Forestry Commission (GFC)
Guyana	Ministry of Natural Resources and Environment (MNRE), Guyana Lands and Surveys Commission (GL&SC)
Peru	Ministry of Agriculture and Irrigation (MINAGRI), National Forest Service (SERFOR),
	General Directorate of Information and Forest Management and Wildlife (DGIOFFS)
	Ministry of Environment (MINAM), National Service of Natural Protected Areas by the State (SERNANP)
Suriname	Foundation for Forest Management and Production Control (SBB)
Venezuela (Bolivarian Republic of)	Ministry of People's Power for Ecosocialism and Water, General Directorate of Forest Heritage

#### **ANNEX 5**

The countries data for the Amazon variables

Table 1 Forest Area, total and in the Amazon region, and how it has changed overtime (Table 1a from the Form for Collection of Amazon Data and Information)							
Country	Category		Area (1 000 hectares)				
Country			2005	2010	2015		
Bolivia (Plurinational	Forest	55 300	54 250	53 200	52 100		
State of)	of which in the Amazon Region	43 700	42 750	41 800	40 800		
Dun-il	Forest	521 274	506 734	498 605	493 422		
Brazil	of which in the Amazon Region	357 223	349 048	344 970	342 809		
Colombia	Forest	62 521	61 180	60 555	59 629		
Colonibia	of which in the Amazon Region	42 999	42 464	41 862	41 437		
Faunday	Forest	13 731	13 337	12 943	12 847		
Ecuador	of which in the Amazon Region	9 774	9 624	9 473	9 380		
Cuyana	Forest	18 473	18 452	18 388	18 483		
Guyana	of which in the Amazon Region	18 473	18 452	18 388	18 483		
Down	Forest	76 147	75 528	74 811	73 973		
Peru	of which in the Amazon Region	74 680	71 525	73 151	70 544		
Suriname	Forest	15 391	15 374	15 354	15 314		
Surmanie	of which in the Amazon Region	15 391	15 374	15 354	15 314		
Venezuela (Bolivarian	Forest	49 151	47 713	47 505	46 683		
Republic of)	of which in the Amazon Region	5 129	5 185	5 192	5 198		
Total of the countries	Forest	798 189	792 568	781 361	772 451		
iotat of the countries	of which in the Amazon Region	567 370	554 422	550 190	543 965		

#### **COUNTRY COMMENTS ON TABLE 1**

#### **Bolivia**

- Official information from the Ministry of Environment and Water, through the General Directorate for Forest Management and Development, Observation Room Bolivia ACTO. It was generated, based on interpretation of satellite images, which is why it is different from previous reports submitted by the country.
- Forested coverage data for 2015 was interpolated with FAO support.

#### Brazil

- The figures corresponding to the reference years refer to the average of the five-year periods, repectively 1998-2002, 2003-2007 and 2008-2012.
- The official area of the country has changed in relation to the area used in FRA 2010 due to legal or judicial modifications or better cartographic representation used in the 2010 Census. Brazil has confirmed up-to-date figures for country, land and inland water areas and those figures were reported to FAOSTAT.

#### Colombia

- Regarding the data for 2015 for the Amazon Region, there was the lowest coverage of areas without informations (clouds/cloud shadow).
- In relation to the forest area totals for the years 2000, 2005 and 2010, the difference with the total area of the country is in the areas without information that are not taken into account in these figures. For the year 2015, the total figure, as it is based on a prediction of the forest area, may suffer over estimation of the total area of the country.

#### **Ecuador**

• The data for the Amazon and national level for the year 2000, were obtained based on the land cover and use map of the year 2000. For the year 2005 and 2010, a regression and projection were made based on the national coverage map of the year 2008. For the Amazon, 2015 data were obtained from the map of coverage and use of the Amazon of the same year and the national data of the 2014 data projection. Data at the national level were updated based on the official limits.

#### Guyana

• The figures are corrected to reflect the figures officially used by Guyana and the 18 million hectares are just forest cover. All other categories (indoor water bodies, etc.) have already been excluded.

#### Suriname

- Forest coverage for 2005 and 2010 was estimated based on available data on forest cover and deforestation for the period of 2000-2009 and 2009-2013.
- Quality assessment and quality control (QA/QC) were carried out on the coverage data for the period 2000-2009 and 2009-2015

#### Venezuela

• The forest cover for 2010 was calculated and reported in FRA 2015. This data was obtained with the Map of Forest Cover of Venezuela, year 2010, edition, 2014. Estimates were made for 2015 applying simple linear projections.

Table 2 Area of Annual Forest Loss, total and in Amazon Region and how it has changed overtime (Table 1b of the Form for Collection of Amazon Data and Information)						
Defe	Category	Annu	Annual Forest Loss (1 000 hectares)			
País			2005	2010	2015	
Bolivia (Plurinational	Deforestation	154	186	217	202	
State of)	of which in the Amazon Region	141	166	191	181	
Brazil	Deforestation	3 276.9	3 406.9	1 806.5	1 469.0	
Brazil	of which in the Amazon Region	1 429.4	1 559.5	649.9	475.5	
Colombia	Deforestation	315.60	281.97	166.07	124.04	
Colombia	of which in the Amazon Region	110.46	88.18	103.14	60.71	
Ecuador	Deforestation	92.74	83.38	73.98	42.46	
Ecuador	of which in the Amazon Region	39.31	33.56	27.80	26.73	
Curana	Deforestation	2.13	6.85	10.28	11.97	
Guyana	of which in the Amazon Region	2.13	6.85	10.28	11.97	
Down	Deforestation	143	175	165	159	
Peru	of which in the Amazon Region	84	148	136	156	
Suriname	Deforestation	nd	3	4	8	
Surmame	of which in the Amazon Region	nd	3	4	8	
Venezuela (Bolivarian	Deforestation	164.6	164.6	164.6	164.6	
Republic of)	of which in the Amazon Region	0.84	0.84	3.1	0.54	
Total of Countries	Deforestation	4 149.0	4 258.7	2 607.4	2 181.1	
Total of Countries	of which in the Amazon Region	1 807.1	2 005.9	1 125.2	920.5	

#### **COUNTRY COMMENTS ON TABLE 2**

#### Bolivia

- Official information from the Ministry of Environment and Water, through the General Directorate for Forest Management and Development, Observation Room Bolivia ACTO. It was generated based on interpretation of satellite images, which is why it is different from previous reports submitted by the country.
- Data on forest loss for 2005 were interpolated with support from FAO.

#### Brazil

- The forest area is an estimation. There is a regular monitoring of land cover in Brazil, except for the PRODES Project, which measures the rate of deforestation in the Legal Amazon. It is important to note that the data used for estimation and forecasting do not predict regeneration. There is a slight difference between the data reported in this report and in FRA 2015 in relation to forest area and deforestation. This difference is due to more recent data on deforestation in the Cerrado between 2010 and 2011 (data published in September 2015) and in the Amazon biome for 2013, 2014 and 2015. Once these data were updated, the forest area estimate for the years 2010 and 2015 was also updated.
- The available data on deforestation do not refer only to the forest conversion of the forest into another use of land, but to the conversion of any vegetation typology into an anthropic use.
- The Amazon Region refers to the Amazon biome.

#### Colombia

- In relation to the totals of forest areas for the years 2000, 2005 and 2010, the difference with the total area of the country is in the areas without information that are not taken into account in these figures. For the year 2015, the total figure, as it is based on a prediction of the forest area, may suffer over estimation of the total area of the country.
- The adjustment is made for this table, since the data that had been placed as natural regeneration corresponds to forest expansion.

#### **Ecuador**

- The Amazon data for the years 2005 and 2010 were calculated using the same methodology used to the national report FRA-2015, that is, a linear interpolation and extrapolation based on deforestation data for the periods 1990-2000 and 2000-2008, according to the recommendations of the Guide for the presentation of national FAO-FRA reports.
- Implementing two points in time (1990-2000 and 2000-2008) to make projections for the years 2005 and 2010 in the Amazon, the results do not adequately show the trend in relation to the original data corresponding to the periods 2000-2008, 2008-2014 and 2014-2015. This methodology was implemented in the calculation of the deforestation of the Amazon to maintain consistency with the methodology used in the national report FRA-2015.

#### Guyana

• The figures are corrected to reflect the official figures used by Guyana and the 18 million hectares are only forest cover. All other categories (indoor water bodies, etc.) have already been excluded.

#### Peru

- Deforestation in the Amazonian area corresponds only to the loss of the Amazonian Humid Forest according to the Non-Forest and Loss Map of the Amazonian Humid Forests of Peru, period 2001 2015, prepared by the National Forest and Wildlife Service, the Ministry of Environment and the Observation Room of ACTO.
- What was reported as deforestation for the year 2010 was considered the average deforestation in the Peruvian Amazon for the years 2011, 2010 and 2009, to which was added the rate of deforestation used for coastal and Andean forests. For the 2005 data, the average of the years of 2003, 2004, 2005, 2006 and 2007 was considered, in addition to the deforestation used for coastal and Andean forests.
- For the year 2000, was used the deforestation from 2001, 2002 and the rate of deforestation for the period 1990-2000, to which was added the deforestation rate for the coast and Andean region. For the year 1990, was used the deforestation rate from Peruvian Amazon of the periods 1990-2000, to which was added the rate used for forests in the coast and Andean region.

#### **Suriname**

• The Forest Cover Monitoring Unit (FCMU), located within the Foundation for Forest Management and Production Control has produced maps of deforestation for the following periods: 2000-2009, 2009-2013, 2013-2014 and 2014-2015. For the period 2000-2009, the accumulated deforestation figure was 31,000 ha. The deforestation figure per year of 3,000 ha is calculated by dividing the cumulative deforestation of 31,000 ha by the number of years (9 years) of this period. The same calculation method was carried out for the period

2009-2013. The accumulated deforestation for this period was 24,000 ha and therefore the deforestation figure per year is 6,000 ha. Finally, for the 2013-2014 and 2014-2015 periods, the annual deforestation figure is 13,000 ha and 9,000 ha, respectively. The annual loss of forests for the years 2005 and 2010 was established on the basis of the abovementioned deforestation figures.

Table 3 Area of Natural Forest and Planted Forests, total and in the Amazon Region, and how it has changed overtime.

(Table 2 from the Form for Collection of Amazon Data and Information)

	Category	Forest Area (1 000 hectares)			
Country			2005	2010	2015
	Natural Forest	55 300	54 250	53 200	52 100
	of which natural forest n the Amazon Region	43 700	42 750	41 800	40 800
Bolivia (Plurinational State of)	Planted forest	n.d.	n.d.	n.d.	n.d.
State ory	of which planted forest in the Amazon Region	n.d.	n.d.	n.d.	n.d.
	TOTAL	55 300	54 250	53 200	52 100
	Natural Forest	516 098	501 114	491 485	485 621
	of which natural Forest in the Amazon Region	357 223	348 751	344 421	342 104
Brasil	Planted forest	5 176	5 620	7 120	7 801
	of which planted forest in the Amazon Region	n.d.	297	548	706
	TOTAL	521 274	506 734	498 605	493 422
	Natural Forest	62 498	61 109	60 508	59 558
	of which natural forest in the Amazon Region	42 999	42 464	41 862	41 437
Colombia	Planted forest	23.24	70.65	46.65	70.9
	of which planted forest in the Amazon Region	n.d.	n.d.	n.d.	n.d.
	TOTAL	62 521	61 180	60 555	59 629
	Natural Forest	13 660	13 272	12 883	12 706
	of which natural Forest in the Amazon Region	9 774	9 624	9 473	9 380
Ecuador	Planted forest	70.15	65.18	60.21	141.39
	of which planted forest in the Amazon Region	0.062	0.145	0.23	0.087
	TOTAL	13 730	13 337	12 493	12 847
	Natural Forest	18 473	18 452	18 388	18 483
	of which natural forest in the Amazon Region	18 473	18 452	18 388	18 483
Guyana	Planted forest	0	0	0	0
	of which planted forest in the Amazon Region	0	0	0	0
	TOTAL	18 473	18 452	18 388	18 483
	Natural Forest	75 432	74 774	73 818	72 816
	of which natural forest in the Amazon Region	70 830	70 500	69 910	69 020
Peru	Planted forest	715	754	993	1 157
reiu	of which planted forest in the Amazon Region	38.50	10.25	32.37	15.24
	TOTAL	76 147	75 228	74 811	73 973
	Natural Forest	15 377	15 360	15 340	15 299
	of which natural forest in the Amazon Region	15 377	15 360	15 340	15 299
Suriname	Planted forest	14	14	14	14
Juillallie	of which planted forest in the Amazon Region	14	14	14	14
	TOTAL	15 391	15 374	15 354	15 314

	Natural Forest	48 401	46 908	46 948	46 126
	of which natural Forest in the Amazon Region	5 129	5 185	5 192	5 198
Venezuela (Bolivarian	Planted forest	750	805	557	557
Republic of)	of which planted forest in the Amazon Region	n.d.	n.d.	n.d.	n.d.
	TOTAL	49 151	47 713	47 505	46 683
	Natural Forest	805 239	785 239	772 570	762 709
	of which natural forest in the Amazon Region	563 505	553 086	546 390	541 721
Total of Countries	Planted forest	6 748.4	7 328.8	8 790.9	9 741.3
	of which planted forest in the Amazon Region	52.6	322.4	594.6	735.3
	TOTAL	811 987	792 568	781 361	772 450

# COUNTRY COMMENTS ON TABLE 3

#### **Bolivia**

- Official information from the Ministry of Environment and Water, through the General Directorate for Forest Management
  and Development, Observation Room Bolivia ACTO. It was generated, based on interpretation of satellite images, which is
  why it is different from previous reports submitted by the country. The forest plantations established in Bolivia are in the
  process of monitoring and evaluation, so these data are not yet available.
- Data on natural forest cover for 2005 were interpolated with support from FAO.

#### Brazil

- There is a slight difference between the data reported in this report and in FRA 2015 in relation to forest area and deforestation. This difference is due to more recent data on deforestation in the Cerrado between 2010 and 2011 (data published in September 2015) and in the Amazon biome for 2013, 2014 and 2015. Once these data were updadtd, the forest area estimate for the years 2010 and 2015 was also updated.
- For the Natural forest, the Amazon Region refers to the Amazon biome. For the planted forest, it refers to the planted forest located inside any of the nine States that comprise this biome.

#### Colombia

Regarding the difference between the 2010 report and the 2015 report on the issue of forest plantations, it is important
to mention that there is currently a more consolidated Forest Information System (SNIF), which has allowed to refine
the figures on commercial and protective forest plantations reported by both the Ministry of Agriculture and Rural
Development, as the Ministry of Environment and Sustainable Development, for which the figures have varied.

#### Ecuador

- For the natural forest and the planted forest, the data for the Amazon and nationally for the year 2000 were obtained based on the land cover and land use map for the year 2000. In the case of planted forest, it is clarified that the data do not come from national plans of afforestation and reforestation, as it was previously done in other FRA reports.
- The country does not have a specific datum for "primary forest" since there is no methodology to differentiate between primary, secondary and degraded forests, however, an adjustment was made to the the native forest data of the coverage and land use maps.
- -For the years 2005 and 2010, a regression and projection was made based on the national coverage map for 2008. For the
  Amazon, the 2015 data were obtained from the coverage map and use of the Amazon of the same year and the national data
  of the 2014 data projection. .For the planted forest, the trend of the 2015 data increases and differs from the FRA-2015 report
  because the data is obtained directly from the 2015 map. It was previously obtained from the 2008 map through projections.

#### Peru

• For the forest plantation sector, the reforested lands have been considered.

#### **Suriname**

The small difference in this report and FRA 2015 with respect to natural forests is due to the fact that forest cover update
is available in the FCMU.

Table 4 Forest Area designated for the Conservation of biodiversity and within protected areas, total and in the Amazon Region, and how it has changed overtime

(Table 6 from the Form for Collection of Amazon Data and Information)

Country	Category	Forest Area (1 000 hectares)				
Country			2005	2010	2015	
	Conservation of biodiversity	12 550	12 520	12 490	12 450	
Bolivia (Plurinational	of which bonservation of biodiversity in the Amazon Region	8 140	8 115	8 090	8 050	
State of)	Forest Area within protected areas	12 550	12 520	12 490	12 450	
	of which within protected areas in the Amazon Region	8 140	8 115	8 090	8 050	
	Conservation of biodiversity	21 491	33 536	46 841	46 969	
Brazil	of which conservation of biodiversity in the Amazon Region	17 878	28 466	41 333	41 339	
DIdZIL	Forest Area within protected areas	152 380	185 440	204 737	207 223	
	of which within protected areas in the Amazon Region	110 604	142 856	163 319	164 672	
	Conservation of Biodiversity	11 782	11 669	11 567	11 437	
Colombia	of which conservation of biodiversity in the Amazon Region	9 129	9 076	8 985	8 977	
Cotombia	Forest Area within protected areas	13 773	13 522	13 277	13 096	
	of which within protected areas in the Amazon Region	10 194	10 031	9 864	9 780	
	Conservation of Biodiversity	3 150	3 146	3 754	4 759	
Ecuador	of which conservation of biodiversity in the Amazon Region	2 570	2 607	3 144	4 365	
Ecuauoi	Forest Area within protected areas	3 150	3 146	3143	3 292	
	of which within protected areas in the Amazon Region	2 570	2 607	2 643	3 159	
	Conservation of Biodiversity	151	151	1 880	1 091	
Guyana	of which conservation of biodiversity in the Amazon Region	151	151	1 880	1 091	
Guyana	Forest Area within protected areas	n.d.	n.d.	n.d.	1 091	
	of which within protected areas in the Amazon Region	n.d.	n.d.	n.d.	1 091	
	Conservation of Biodiversity	13 321	18 505	16 977	19 673	
Peru	of which conservation of biodiversity in the Amazon Region	n.d.	n.d.	16 601	19 320	
reiu	Forest Area within protected areas	n.d.	n.d.	16 438	18 844	
	of which within protected areas in the Amazon Region	n.d.	n.d.	15 680	18 580	
	Conservation of Biodiversity	1 765	1 765	1 764	1 764	
Suriname	of which conservation of biodiversity in the Amazon Region	1 765	1 765	1 764	1 764	
Jamanic	Forest Area within protected areas	1 794	1 893	1 892	1 893	
	of which within protected areas in the Amazon Region	1 794	1 893	1 892	1 893	

	Conservation of Biodiversity	15 755	15 755	24 742	24 313
Venezuela (Bolivarian	of which conservation of biodiversity in the Amazon Region	5 129	5 185	5 192	5 198
Republic of)	Forest Area within protected areas	n.d	n.d.	24 470	24 046
	of which within protected areas in the Amazon Region	4 979	4 979	4 979	4 979
	Conservation of Biodiversity	79 965	97 047	120 035	122 456
Countries Total	conservation of Biodiversity of which conservation of biodiversity in the Amazon Region	79 965 44 762	97 047 55 365	120 035 86 989	90 106
Countries Total	of which conservation of biodiversity in the				100

#### **Bolivia**

- Official information from the Ministry of Environment and Water, through the General Directorate for Forest Management and Development, Observation Room Bolivia ACTO. Generated, based on interpretation of satellite images, which is why it is different from previous reports submitted by the country.
- Not all of the Protected Areas are or have forest cover (as is the case of the Eduardo Avaroa Reserve, among others).
- Data for the year 2005 was interpolated with support from FAO.

#### Brazil

- The small differences between the areas of this report and FRA 2015 are due to data updates in indigenous land (2015) and Permanent Preservation Area (2000 and 20005).
- Considering the areas of conservation units, the Amazon region refers to the Amazon biome. Indigenous lands, refers to the indigenous lands located in one of the nine states that comprise this biome.

### Colombia

• The areas for biodiversity conservation and the forest area within the protected areas (National Natural Parks and other categories) are assumed as the same, for which the figures are the same. For this table the crossing with the forest figures is taken from the analysis of CORINE Land Cover adapted for Colombia, since the data is calculated directly by National Parks. Therefore, the original source of the data was not modified, despite the fact that the official forest figure is that from the IDEAM, et. al, 2011. The classification of the reported trend, both for the category of conservation of biodiversity and for the forest area within the protected areas, was calculated from a linear function. The area reported corresponds to the area conserved within the categories of the National System of Protected Areas (SINAP), which have among their objectives the conservation of biodiversity, which makes the data the same. There are other areas or categories of forest conservation outside the SINAP; however, that information is not available to date.

## Ecuador

- For the biodiversity conservation category, the national data of Socio Bosque properties are not projected. For the Amazon data, updated information (coverage, PANE and SB properties) was taken in 2015.
- For the category forest area within the protected areas, the projection was made for 2015 based on the 2008 data. For the 2015 Amazon data, updated information was taken (coverage, PANE and SB lands) to 2015. For the previous years, the existing information for those years was used..
- The data may differ from those presented in FRA-2015 because the layers of existing conservation areas have been updated for each of the years that coverage maps exist, while in the FRA-2015, baseline information for 2012 was used for each of the years.

Table 5 Area of Production Forest and Multiple Use Forest , total and in the Amazon Region and how it has changed overtime

(Table 4a from the Form for Collection of Amazon Data and Information)

Country	Catagory	Forest Area (1 000 hectares)			ares)
Country	Category	2000	2005	2010	2015
	Production forest	28 763	28 431	28 099	27 691
Bolivia (Plurinational State of)	of which production forest in the Amazon Region	25 213	24 931	24 649	24 288
	Multiple use forest	13 988	13 341	12 695	12 030
	of which multiple use Forest in the Amazon Region	10 377	9 773	9 168	8 557
	Production forest	23 177	39 586	63 158	63 844
Brazil	of which production forest in the Amazon Region	17 708	33 652	55 678	55 835
Didzil	Multiple Use Forest	29 513	34 249	43 769	44 586
	Of which multiple use forest in the Amazon Region	8 040	8 718	14 002	14 002
	Production forest	n.d.	n.d.	n.d.	n.d.
Colombia	Of which production forest in the Amazon Region	n.d.	n.d.	n.d.	n.d.
Cotombia	multiple use Forest	n.d.	n.d.	n.d.	n.d.
	of which multiple use forest in the Amazon Region	n.d.	n.d.	n.d.	n.d.
Foredon	Production forest	1 174	1 030	886	785
	of which production forest in the Amazon Region	787	752	718	629
Ecuador	multiple use Forest	1 093	1 154	1 215	1 302
	of which multiple use forest in the Amazon Region	580	654	728	961
	Production forest	12 437	12 434	12 409	12 594
Guyana	Of which production forest in the Amazon Region	12 437	12 434	12 409	12 594
Guyana	multiple use Forest	151	151	153	153
	of which multiple use forest in the Amazon Region	151	151	153	153
	Production forest	39 877	25 175	24 900	17 881
Peru	of which production forest in the Amazon Region	17 256	17 199	17 080	16 855
Peru	Multiple use forest	3 943	17 890	17 695	21 091
	of which multiple use forest in the Amazon Region	13 576	13 519	13 419	13 243
	Production forest	4 500	4 500	4 500	4 500
Suriname	of which production forest in the Amazon Region	4 500	4 500	4 500	4 500
Jamanie	Multiple use forest	527	644	702	739
	of which multiple use forest in the Amazon Region	527	644	702	739

	Production forest	25 481	24 043	19 737	19 396
Venezuela (Bolivarian	of which production forest in the Amazon Region	n.d.	n.d.	n.d.	n.d.
Republic of)	Multiple use forest	23 670	23 670	27 768	24 314
	of which multiple use forest in the Amazon Region	0	0	0	0
	Production forest	135 409	149 901	153 964	146 691
Countries Total	Production forest of which production forest in the Amazon Region	135 409 77 901	149 901 93 468	153 964 115 034	146 691 114 701
Countries Total	of which production forest in the Amazon			10070	

#### **Bolivia**

- Official information from the Ministry of Environment and Water, through the General Directorate for Forest Management and Development, Observation Room Bolivia ACTO. It was generated, based on interpretation of satellite images, which is why it is different from previous reports submitted by the country .The detailed forest area is within the limits of the Permanent Forest Production Lands according to Supreme Decree No. 26075.
- Data for the year 2005 was interpolated with support from FAO.

#### Brazil

Considering production forests areas and the multiple-use forests, the Amazon region refers to the Amazon biome.

### Colombia

• There are no data available to report on these variables.

#### **Ecuador**

- The production forest corresponds to the forest plantations that are identifiable in satellite images, although the 2014 input, besides being supported by the interpretation of satellite images, has a more exhaustive work in the collection of information in the field, since a collaborative work between the Ministry of Environment and the Ministry of Agriculture, Aquaculture and Fisheries. The latter, on its own, presents the reforested area data with approval of its Forest Incentives Program, which corresponds to 41,034.69 hectares.
- The forest within forest heritage has varied very little. As the plantations increase by the year 2015, the Amazon region has a tendency to decrease, probably due to the loss of forest.
- Regarding the multiple use forest, the tendency to increase may be due to the increase of areas within the protective forest and protective vegetation.

227 542 3 031.9 1 694.4 2015 7 674.3 30 920 5 979.9 14 740 1 635 452.9 452.9 1 633 40.19 30.7 n.d. n.d. n.d. n.d. n.d. Table 6 Extraction of wood, total and in the Amazon Region, and the corresponding to firewood, and how it has changed overtime (Values in 1000 m3 without bark) 824 2014 29 720 1 957.9 16 103 7 937.5 1 227.2 1 699 1 016 1 694 530.7 67.52 530.7 32.5 238 n.d. n.d n.d. 627 7 902.8 1 921.8 2013 29 008 15 506 5 979.9 1 645 1 639 437.7 437.7 n.d. 239 7.32 n.d. n.d. n.d. n.d. 38.7 801 748 5 979.9 2012 30 357 15 232 2 137.2 1 475 1 468 1 489 18.28 406.5 406.5 8 117.1 36.8 244 7 n.d. n.d n.d. n.d. n.d. 232 149 8 015.9 926 4 952.4 2 035.5 5 979.9 2011 156.08 15 264 7 056.1 1 043 1132 1 130 421.4 4214 35.9 n.d. n.d n.d. 28 169 4 640.2 2010 26 784 14 500 7 043.4 7 987.9 2 008.1 5 979.9 448.9 448.9 71.26 216 31.3 n.d. n.d. n.d. 934 n.d. n.d. 6 855.4 4 925.4 5 979.9 2009 30 369 16 444 1 972.2 119.08 1 504 389.4 389.4 7 952 n.d. 208 n.d. 29.7 n.d. n.d. n.d 2008 211 755 8 338.3 2 358.5 5 979.9 239.48 234 17 667 382.8 6 016 4 076 382.8 806 n.d. n.d. n.d. n.d. n.d. 21.1 30 Year 216 929 6 054.4 2007 2 018.7 35 765 20 376 8 073.1 146.19 452.9 452.9 1 399 6 082 4 112 26.2 n.d. n.d. n.d n.d. n.d. 7 864.5 2006 204 799 5 840.4 6 054.4 853 17 669 3 977.4 1 810.1 176.54 1 402 502.5 502.5 20.5 n.d n.d. n.d. n.d. n.d. 34 205 501 6 054.4 2002 7 501.4 32 666 16 691 6 648.1 530.53 1 447.1 2 008 5 437.1 422.3 422.3 n.d. n.d. n.d. n.d. 17.8 n.d. 6 054.4 159 6 632.4 2004 1 169.6 5 421.4 31 294 14 419 1308 16.34 440.1 7 224 440.1 189 n.d. n.d. n.d. n.d. 17.0 n.d. Table 4b from the Form for Collection of Amazon Data and Information) 6 054.4 2003 201 001 36 707 19 366 5 406.1 308.8 6 319.1 308.8 1 367.1 81.79 7 393 16.6 n.d. 846 n.d. n.d. n.d. n.d 190 398 6 054.4 2002 5 391.2 1 081.7 35 658 18 542 6 304. 7 136.1 364.8 364.8 16.40 1997 20.3 n.d. n.d. n.d. n.d. n.d. 169 528 6 234.8 1 563.6 6 054.4 2001 5 376.8 7 103.8 32 530 16 754 2 090 40.66 377.9 377.9 15.2 n.d. n.d. n.d. n.d. n.d. 765 5 908.8 5 362.8 6 054.4 15 200 1 321.6 30 959 370.5 370.5 7 376 1776 24.9 n.d. n.d. 182 n.d. n.d 1.15 n.d ... of which is firewood of which is firewood of which is firewood of which is firewood ... of which is firewood of which is firewood Total wood extraction fotal wood extraction **Fotal wood extraction** Total wood extraction Total wood extraction Total wood extraction extraction in the ... of which wood extraction in the extraction in the extraction in the extraction in the iAmazon Forest extraction in the ... of which wood ... of which wood ... of which wood of which wood Category ..of which wood Amazon Forest Amazon Forest Amazon Forest **Amazon Forest Amazon Forest** Bolivia (Plurinational Colombia Country State of) Ecuador Guyana Brazil Peru

	Total wood extraction	303.8	286.2	273.9	272.0	272.5	290.8	300.3	271.0	299.5	306.5	343.4	9.094	528.13	484.5		
Suriname	of which wood extraction in the Amazon Forest	303.8	286.2	273.9	272.0	272.5	290.8	300.3	271.0	299.5	306.5	343.4	460.6	528.13	13	13 484.5	
	of which is firewood	127.3	123.6	120.0	116.5	113.1	109.8	107.2	104.6	102.0	99.5	97.1	94.7	92.4		90.2	90.2 88.4
	Total wood extraction 781	781	1 007	1 315	1 183	1 212	1 093	1 518	1 741	1 503	897	721	877	814		872	872 n.d.
Venezuela (Bolivarian Republic of)	Venezuela of which wood(Bolivarianextraction in theRepublic of)Amazon Forest	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.		n.d.	n.d. n.d.
	of which is firewood 2.6	2.6	4.5	0.2	0.3	0.1	0.1	0.8	6.5	1.4	6.4	5.4	3.6	3.7		0.1	0.1 n.d.
	Total wood extraction   199 284   186 666   207 817   217 470	199 284	186 666	207 817	217 470	206 292	223 506	222 279	235 013	229 213	226 018	233 797	251 289	257 725		252 124	
Total	of which wood extraction in the Amazon Forest	32 956	32 956 34 798	37 395	38 737	33 193	35 357	37 642	38 654	33 514	33 156	29 656	33 160	34 915		33 498	33 498 35 568
	of which is firewood	26 772	26 772 28 329	30 128	30 960	26 025	28 310	27 829	30 680	27 847	28 485	25 254	26 331	21 345		21 615	21 615 22 204

### **Bolivia**

- Official information from the Ministry of Environment and Water, through the General Directorate for Forest Management and Development, Observation Room Bolivia ACTO. It was generated, based on interpretation of satellite images, which is why it is different from previous reports submitted by the country.
- The detailed forest area is within the limits of the Permanent Forest Production Lands according to Supreme Decree No. 26075.
- Data for the year 2005 was interpolated with support from FAO.

### Brazil

- The informations disclosed by the Brazilian research PEVS (Produção da Extração Vegetal e da Silvicultura) considers the removal of wood from natural and planted forests. Most of the brazilian removal of wood comes from planted forests. Therefore, the amount of wood removal from the forest in the Amazon region represents a small part of the total removal.
- The values for firewood correspond to the extraction of wood from the forests of the Amazon region.
- Wood removals refer to the removals that occurred in the Legal Amazon (nine states).

#### Colombia

- The information on wood extraction is reported by the Regional Autonomous Corporations as environmental authorities of the country and consolidated and reported by the Forest Information System SNIF of the IDEAM. The official value for 2015 is not yet available.
- The country does not have a system to report values of total firewood and for the Amazon region.

#### **Ecuador**

• The value reported by Ecuador corresponds to a data at the national level according to the origin of the wood (types of vegetation cover) authorized by the Ministry of the Environment, which are 4: Natural Forests, Pioneers Formations, Forest Plantations and Agroforestry Systems.

# Guyana

• The wood production figures presented in the table were only extracted logs, excluding motor-driven wood, pile posts and other extracted wood products. These are considered in the figures of total extracted wood including firewood, to reflect a more accurate figure of the production. The figures provided for firewood from 1990 to 2005 were recorded using a different unit of measurement (kilograms) and a different calculation method, because since 2006 the firewood is recorded in cubic meters. Since that year, the GFC has also managed to improve firewood monitoring through a permit system and has adjusted the formula and calculation method for firewood. The difference in volume is partially explained by this and also due to a decrease in the demand for firewood over the years in the industry, since alternative sources of energy have been preferred.

#### Peru

• With regard to firewood figures, fuelwood consumption of the rural population is considered according to the National Population and Housing Censuses multiplied by a consumption factor: the rural population of the Coast records an annual per capita consumption of 0.5 cubic meters (r), of the Sierra of 1.1 m3 cubic meters (r) and of the Forest of 1.3 cubic meters (r).

Table 7 Ownership of Forests, total and in Amazon Region, and how it has changed overtime
(Table 18 from the Form for Collection of Amazon Data and Information)

Countries	Cotogony	Fo	rest Area (1	l 000 hecta	res)
Country	Category		2005	2010	2015
	Public Property	55 300	54 250	53 200	52 100
	of which public property in the Amazon Region	43 700	42 750	41 800	40 800
Bolivia	Private Property	n.d.	n.d.	n.d.	n.d.
(Plurinational	of which private property in the Amazon Region	n.d.	n.d.	n.d.	n.d.
State of)	Unknown property	n.d.	n.d.	n.d.	n.d.
	of which unknown property in the Amazon Region	n.d.	n.d.	n.d.	n.d.
	TOTAL	55 300	54 250	53 200	52 100
	Public Property	310 705	310 705	310 705	310 705
	of which public property in the Amazon Region	286 600	286 600	286 600	286 600
	Private Property	97 675	100 180	103 162	106 024
Brazil	of which private property in the Amazon Region	47 922	48 559	49 423	50 230
	Unknown property	112 894	95 849	84 738	76 693
	of which unknown property in the Amazon Region	22 701	13 889	8 947	5 979
	TOTAL	521 274	506 734	498 605	493 422
	Public Property	n.d.	n.d.	n.d.	n.d.
	of which public property in the Amazon Region	18 503	18 251	17 699	17 877
	Private Property	n.d.	n.d.	n.d.	n.d.
Colombia	of which private property in the Amazon Region	24 119	23 709	23 226	23 558
	Unknown property	n.d.	n.d.	n.d.	n.d.
	of which unknown property in the Amazon Region	n.d.	n.d.	n.d.	n.d.
	TOTAL	62 521	61 180	60 555	59 629
	Public Property	5 207	5 122	5 037	5 086
	of which public property in the Amazon Region	3 929	3 248	3 354	4 101
	Private Property	140	143	758	1 618
Ecuador	of which private property in the Amazon Region	5	10	516	1 222
	Unknown property	8 384	8 072	7 148	6 143
	of which unknown property in the Amazon Region	5 840	6 366	5 603	3 929
	TOTAL	13 731	13 337	12 943	12 847
	Public Property	15 984	15 964	15 841	15 900
	of which public property in the Amazon Region	15 984	15 964	15 841	15 900
	Private Property	2 490	2 488	2 547	2 582
Guyana	of which private property in the Amazon Region	2 490	2 488	2 547	2 582
	Unknown property	0	0	0	0
	of which unknown property in the Amazon Region	0	0	0	0
	TOTAL	18 473	18 452	18 388	18 482

	of which unknown property in the Amazon Region TOTAL	28 540 749 467	20 255 731 388	14 550 720 806	9 908 712 821
	Unknown property	121 278	103 922	91 886	82 836
Total countries	of which private property in the Amazon Region	84 742	86 264	87 020	88 619
	Private Property	111 054	115 659	119 825	122 168
	of which public property in the Amazon Region	446 204	444 115	442 180	441 491
	Public Property	517 135	511 808	509 095	507 817
	TOTAL	49 151	47 713	47 505	46 683
	of which unknown property in the Amazon Region	n.d.	n.d.	n.d.	n.d.
Republic of)	Unknown property	0	0	0	0
(Bolivarian	of which private property in the Amazon Region	n.d.	n.d.	n.d.	n.d.
Venezuela	Private Property	144	144	144	144
	of which public property in the Amazon Region	5 129	5 185	5 192	5 198
	Public Property	49 007	47 569	47 361	46 539
	TOTAL	15 391	15 374	15 354	15 314
	of which unknown property in the Amazon Region	0	0	0	0
	Unknown property	0	0	0	0
Suriname	of which private property in the Amazon Region	87	87	87	87
	Private Property	87	87	87	87
	of which public property in the Amazon Region	15 304	15 287	15 267	15 227
	Public Property	15 304	15 287	15 267	15 227
	TOTAL	76 147	75 528	74 811	73 973
	of which unknown property in the Amazon Region	0	0	0	0
	Unknown property	0	0	0	0
Peru	of which private property in the Amazon Region	10 120	11 411	11 221	10 941
	Private Property	10 518	12 617	13 127	11 713
	of which public property in the Amazon Region	57 055	56 830	56 427	55 788
	Public Property	65 629	62 911	61 684	62 260

#### Bolivia

• To date, the Forest Certification System is in the implementation phase by the Enforcement Official and Social control of forests and lands (ABT). This certification will develop proposals for promotion mechanisms applied to the forestry sector (timber and non-timber) that adjust to their reality, according to the statistical and historical data that will be generated through their database of forest users.

## Brazil

- There is a great lack of information on the ownership of forests in Brazil. The IBGE agricultural census provides very important information, but it is only done every ten years and the data is only published at least two years after the end of the data collection period. The Rural Environmental Registry is a mandatory electronic registry for all rural properties, which aims to integrate environmental information on the status of Permanent Preservation Areas PPA, Legal Reserve areas, forests and remains of native vegetation, Areas of Restricted Use and the consolidated areas of rural properties and possessions of the country. The Registry is a strategic database for the environmental management of the country and will provide information on the private area in the country. Currently, the areas are being registered by the owner. The Brazilian Forest Service is improving the registery of the Brazilian public forests to have a better quality of historical data.
- The areas without information about the ownerof the management rights were considered as "others".
- For public ownership with data from the National Registry of Public Forests, the Amazon region refers to the Amazon biome. For private property, it refers to areas located in one of the nine states that comprise this biome.

#### Colombia

- Nationally, the data sent in 2010 are modified, since the areas corresponding to the National Natural Parks system, by definition, are public and private property areas (Decree Law 2811 of 1974), so that they can not be assumed in their totality as public property. However, these areas correspond entirely to public administration. Additionally, the official data on the area of collective territories, both for indigenous resguardos and for Afro-descendant communities, comes from the Ministry of the Interior and Justice and its cartography is carried out by the IGAC. So the official adjustment is made for this report. Table 18b assumes the following concepts: As public administration, the areas of the National System of National Natural Parks, are understood.
- The data of 29 846.67 for 2000 was calculated based on the forests ecosystems of the ecosystem map and the one of 30 349.53 for 2010 was calculated based on the forests map from 2010.

#### **Ecuador**

- It is suggested to add a box that mentions "other types of property or shared property", since Ecuador has mixed ownership forests (state and private) that does not mean that they are unknown.
- The values of the year 2000 in terms of public property correspond to the coverage of the year 2000. For the year 2005 and 2010 it was projected based on the 2008 data of the historical deforestation map. Those for 2015 correspond to the areas created up to that year and the coverage.
- In relation to private property, the values for the year 2000 correspond to the coverage of the year 2000. For the years 2005 and 2010, it was projected based on the 2008 data from the historical map of deforestation. The 2015 data correspond to the areas created up to that year and the coverage updated to that year.

#### Guyana

• The forest areas are classified as public lands that are leased, but under the control of GFC, and ameridian lands as private property.

	destined to maintain a permanent forest use of the formation of Amazon Data and Information		nazon Region
Country	Category	Forest Area 2010	Área de bosque 2015 (1 000 hectáreas)
Bolivia (Plurinational	Forest area destined to maintain a permanent forest land use	34 790	34 400
State of)	of which permanent forest land use in the Amazon Region	29 920	29 580
Brazil	Forest area destined to maintain a permanent forest land use	377 505	377 505
DIdZIL	of which permanent forest land use in the Amazon Region	308 600	308 600
Colombia	Forest area destined to maintain a permanent forest land use	n.d.	n.d.
Cotombia	of which permanent forest land use in the Amazon Region	n.d.	n.d.
Ecuador	Forest area destined to maintain a permanent forest land use	3 754	4 759
Ecuador	of which permanent forest land use in the Amazon Region	3 144	4 365
Guyana	Forest area destined to maintain a permanent forest land use	18 388	18 483
Guyana	of which permanent forest land use in the Amazon Region	18 388	18 483
Peru	Forest area destined to maintain a permanent forest land use	52 738	70 394
reiu	of which permanent forest land use in the Amazon Region	20 132	42 206

Suriname	Forest area destined to maintain a permanent forest land use	7 210	7 210
Surmame	of which permanent forest land use in the Amazon Region	7 210	7 210
Venezuela (Bolivarian	Forest area destined to maintain a permanent forest land use	47 505	46 683
Republic of)	of which permanent forest land use in the Amazon Region	5 185	5 198
Total	Forest area destined to maintain a permanent forest land use	541 890	559 434
Total	of which permanent forest land use in the Amazon Region	392 579	415 642

#### **Bolivia**

The detailed forest area is within the limits of the Permanent Forest Production Lands, in accordance with Supreme Decree No. 26075.Brazil

• The Amazon region refers to the Amazon biome.

#### Colombia

 Although Colombia does not report forest areas for permanent forest use, recently the Ministry of Environment and Sustainable Development, within the framework of compliance with the Peace Agreements, has developed a Policy to Combat Deforestation and the Comprehensive Control Strategy to deforestation and sustainable forest management, where this concept has been incorporated and it is expected that by the end of 2017 or beginning of 2018 the process of defining these areas for the country will begin.

# **Ecuador**

- The area of forest designated for permanent forest use of the land is the area of protected natural areas within the forest cover of the deforestation map plus the partner forest land for the year 2010. It has been considered that the extension of forest of permanent forest use is similar to that of conservation, since the legislation makes feasible the survival of these areas as forest..
- The data may differ from those presented in FRA-2015 because the layers of existing conservation areas have been updated for each of the years in which coverage maps exist, while in the FRA-2015, baseline information was used of the year 2012 for each of the years.

## Guyana

• The total figure represents total forest cover, which is classified at the national level as national state forest lands, state lands, and protected areas with no intention of conversion to other land use.

	ea under a forest management plan, total and in Ame e Form for Collection of Amazon Data and Informatio		has changed ovetime.
Country	Category	Forest Area 2010	Área de bosque 2015 (1 000 hectáreas)
	Forest area with forest management plan	8 702	9 567
	of which in the Amazon Region	7 250	8 158
Bolivia   (Plurinational	of which for production	6 961	7 653
State of)	of which for production in the Amazon Region	5 800	6 527
·	of which for conservation	1 740	1 913
	of which for conservation in the Amazon Region	1 450	1 632

	Forest area with forest management plan	72 381	75 152
	of which in the Amazon Region	56 478	58 270
Brazil	of which for production	7 590	9 696
	of which for production in the Amazon Region	691	2 035
	of which for conservation	64 791	65 456
	of which for conservation in the Amazon Region	55 787	56 235
	Forest area with forest management plan	8 345	8 345
	of which in the Amazon Region	n.d.	n.d.
Colombia	of which for production	n.d.	n.d.
Colonibia	of which for production in the Amazon Region	n.d.	n.d.
	of which for conservation	n.d.	n.d.
	of which for conservation in the Amazon Region	n.d.	n.d.
	Forest area with forest management plan	4 640	5 544
	of which in the Amazon Region	3 863	4 993
Ecuador	of which for production	886	785
	of which for production in the Amazon Region	718	629
	of which for conservation	3 754	4 759
	of which for conservation in the Amazon Region	3 144	4 365
	Forest area with forest management plan	7 252	6 160
Guyana	of which in the Amazon Region	7 252	6 160
	of which for production	5 525	4 433
	of which for production in the Amazon Region	5 525	4 433
	of which for conservation	1 727	1 727
	of which for conservation in the Amazon Region	1 727	1 727
	Forest area with forest management plan	27 478	29 133
	of which in the Amazon Region	24 750	24 598
Peru	of which for production	7 677	8 904
reiu	of which for production in the Amazon Region	5 054	4 940
	of which for conservation	19 801	20 229
	of which for conservation in the Amazon Region	19 696	19 658
	Forest area with forest management plan	6 265	6 265
	of which in the Amazon Region	6 265	6 265
Suriname	of which for production	4 500	4 500
Surmaine	of which for production in the Amazon Region	4 500	4 500
	of which for conservation	1 765	1 765
	of which for conservation in the Amazon Region	1 765	1 765
	Forest area with forest management plan	2 852	4 967
	of which in the Amazon Region	n.d.	n.d.
Venezuela (Rolivarian	of which for production	1 996	2 981
(Bolivarian Republic of)	of which for production in the Amazon Region	n.d.	n.d.
,	of which for conservation	855	1 986
	of which for conservation in the Amazon Region	n.d.	n.d.

	Forest area with forest management plan	137 915	145 133
	of which in the Amazon Region	105 857	108 444
Total	of which for production	35 135	38 952
TOTAL	of which for production in the Amazon Region	22 288	23 064
	of which for conservation	94 434	97 835
	of which for conservation in the Amazon Region	83 569	85 382

#### Bolivia

 The detailed forest area is within the limits of the Permanent Forest Production Lands, in accordance with Supreme Decree No. 26075.

#### Brazil

- The data presented are partial data.
- The Amazon region refers to the area in the nine states that cover this biome..

#### Colombia

• The tables that were not filled do not have official data from the Ministry of Environment and sustainable development, therefore, it is not possible to complete them. Even though, it had been formulated and adopted forest management plans that cover an area of 8 344.818 hectares, the Forest Management Plans of the Forest Management Units - UOF have not yet been started.

#### **Ecuador**

- Forest area with forest management plan: corresponds to the area covered with forests and officially recognized by the Ecuadorian legislation in its different categories of conservation and/or management. This is how you have Natural Areas of Ecuador (PANE), Socio Bosque Program (PSB), State Forest Patrimony (PFE) and areas covered with forest plantations. Although forests and protective vegetation (BVP) have a forest management plan, they have not been included in the production or conservation category because they are multiple use forests.
- Areas with management plan for production: correspond to the areas of the State Forest Patrimony (PFE); the areas covered with forest plantations (planted forest) and the areas under sustainable forest management registered in the Forest Administration System (SAF); however, these last ones have not been included since they are currently in the refining phase to know their real surface.
- Areas with a management plan for conservation: are the areas that integrate the Natural Areas in Ecuador (PANE) and the Social Forest Programme (PSB).

2 734.1 2 080 6 513 137.7 54.4 n.d. n.d. Table 10 Forest Area (in 1 000 hectares) under a forest certification scheme verified independently, total and in Amazon Region, and how it has changed overtime 6 438.1 2 804. 127.2 52.6 n.d. 2 265.6 7 280.7 113.5 53.8 n.d. n.d. 2 204.7 6 480 1 424 113.5 60.7 n.d. 1858.9 6 383 371.7 371.7 95.5 16.7 n.d. 5 169.3 2 183 371.7 371.7 1 657 94.2 41.2 n.d. 5 331.2 1 285.2 371.7 371.7 87.4 23.7 n.d. 5 385.8 1114.4 2 093 371.7 371.7 N.d. 32.1 Year 4 839.6 2 146 1 558 882. 10.0 n.d. 3 281.9 2 119 1 531 26.5 n.d. 3 119.3 2 209 1 621 26.5 n.d. 1 615.3 1 534 26.5 n.d. Table 16 from the Form for Collection of Amazon Data and Information) 1336.8 26.5 n.d. 1240.7 1 023 26.5 n.d. 940.1 n.d. 638.4 n.d. PEFC ... of which FSC, PEFC ... of which FSC, PEFC and/or others are in and/or others are in ... of which FSC, PEFC and/or others are in and/or others are in ... of which FSC, PEFC and/or others are in the Amazon region the Amazon region the Amazon region the Amazon region Management the Amazon region Certification ... of which FSC, Forest Others Others Others Others Others PEFC PEFC PEFC PEFC PEFC FSC FSC FSC FSC FSC Bolivia (Plurinational Colombia Country State of) Ecuador Guyana Brazil

	FSC	0	0	0	0	0	61.3	180.5	661.7	661.7	644.3	673.7	693.7	746.3	915.4	743.5	527.6
	PEFC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peru	Others	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	of which FSC, PEFC and oor others are in the Amazon region	0	0	0	0	0	61.3	180.5	661.7	661.7	644.3	673.7	693.7	746.3	915.4	743.5	527.6
	FSC	0	0	0	0	0	0	0	0	65.27	65.27	89.12	23.86	89.12	113.86	396.88	396.88
	PEFC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Suriname	Others	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	of which FSC, PEFC and/or others are in the Amazon region	0	0	0	0	0	0	0	0	65.3	65.3	89.1	23.9	89.1	113.9	396.9	396.9
	FSC	0	0	0	0	139.6	139.6	139.6	139.6	139.6	139.6	139.6	139.6	139.6	n.d.	n.d.	n.d.
Venezuela	PEFC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(República	Others	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
bolivariana de)	of which FSC, PEFC and/or others are in the Amazon region	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	FSC	1 441.4	1 925.1	2 290.2	2 476.3	3 315.2	5 555.7	5 747.6	7 7 9 7	8 747.1	8 319.2	8 235.9	8 879	8 382.8	9 384.5	8 648.3	8 517.5
	PEFC	0	0	0	0	0	555	555	882.6	1114.5	1285.2	2 083	1 858.9	2 204.7	2 265.6	2 804	2 734.1
Total of	Others	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	of which FSC, PEFC and/or others are in the Amazon region	648	830	868	958	1320	1 682.3	1711.5	2 219.7	2 452.7	1 996.2	2 052.5	1 505.2	1 521.4	1349.3	1 442.4	3 306.5

#### **Bolivia**

- Official information from the Ministry of Environment and Water, through the General Directorate of Forest Management and Development, Observation Room Bolivia ACTO. It was generated based on interpretation of satellite images, which is why it is different from previous reports submitted by the country.
- The General Forestry Management Plans (PGMF) have a duration of 20 years; after this period, they can be extended again.

### **Brazil**

• The Amazon region refers to the area of nine States that comprise the Amazon biome.

### Colombia

• According to the official source (Ministry of Environment and Sustainable Development) there is no information available for this subject to date.

### **Ecuador**

• There is no official data at the national level to that detail. CEFOVE - an entity accredited nationally by the FSC - did not provide updated data per year. The data presented have been provided by FAO.

## Guyana

• Country data based on what was reported by these two companies. One was briefly certified in 2006, but later it lost certification, and the other was certified from 2008 to 2011 and then it stopped operation.

# **ANNEX 6**

# Progress reported by the ACTO Member Countries on forest inventories at the national and Amazon region levels and other instruments for the evaluation or monitoring of forest resources<sup>7</sup>

# Bolivia, Plurinational Republic of

To date, there is a pilot forest inventory for two Bolivian departments (Pando and Santa Cruz) approved by Ministerial Resolution (2016); however, the other departments are in the process of elaboration.

#### Brazil

National Forest Inventory (IFN) - It covers the entire country and is repeated periodically every five years. It uses sampling techniques to allow the continuous monitoring of Brazilian forest resources with the main purpose of providing information to support the definition of forest policies, the management of forest resources and the elaboration of plans for the use and conservation of forest resources.

National System of Permanent Plots (SISPP) - Objective to monitor the dynamics of natural and planted forests, located in different biomes, for research purposes.

Monitoring by remote sensors - The National Institute of Space Research (INPE) has a monitoring program for the Amazon region by remote sensors, with three operating and complementary systems: PRODES, DETER and DEGRAD. The images used are from the satellite LANDSAT and form a grid that covers the entire Amazon region, formed by a set of points and orbits...

The PRODES system monitors forest deforestation in the Legal Amazon. It is a systematic survey carried out since 1988 to estimate the annual rate of deforestation, and detects exclusively the deforestation by "clear cut" areas larger than 6.25 hectares. Through PRODES, information is also generated for DEGRAD, which is a system for mapping deforestation areas where forest cover has not been totally removed.

DETER is a rapid survey conducted monthly by the INPE since May 2004, with data from the MODIS sensor of the Terra / Aqua satellite and the WFI sensor from the CBERS satellite, with a spatial resolution of 250 m. DETER was designed as an early warning system, developed methodologically to support the monitoring and control of deforestation. For this reason, DETER maps open and deforested areas through forest degradation. With this system it is possible to detect only deforestation in areas larger than 25 hectares and can be used only as an indicator of the annual deforestation trends.

The Brazilian Institute of Environment and Renewable Natural Resources (IBAMA in a technical cooperation agreement with the Secretariat of Biodiversity and Forests of the Ministry of Environment - (SBF / MMA), implemented the project of Deforestation of Brazilian Biomes by Satellite Monitoring (PMDBBS) to monitor forest cover, quantify deforestation and ground actions to combat illegal deforestation in the Caatinga, Cerrado (Sabana), Atlantic Forest, Pantanal and Pampa biomes. For this project, Landsat and CBERS images were used. The procedure for the identification of polygons with deforested areas adopts the base work of scale at 1:50 000 and the minimum deforestation detection area of 2 hectares.

Rural Environmental Cadastre (CAR) - It is a mandatory electronic register for all rural properties that aims to integrate environmental information on the status of Permanent Preservation Areas - PPA, Legal Reserve areas, forests and remnants of native vegetation, Restricted Use areas and Consolidated areas of rural properties and possessions of the country. The Registry is a strategic database for the environmental management of the country and contributes to the control, monitoring and combat of the deforestation of forests and other forms of native vegetation in Brazil, as well as to the environmental and economic planning of rural properties. Currently, the areas are being registered by the owners. The CAR was created by Law 12.651 / 2012 under the National System of Environmental Information - SINIMA and regulated by the MMA Instructional Norm n. 2 of May 5, 2014.

# Colombia

National Forest Inventory (IFN) - Its implementation, defined in six phases, is underway since 2105 through its first baseline cycle (2015 - 2017). There will be data to validate the design of the IFN proposed by IDEAM and review / adjust aspects associated, mainly, with the sampling intensity and the estimated times and costs for its execution.

Permanent sampling plots - The design of the IFN considers the establishment of a set of permanent plots of one hectare (corresponding to 20% of the total sample) at national level, in order to improve the quality and accuracy of the results, as well as to obtain a better understanding of the spatial heterogeneity of forests.

Between 2015 and 2016, progress was made with the establishment of nearly 300 conglomerates representing more than 10% of the sample on national level, and a total of 42 permanent plots.

<sup>&</sup>lt;sup>7</sup> The information was extracted/adapted from the national reports submitted by the Member Countries to prepare this regional report, where they respond to the consultation on how the country measures and reports on the progress made towards sustainable national forest management.

#### **Ecuador**

Ecuador, through the Ministry of Environment (MAE), is in the process of institualization of the National Forest Monitoring System (SNMB). The system is operational and its main objective is to generate updated and periodic information on the state of forests and ecosystems through indicators of changes in use and coverage, as well as indicators of status, pressure and response, generating key inputs for the decision-making, the design and implementation of policies of land use planning, land use, forest governance and natural resources management. The SNMB unified the informations on the deforestation baseline, National Forest Inventory and Ecosystem Map.

The system works transversally to the different management units of the Ministry, to which it provides support. This joint work has made it possible to carry out international reports, such as the reference level of forest emissions due to deforestation, thus complying with one of the requirements of the United Nations Framework Convention on Climate Change (UNFCCC) within the framework of payments for results under REDD + mechanisms. Likewise, it has generated the regional maps of deforestation, the national report on the evaluation of forest resources (FRA) and the delivery of the information required for the Regional Report on the State of Forests in the Amazon Region, for which work has been done jointly with the Observation Room of ACTO and the National Forestry Office.

Since 2014, deforestation monitoring has been carried out nationally every two years and for the Amazon region on an annual basis. Currently the goal is the strengthening of the indicators on the state of the forests, for which activities have been initiated for the automation of processes and the generation of methodologies aimed at the detection of forest degradation, early warnings of deforestation and fires; as well as the second remeasurement of the national forest inventory.

## Guyana

All authorizations for forest exploitation (TSA and CMT) must carry out the inventory of the forest area and submit the information to the Guyana Forestry Commission (GFC) as parts of their management plan before the permit is granted so they can to take advantage .

The Forestry Monitoring Department of the GFC continuously monitors and reports on all the forest management practices in forest concessions. The concessionaires inform about the volume and the extracted species, information without which they can not withdraw the products from the concession. The GFC has a database that it uses to monitor each concessionair.

#### Peru

National Forest Inventory (INF) - The percentage of advance of the IFN at a national level is close to 12% (including all ecozones). At the Amazon level, the percentage of progress is 9%, considering that only the lowland and hydromorphic forest ecozones of the Peruvian Amazon have been evaluated. So far, data on accessible highland and high forest ecozones have been difficult to access. There is recent information on the evaluation of forest resources, such as vegetation maps and forest and non-forest maps, which allow much more accurate calculations and projections to be made with reality; likewise, forest inventories are being carried out at the national level, which will allow for even more precise data that may be reflected in subsequent FRA reports.

## **Suriname**

The country is preparing for a National Multipurpose Forest Inventory including the mangrove forests. One of the planned activities is also the harmonization of the INF proposal with other MCs in the region.

In 2012, a Forest Coverage Monitoring Unit (FCMU) was established in the SBB. So far, the FCMU has produced a base map for the year 2000 and deforestation maps for the periods 2000-2009, 2009-2013, 2013-2014 and 2014-2015 using Landsat and TerraAmazon images, a free software distributed by the Brazilian Institute of Space Research (INPE). The intention is to produce deforestation maps annually. The FCMU was established within the framework of the ACTO Project Monitoring Deforestation, Wood Extraction and Land Use Change in the Amazon Forest.

# Venezuela, República Bolivariana de

The National Forestry Inventory is being implemented. The advance is 7.2% of the field work and the National Forest Inventory System (SINACIF) is used to process the field information and generate reports on the state of the forests, quantitative, qualitative, ecological and derived data, among them, the calculation of potential carbon and the emission of GHG from deforestation, seen as avoided emissions of CO2 or equivalent CO2 emissions. Other field evaluations include the map of Vegetal coverage of Venezuela in 2010, edition 2014 and updades from other sources; Regional Map of Amazon Deforestation in Venezuela between 2000-2016 and the map of changes in the land use coverage in the Amazon region of Venezuela between 2010 and 2014.

# **ANNEX 7**

# Policy instruments and regulations to support sustainable forest management reported by ACTO Member Countries<sup>8</sup>

### Bolivia, Plurinational State of

# Policies to support sustainable forest management

Forest Law 1700 (enacted in 1996) - Standard sustainable use and protection of forests and forest lands for the benefit of current and future generations, harmonizing the social, economic and ecological interest of the country.

Supreme Decree 2912 (2016) - Declares the National Program of Forestation and Reforestation of strategic nature and of national priority and approves the National Strategy for the implementation of PNFR 2016-2030. Supreme Decree 2913 (2016) - Authorizes the constitution of a Trust constituted by the Ministry of Productive Development and Plural Economy, for the granting of credits destined to capital of operations and investment for natural persons and/or legal entities that carry out activities of recollection, extraction, production, processing and commercialization of forest, timber and non-timber products, strengthening the activities of the peasant, indigenous and small-farmer communities. Supreme Decree 2914 (2016) - The objective of the SD is to maintain forest cover and expand the area of integrated and sustainable management of forests to 16,900,000 hectares until 2030. In addition, to achieve the eradication of zero illegal deforestation until 2020.

# Legislation and regulations of support to the sustainable forest management

Regulation of the Forest Law 1700 (1996) - Regulates the Forest Law 1700

Technical Standard on Property Development Plans (1997) - Establishes the technical criteria and the procedures to be followed in the preparation, approval, implementation, monitoring and control of the Plans of Land Management (POP), within the framework of the constitutional, legal and applicable regulations on the subject.

Special Regulation for Deforestation and Controlled Burning (1997). Establishes the technical-legal rules for clearing and burning of lands with forest cover suitable for various uses and for their corresponding monitoring by the auditing entity (ABT), and in this way avoid deforestation in areas not suitable for other uses and reduce the negative impact of deforestation, the burning of usable wood and forest fires.

Technical Standard for the elaboration of management plans elaboration under 200 hectares (1997) - Establishes the technical criteria to elaborate and implement management plans for tropical and subtropical forests in private properties of areas equal to or less than 200 hectares.

Technical standard on Raw Material Processing and Supply Program (1997) - Establishes the technical criteria and procedures to be followed in the preparation, approval, implementation, monitoring and control of the Raw Material Processing and Supply Programs, in order to effectively meet its objective of ensuring that all forest products that reach the processing centers come from managed forests or, where appropriate, from duly authorized clearings. Technical Regulation for the elaboration of Forest Management tools in Andean and Chaco forests (1997) - Establishes the technical criteria for the preparation of inventories, management plans and forest operational plans in Andean and Chaco forests.

Technical standard for the elaboration of instruments of Commercial Forest Management in Communal Lands of Origin (1997) - Establishes the technical criteria for the elaboration of inventories, management plans and forest operational plans in Community Land of Origin.

Technical standard for the elaboration of the Forest Management Instruments in private property or Concessions with areas greater than 200 hectares (1998) – Establishes the technical criteria for the elaboration of inventories, management plans and forest operational plans on Community lands of origin.

Technical standard for sustainable commercial use of non-timber forest resources in forests and natural forest lands (2006) - Establishes the provisions for access and management of non-timber forest resources of plant species of wild flora for commercial purposes, conventionally called Non-timber Forest Products in forests and natural forest lands.

<sup>&</sup>lt;sup>8</sup> Las informaciones fueron extraídas/adaptadas de los informes nacionales sometidos por los Países Miembros para preparar el presente informe regional.

#### **Brazil**

# Policies to support sustainable forest management

Law 7.797 (1989) - Institutes the National Fund for the Environment, in order to develop projects oriented to the rational and sustainable use of natural resources, including the maintenance, improvement or restoration of environmental quality to improve the quality of life of the population.

Law 9.985 (2000) –Institutes the National System of Conservation Units (SNUC), establishes criteria and rules for the creation, implementation and management of the protected areas and establishes other provisions.

Law 12.651 (2012) – Institutes the Forest Code. Provides protection over vegetation, Permanent Preservation Areas, Legal Reserve, extraction in forests and successive formations, supply of forest raw materials, control of the origin of forest products and prevention and control of forest fires and provides economic instruments and financial for the achievement of its objectives, and establishes other provisions.

Law 11.284 (2016) – Establishes public forest management for sustainable production, creates the Brazilian Forest Service (SFB) in the structure of the Ministry of the Environment, and establishes the National Forestry Development Fund (FNDF) and other provisions.

# Legislation and regulations of support to the sustainable forest management

Decree 3.420 (2000) - Creates the National Forest Program - PNF, and establishes other provisions.

Decree 4.340 (2002) – Regulates the articles of law n. 9.985, from July 18, 2000, which establishes the National System of Conservation Units (SNUC), and establishes other provisions. Provides the creation of Protected Areas, Management Plan, advice, management and authorization to explore goods and services.

Decree 5.975 (2006) – Regulates the articles of the law n. 4.771, of September 15,1965, of Law n. 6.938, of August 31, 1981, of Law n. 10.650, of April 16,2003, alters and adds provisions to decrees nos. 3.179, of September 21, 1999 and n. 3.420, of April 20, 2000; and contains other provisions. Provides observations for the exploration, suppression and felling of the forests and successive formations; Sustainable Forest Management Plan, Forest Replanting and Licensing for forest transportation by products.

Resolution 378 (2006) - Defines the companies that may cause national or regional environmental impacts and issues other provisions. Provides forest exploitation to the authorization of IBAMA.

Resolution 379 (2006) – Creates and regulates the database on forest management at the level of the National Environmental System - SISNAMA.

Decree 6,063 (2007) - Regulates, at the federal level, the provisions of the Law n. 11.284, of March 2, 2006, which establishes public forest management for sustainable production and other provisions.

Decree 6,527 (2008) - Establishes the Amazon Fund by the National Bank for Economic and Social Development (BNDES).

Decree 6,874 (2009) – Institutes the Federal Program for Community and Family Forest Management - PMFC, established under Ministry of Environment and the Ministry of Agrarian Development, whose objective is to organize management actions and promote sustainable management in forests subject to use by farmers, settlers of the agrarian reform, traditional populations and communities

Resolution 406 (2009) – Establishes technical parameters to be adopted in the preparation, presentation, technical evaluation and implementation of the Sustainable Forest Management Plan - PMFS for timber purposes for native forests and their forms of succession in the Amazon.

Normative Instruction 7 (2003) - Procedures related to the activities of the Sustainable Forest Management Plan that consider the use of caoba (Swietenia macrophylla King).

Normative Instruction 93 (2006) – Establishes technical standards for the presentation of maps and geographically referenced information on the location of legal reserves and areas under forest management and respective subdivisions.

Normative Instruction 112 (2006) - Provides the Document of Forest Origin (DOF) and the Declaration of Supply of Forest Products, Authorization of Transportation of Forest Products - ATPF.

To these are added 12 other regulations.

# Colombia

# Policies to support sustainable forest management

National Forestry Development Plan (2000) - Establishes a strategic framework that actively incorporates the forestry sector into national development, optimizing comparative advantages and promoting the competitiveness of timber and non-timber forest products in the national and international market, based on sustainable management of the natural and planted forests.

Amazon Vision (2016) - program that seeks to promote a new model of development in the region that allows improving the living conditions of local populations, while maintaining the natural base that supports the immense biodiversity and productivity of the region. In a first stage the program, and in particular the REM actions, have, as priority areas, the departments of Caquetá and Guaviare. The interventions in the Amazon would be concentrated in five components: a) forest governance; b) sectoral agreements; c) productive agro-environmental systems and agreements with peasant associations; d) agreements with indigenous communities; and e) forest and carbon monitoring system, and national forest inventory. Within these five components, interventions with greater potential will be prioritized to be implemented in the short term. At present, it has the financial support of the Governments of Germany, Norway and the United Kingdom, through the Pioneers for REDD + (REM) Program.

# Legislation and regulations of support to the sustainable forest management

Decree Law 2811 (1974) - Regulates the management of forest soils by their nature and the forests they contain, which, for the purposes of the instrument, are called forest areas. Forest areas may be productive, protective and protective-producing.

Law 99 (1993) - Functions of the Ministry of the Environment to direct and coordinate the planning process and the harmonious execution of activities in environmental matters, of the entities that make up the National Environmental System -SINA; and to define the execution of programs and projects that the Nation, or this one in association with other public entities, must advance for the environmental sanitation or in relation to the management, use, conservation, recovery or protection of the renewable natural resources and the environment.

The Regional Autonomous Corporations execute the national policies, plans and programs on environmental matters defined by the law approving the National Development Plan and the National Investment Plan or by the Ministry of the Environment, as well as those of the regional order that have been entrusted to it, according to the law, within the scope of its jurisdiction.

Decree 1791 - regime for the use of forests (1996) - Forestry Development Regime (1996) - The Corporations, in order to plan the ordination and management of the forests, reserve, allocate and declare the forest producing and producing - protective areas that will be exploited in their respective jurisdictions. Each area will have a forest management plan that will be prepared by the resource management entity.

#### Ecuador

## Policies to support sustainable forest management

Forest and Conservation Law for Natural Areas and Wildlife - Organic Law of the forestry sector Unified Text of Secondary Legislation Environment (TULSMA) Book III: Forest Regime - Text of compilation of the Environmental Law for the Forest Regime.

# Legislation and regulations of support to the sustainable forest management

Standard for the procedure for the Award of Lands of the State Forest Patrimony and Forest and Vegetation Protectors - Establishes parameters for the Awarding of Lands of the State Forestry Patrimony, Forests and Vegetation Protectors at the community level, associations and individuals. Regulations for sustainable forest management for native forests, cultivated forests, agroforestry systems, natural regeneration and relict trees - Secondary regulations established with technical criteria that direct sustainable forest management of natural forests in the country.

National Program of Incentives for the Conservation and Sustainable Use of the Natural Heritage (Socio Bosque) - Determines incentive initiatives in a single National Program, seeking an integral intervention in the territory and promoting an improvement in the living conditions of the inhabitants.

At the national level there is the Organic Code of Territorial Organization, Autonomy and Decentralization (COOTAD), which promotes the organization of the territory at the provincial, cantonal and parochial levels (administrative and territorial division of the country). In addition, the National Environmental Authority (Ministry of the Environment of Ecuador) is currently in the process of reviewing and modernizing existing regulatory legal bodies at the national level for the management and running of forests, for which the current national legal framework (Forestry Law) and its secondary regulations will be modified and replaced by the Organic Environmental Code (COA), which in one of its chapters, contemplates the aspects related to the country's forest regime. Currently, the COA is officialized and will enter into force in April 2018.

# Guyana

# Policies to support sustainable forest management

National Forest Policy Statement (2011)

National Forest Plan (2011)

Low-Carbon Development Strategy - LCDS

Green State Development Strategy (GSDS) - (2016)

Government Policies and the LCDS encourage the private forests on Amerindian lands to implement the sustainable forest management.

Legislation and regulations of support to the sustainable	The main regulation is the Code of Practice (CoP) for timber exploitation, which is monitored through the operational procedure of the GFC, supported by the Law of the Guyana Forestry Commission of 2001. However, the Amerindian lands considered private lands are not regulated by CoP, but have the opportunity to implement the CoP and be considered under LCDS. The legislation and regulations related to sustainable forest management are not mandatory for Amerindian lands.
forest management	GFC collaborates with Amerindians as part of the LCDS program by helping them to implement sustainable forest management practices and any other required area.
Peru	
Policies to	Forestry and Wildlife Law, Law n° 29763 (2011)
support sustainable forest	National Forest and Wildlife Policy (2013)
management	
Legislation and	Regulations of the Forestry and Wildlife Law Supreme Decrees n° 018-2015- MINAGRI, n° 019-2015-MINAGRI, n° 020-2015- MINAGRI and n° 021-2015- MINAGRI (2015).
regulations of support to the	Implementation of the Forest Zoning Process as a national forestry policy that can be used as a technical basis to define the alternatives for the sustainable use of forest resources and wildlife.
sustainable	Construction of the spatial data infrastructure (IDE) of SERFOR
forest management	Forest Registr, which incorporates cartographic and documentary information on the zoning categories, forest management units, titles, plantations and lands of public domain with aptitude for forest production or protection plantations, as well as lands of peasant and native communities. (Art. 34, Law n° 29763).
Suriname	
Policies to support sustainable forest management	National Forest Policy (2005) - Formulation through a participatory process with all relevant stakeholders. For its implementation, an interim strategic action plan was formulated in 2009 with the indication of priority measures that will lead to strengthening sustainable forest management in the country and to continue developing the entire forestry sector. The policy and action plan are relevant at the national level, but they are also relevant at the subnational level. Forest Action Plan (2009) - Interim strategic action plan for the forestry sector 2009 - 2013
Legislation	Forest Management Act (1992)
and	Nature Conservation Act (1954, 1992)
regulations of support	Game Act 1954 (1997)
to the sustainable	Guidelines for sustainable forest management - Code of Practice for Sustainable Forest Management (2011) (under an approval process).
forest management	Forest Planning Act - Planning Act, Forestry - The Forest Management Act (1992)
	Act for export of timber - Timber Export Act 1950, emended 1980
	Regulation for forests and flora and fauna to be protected, Nature Conservation Act (1954), with subsidiary legislation Nature Conservation Resolution 1961, 1966, 1969, 1972, 1986, 1998.
Venezuela, Bo	livarian Republic of
Policies to	National Program of Commercial and Multiple use Forest Plantations(1991)
support sustainable	National Plan for Territorial Planning (1998)
forest	National Forest Policy (2002)
management	National Plan for Development of the Forestry Sector (2003)
	Forests Law and Forest Management (2008) – It was recently repealed.
Legislation	Forest law of Soils and Waters (1966)
and regulations	Regulation of the Forest law of Soils and Waters (1977)
of support	Organic Law for the Organization of the Territory (1983)
to the	Methodology for the realization of the National Forest Inventory(2004)
sustainable forest management	Norms for the administration of forestry activities in forest reserves, forested lots, forested areas for protection and forested areas on privately owned lands, destined for permanent forest production. (1992)

