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**LATIN AMERICAN AND CARIBBEAN FORESTRY COMMISSION****TWENTY-NINTH SESSION****Lima, Peru, 9 – 13 November, 2015****FRA 2015 AND THE STATE OF THE FOREST SECTOR  
IN THE REGION****Secretariat note****Introducing FRA 2015**

1. Forests and forest management have changed substantially over the past 25 years. Overall, positive progress has been made to save and restore forests over this period, according to the Global Forest Resources Assessment Report 2015 (FRA 2015). While the extent of the world's forests continues to decline as the human population grows and demand for food and land increases, the rate of net forest loss has been cut by over 50 percent. At the same time, the attention paid to sustainable forest management has never been higher: more land is designated as permanent forest, more measurement, monitoring, reporting, planning and stakeholder involvement is taking place, and the legal framework for sustaining forest management is nearly universal. Larger areas are being designated for conservation of biodiversity at the same time as forests are meeting increasing demand for forest products and services.

2. FRA 2015 contains results for 234 countries and territories, including contributions from 155 countries representing the hard work of national correspondents who prepared country reports that present government forest statistics in a common format. When FRA began in 1948, FAO was the only organization collecting and reporting global forest resource information. Today there are many international and regional organizations involved in measuring, monitoring and reporting forest resource data, mostly using remote sensing with little or no information other than tree cover area estimates. In 2011, six international organizations and processes<sup>1</sup> came together to create the Collaborative Forest Resources Questionnaire (CFRQ), representing some 100 countries and 88 percent of the world's forest area. These organizations now jointly collect data on over 60 percent of the total number of variables collected through the FRA process.

<sup>1</sup> Central African Forest Commission/Observatoire des Forêts d'Afrique Centrale (COMIFAC/OFAC), FAO, FOREST EUROPE, International Tropical Timber Organization (ITTO), Montréal Process, United Nations Economic Commission for Europe (UNECE).

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3. The FRA 2015 data, analysis and results are documented in a series of technical reports, scientific articles and on-line access as follows:

- The synthesis report “*How are the World’s Forests Changing?*” that summarizes some of the key findings about the status and trends of the world’s forest, as well as an outlook for the future. The document is available for download at <http://www.fao.org/3/a-i4793e.pdf>
- Summary tables for all variables collected in FRA 2015 are presented in the FRA 2015 Desk Reference which can be found at <http://www.fao.org/3/a-i4808e.pdf>
- A more detailed set of analyses are presented in independently peer-reviewed papers in the journal *Forest Ecology and Management* at <http://www.fao.org/3/a-i4895e/index.html>

### Analysis of the FRA 2015 data for Latin America and the Caribbean

4. As the general documentation of the FRA 2015 data does not go into much detailed regional analysis, it was considered relevant to prepare a specific document on the forest resources in Latin America and the Caribbean (LAC) to be presented at the meeting of the Forestry Commission for Latin America and the Caribbean in November 2015.

5. For the purpose of this document, the LAC region has been further subdivided into four subregions as follows:

Table 1. List of FRA 2015 reporting countries and territories by subregion

Southern Cone	Amazon	Mesoamerica	Caribbean	
Argentina Chile Falkland Islands (Malvinas)* Paraguay Uruguay	Bolivia (plurinational state of) Brazil Colombia Ecuador French Guiana Guyana Peru Suriname Venezuela (Bolivarian Republic of)	Belize Costa Rica El Salvador Guatemala Honduras Mexico Nicaragua Panama	Anguilla Antigua and Barbuda Aruba Bahamas Barbados Bermuda British Virgin Islands Cayman Islands Cuba Dominica Dominican Republic Grenada Guadeloupe Haiti	Jamaica Martinique Montserrat Netherlands Antilles** Puerto Rico Saint Kitts and Nevis Saint Lucia Saint Martin (French part) Saint Vincent and the Grenadines Saint-Barthélemy Trinidad and Tobago Turks and Caicos Islands United States Virgin Islands

\* Adispute exists between the governments of Argentina and the United Kingdom of Great Britain and Northern Ireland  
\*\* Sum of Bonaire, Saint Estatus and Saba, Curaçao and Saint Maarten (Dutch part)

### Forest area and area change

#### Forest area

6. Latin America and the Caribbean have abundant forest resources, and the total forest area of the region ascends to 935.5 million hectares, which is 46.4 % of the regional total land area. This corresponds to 23.4 % of the world’s total forest area.

7. Table 2 shows the areas of forest, other wooded land and other land by subregion. It is noticeable that most of the forests are found in the Amazon subregion, which has a forest cover of 58 %, the Southern Cone subregion has a forest cover of only 15 %. Mesoamerica and the Caribbean have a forest cover of 35 and 32 percent respectively (Figure 1).

Table 2. Total country area by subregion, divided by forest, other wooded land, other land and inland water

Subregion	Land area						Land area 1000 ha	Inland water 1 000 ha	Country area 1000 ha
	Forest		Other wooded land		Other land				
	1 000 ha	% of land area	1 000 ha	% of land area	1 000 ha	% of land area			
Southern Cone subregion	62,015	15.3	79,025	19.4	265,432	65.3	406,471	6,692	413,164
Amazon subregion	779,996	58.2	77,405	5.8	482,728	36.0	1,340,128	27,121	1,367,249
Mesoamerica subregion	86,290	35.2	25,831	10.5	133,105	54.3	245,227	3,439	248,666
Caribbean subregion	7,195	31.9	1,065	4.7	14,267	63.3	22,528	815	23,343
<b>Latin America and the Caribbean</b>	<b>935,496</b>	<b>46.4</b>	<b>183,326</b>	<b>9.1</b>	<b>895,532</b>	<b>44.5</b>	<b>2,014,354</b>	<b>38,068</b>	<b>2,052,422</b>

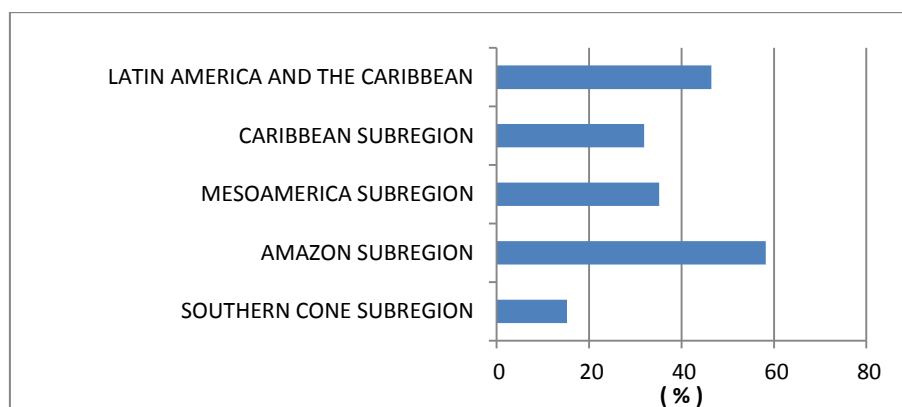


Figure 1. Forest area 2015 in % of total land area

8. Figure 2 shows how the forest area in the LAC region is distributed by the four subregions. 83 % of the forest area is found in the Amazon subregion, while only 1 % in the Caribbean. Mesoamerica has 9 % and the Southern Cone 7 % of the total forest area of the region.

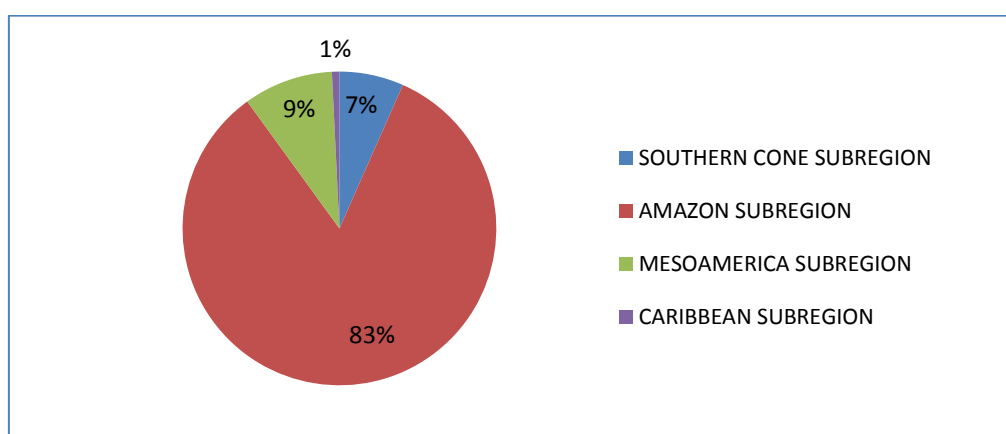


Figure 2. Forest area 2015 in Latin America and the Caribbean, by subregion.

9. Although forests are found in all countries and territories in the LAC region except the Falkland Islands (Malvinas)<sup>2</sup> and Saint-Barthélemy, the major part of the forest area is concentrated to a few countries. Table 3 shows the top five countries in terms of forest area in the region. These five countries together account for 80 % of the total forest area in the region. Brazil alone accounts for 53 % of the region's total forest area. On the other hand, 26 countries and territories in LAC (out of a total of 49), have less than 1 million hectares of forest, most of these are in the Caribbean subregion.

Table 3. Top five countries in terms of forest area 2015

Country	1 000 ha	% of forest area in LAC
Brazil	493,538	53%
Peru	73,973	8%
Mexico	66,040	7%
Colombia	58,502	6%
Bolivia	54,764	6%

<sup>2</sup> A dispute exists between the Governments of Argentina and the United Kingdom of Great Britain and Northern Ireland

10. Table 4 shows the high forest cover countries in Latin America and the Caribbean. Four countries and territories have a forest cover above 70 %. On top of the list is French Guiana with 98.6 % forest cover, followed by Suriname, Guyana and Turks and Caicos Islands.

*Table 4. Countries with high forest cover (>70%)*

Country	Forest	
	1 000 ha	% of land area
French Guiana	8,130	98.6
Suriname	15,332	95.4
Guyana	16,526	84.0
Turks and Caicos Islands	34	80.0

11. Table 5 shows the low forest cover countries and territories in the region with less than 15 % forest cover. Two countries and territories have reported no forest area (Falkland Islands (Malvinas)<sup>3</sup> and Saint-Barthélemy). Among the remaining countries are Haiti, Argentina, Uruguay and El Salvador, as well as some smaller Caribbean islands such as Aruba, the Netherlands Antilles and Barbados.

*Table 5. Countries with low forest cover (<15%)*

Country	Forest	
	1 000 ha	% of land area
Barbados	6	14.7
El Salvador	265	12.8
Uruguay	1,845	10.5
Argentina	27,112	9.9
Haiti	97	3.5
Aruba	0	2.3
Netherlands Antilles	1	1.5
Falkland Islands (Malvinas)	0	0.0
Saint-Barthélemy	0	0.0

#### Forest area change

12. The forest area change estimates represent net changes, based on the forest area reported by countries at the reference years.

13. Figure 3 shows that the loss of forest area in the LAC region continues, but the rate of loss is slowing down from 4.45 million hectares per year in 1990-2000 to 2.18 million hectares per year in 2010-2015. This slow-down is mainly due to Brazil that has reduced the rate of annual forest loss from 2.54 million hectares in the period 1990-2000 to 0.98 million hectares in the period 2010-2015. However, also the Mesoamerica and the Southern Cone subregions show a reduction of annual forest loss.

14. On the other hand, The Caribbean subregion shows a net increase of forest area, mainly due to the abandonment of sugarcane plantations and other agricultural land. This increase in forest area is particularly noticeable in Cuba, the Dominican Republic, Puerto Rico and Trinidad and Tobago.

15. Outside of the Caribbean subregion, Chile, Costa Rica and Uruguay are the only countries that show an increase in forest area during the period 2010-2015.

<sup>3</sup> A dispute exists between the governments of Argentina and the United Kingdom of Great Britain and Northern Ireland

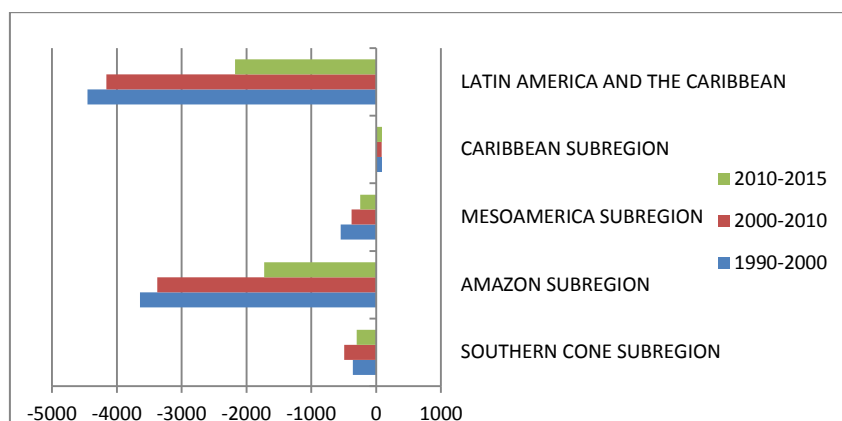


Figure 3. Annual forest area change (1000 hectares per year)

16. Analyzing the forest area change in relative terms, Figure 4 shows the forest area change rate expressed as a percentage. For the whole region, the net loss has gone down from 0.44 % in 2000-2010 to 0.23 % in 2010-2015.

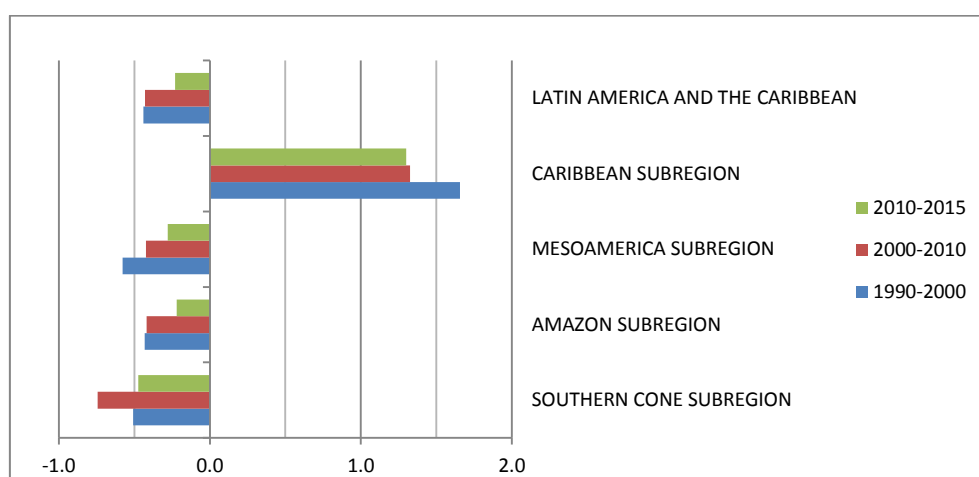


Figure 4. Annual forest area change rate (%)

#### Afforestation, natural forest expansion and deforestation

17. The net changes in forest area is the accumulated effect of change processes that increase the forest area (afforestation and natural forest expansion) and deforestation which implies a change of forest to another land use. FRA 2015 asked countries to provide information on these three indicators.

18. Very few countries reported on natural forest expansion and it is not possible to draw any regional or subregional conclusions based on the FRA 2015 data set. 23 countries and territories reported on afforestation, and the data for countries with more than 2000 hectares of annual reforestation are presented in Table 6. Among the reporting countries, four are particularly important in terms of afforestation area – Argentina, Chile, Uruguay and Brazil. Argentina and Uruguay present a peak in 2000, and since then a significant drop in annually afforested area. Chile has a peak in 2005 and a decline in 2010, while Brazil shows a steady increase of the annual afforested area.

19. Worth mentioning is also the strong increase of afforestation in Nicaragua, due to the national reforestation programme (Cruzada Nacional de Reforestación), as well as the Dominican Republic that has afforested significant areas through its programme Quisqueya Verde, since its beginning in 1997.

Table 6. Countries with more than 2000 hectares of annual afforestation in 2010

Country/area	Afforestation (1000 ha/year)			
	1990	2000	2005	2010
Argentina	11.7	51.3	9.1	2.3
Chile	36.6	41.9	64.3	23.2
Uruguay	10.8	63.8	29.6	22.4
Brazil	226.0	234.0	266.0	316.0
Venezuela (Bolivarian Republic of)	NR	NR	16.3	19.4
Nicaragua	-	-	0.8	15.3
Panama	1.4	4.0	2.9	2.6
Dominican Republic	1.7	4.4	7.0	8.4

NR: not reported

20. Data on deforestation has been reported by 18 countries and territories. Table 7 presents the top 10 countries in the region in terms of annual deforestation 2010. While Brazil's rate of deforestation is more than three times the next largest deforested country, Brazil has had the most substantial drop in deforestation rates in the region. Brazil is followed by Mexico, Argentina, Bolivia, Peru, Venezuela and Colombia – all with an annual deforestation of more than 100,000 hectares.

Table 7. Top 10 countries in terms of annual deforestation

Country/area	Deforestation (1 000 hectares/year)							
	Total				...of which human induced			
	1990	2000	2005	2010	1990	2000	2005	2010
Brazil	3,026.0	3,277.0	3,407.0	1,775.0	-	-	-	-
Mexico	-	-	583.0	440.6	-	-	-	-
Argentina	-	235.0	336.0	301.0	-	235.0	336.0	301.0
Bolivia (plurinational state of)	270.0	270.0	281.0	289.0	270.0	270.0	281.0	289.0
Peru	177.0	143.0	126.0	165.0	-	-	-	-
Venezuela (Bolivarian Republic of)	288.0	288.0	288.0	164.6	288.0	288.0	288.0	164.6
Colombia	279.8	315.0	238.3	148.0	-	-	-	-
Ecuador	-	92.8	83.4	47.5	-	92.8	83.4	74.0
Guatemala	-	73.0	48.0	38.0	-	73.0	48.0	38.0
Suriname	-	3.9	3.9	3.9	-	3.4	3.4	3.4

## Forest characteristics

### Area distribution by primary forest, planted forest and naturally regenerated forest

21. In LAC, 38 out of 49 countries and territories reported on forest characteristics, corresponding to 94 % of the total LAC forest area. As Figure 5 shows, about 50 % of the forest area in the region is considered primary forest and 2 % of the forest area is planted forest, the remaining 48 % is other naturally regenerated forest. This should be compared to the global averages where about 33% is primary forest, 7% is planted and the remaining 60% is other naturally regenerated forest. So the LAC region has more primary forests and less planted forests than the global average.

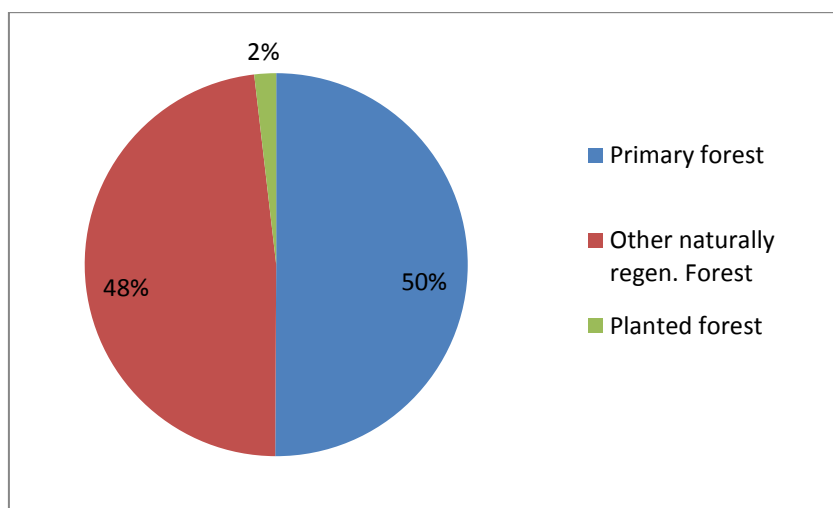


Figure 5. Forest characteristics in the Latin America and the Caribbean

22. An analysis by subregion (Figure 6) shows that primary forests are mostly found in the Amazon and Mesoamerica subregions. The Southern Cone and Caribbean subregion show a considerably higher percentage of planted forests.

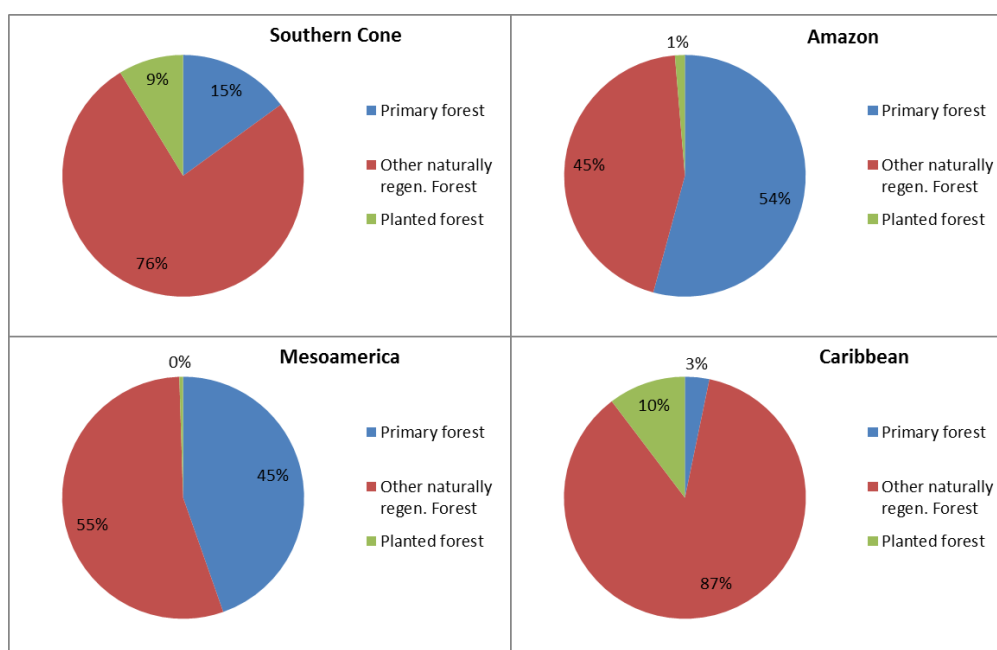


Figure 6. Forest characteristics in the four subregions

Primary forests

23. Complete time series on primary forest area has been reported by 33 countries. Figure 7 and Table 8 show the trend in LAC region. There is a loss of about 37.9 million hectares of primary forest for the period 1990-2015. There is a tendency that the rate of primary forest loss is slowing down. The loss of primary forest is concentrated to the Amazon and Mesoamerica subregions where five countries show a loss of more than 100,000 hectares per year, namely: Bolivia, Brazil, Guyana, Peru, and Mexico. Note that primary forest loss is not only deforestation; it also includes the transition of primary forest to other naturally regenerated forest.

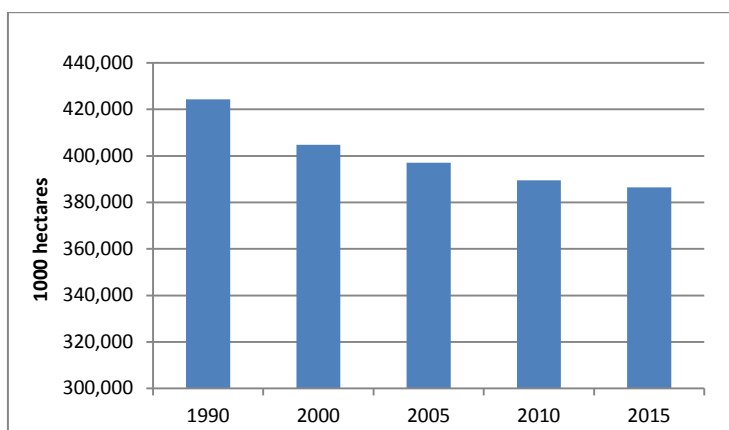


Figure 7. Primary forest area in Latin America and the Caribbean

Table 8. Primary forest area and area change

Subregion	1000 ha					1000 ha/year			
	1990	2000	2005	2010	2015	1990-2000	2000-2010	2010-2015	1990-2015 (average)
Southern Cone subregion	3,827	3,884	3,884	3,923	3,935	6	4	2	4
Amazon subregion	375,873	361,862	355,358	348,561	345,421	-1,401	-1,330	-628	-1,218
Mesoamerica subregion	44,311	38,821	37,638	36,715	36,808	-549	-211	19	-300
Caribbean subregion	237	235	234	233	232	0	0	0	0
<b>Latin America and the Caribbean</b>	<b>424,247</b>	<b>404,802</b>	<b>397,114</b>	<b>389,432</b>	<b>386,396</b>	<b>-1,945</b>	<b>-1,537</b>	<b>-607</b>	<b>-1,514</b>

### Planted forests

24. In LAC, 36 countries and territories have reported data on planted forests. Together they have about 15.6 million hectares of planted forests, an increase from 8.8 million hectares in 1990, which corresponds to an increase of 280,000 hectares per year of planted forest in the region.

25. As shown in Figure 8, most of the planted forest area as well as the increase in planted forest area are found in the Southern Cone and Amazonas subregions, with a steady increasing trend. Among countries with a strong increase are Argentina, Brazil, Chile, Peru and Uruguay. In Mesoamerica, Guatemala has reported most planted forest area, and in the Caribbean, Cuba is the country with most planted forests, also showing a strong increasing trend.

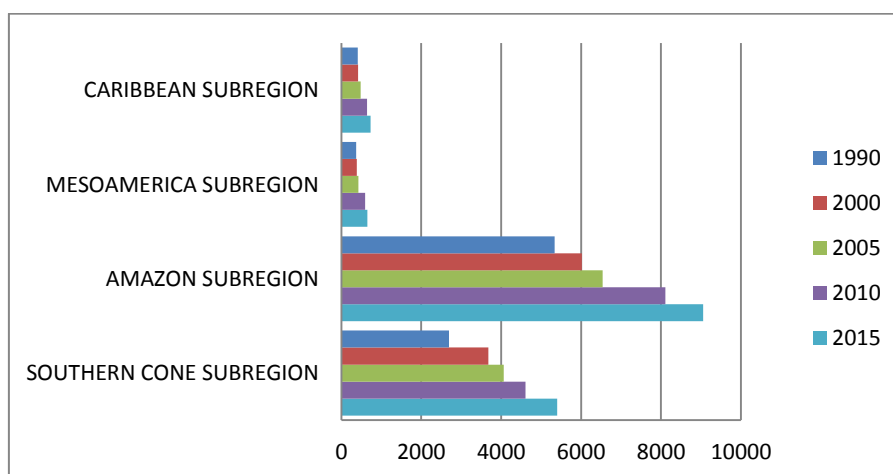


Figure 8. Planted forest area 1990-2015 in Latin America and the Caribbean



### Mangrove forests - status and trends

26. Mangrove forests are present in all subregions except the Southern Cone. In 2015, there are about 4.6 million hectares of mangrove forests in the LAC region (Figure 9). Most is found in coast of the Amazon countries, where Brazil accounts for about 70% of the mangrove area in the subregion. In Mesoamerica, most mangroves are found in Mexico, and in the Caribbean, Cuba is the country with most mangrove forests. All three subregions show a slight increase of mangrove forest area, due to both a natural increase and more accurate recent estimates.

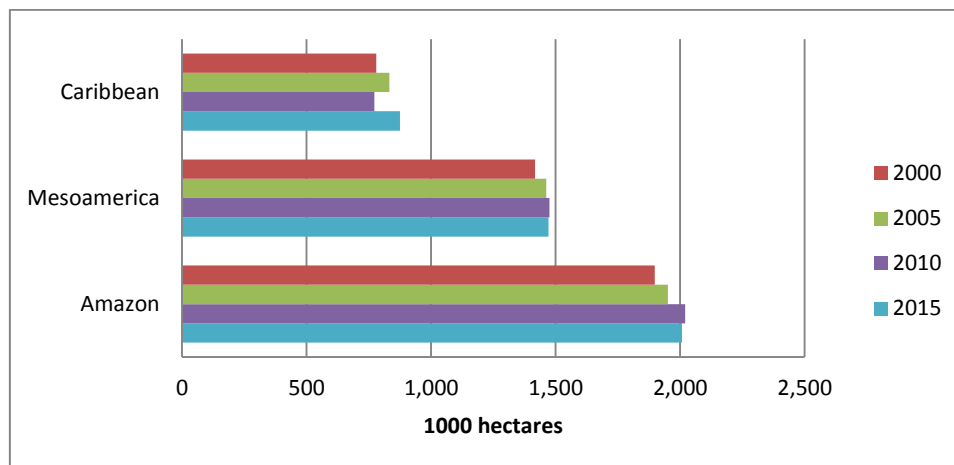


Figure 9. Extent and trends of mangrove forest area 2000 – 2015

### **Forest ownership, designation and use**

#### Ownership

27. The analysis is based on the 26 countries that reported on forest ownership in 2010. In the Caribbean and Amazon subregions most forests are under public ownership. In the Southern Cone, private ownership is dominating, and in Mesoamerica, private and other ownership dominate.

28. The trends are in general not significant, and some of the most important countries in the Region have not reported trend data. The only subregion that presents a significant trend is the Caribbean, with an increase of the area under public ownership between 1990 and 2010, entirely due to the expansion of public forests in Cuba.

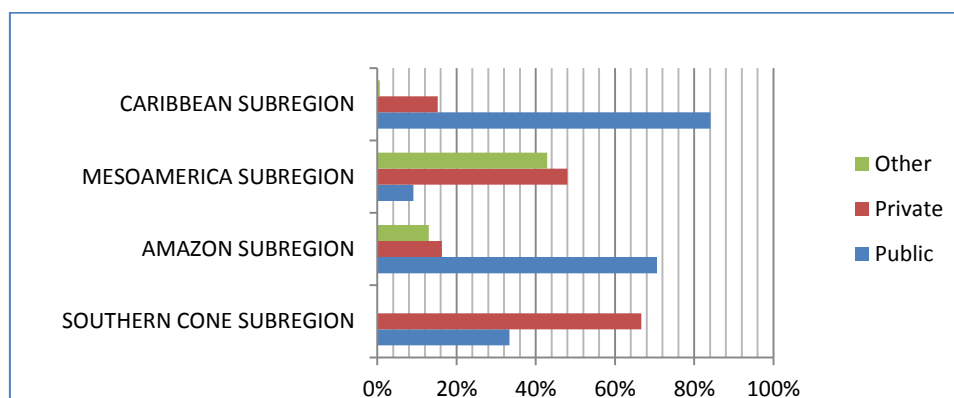


Figure 10. Forest ownership by subregion

### Forest designation – status and trends

29. As FRA 2015 reports on forest designation through a series of indicators that are not exclusive and cannot be summed, only select aspects of subregional trends are presented below.

30. In the Southern Cone subregion, Uruguay and Chile have reported considerable forest areas designated to production as well as protection of soil and water. The four reporting countries in this subregion have between 7 and 17 % designated for conservation of biodiversity. Notably, there is a substantial drop in area under biodiversity conservation in Paraguay. Uruguay shows a drop in the area for conservation of water and soils, but an increase in percent allocated to production forests. The forest area of Chile dedicated to production decreased over the 1990-2015 period.

31. In the Amazon subregion, Guyana has reported most of its forest area as designated to production, and for 2015, some areas were moved from production to conservation. Ecuador has reported an increase in forest area designated to conservation as well as to protection of soil and water and to ecosystem services. Brazil has reported an increase in areas designated to production, as well as to conservation. A substantial amount of Ecuador's forests were designated for the protection of soil and water as well as for ecosystem services, cultural or spiritual values over the period examined.

32. Nearly all countries in Mesoamerica have reported slight to substantial percentage increases of forest area designated to conservation of biodiversity and fairly low percentages designated to production. Guatemala has reported a high percentage designated to protection of soil and water, and El Salvador and Panama have reported a high percentage designated to multiple use.

33. In the Caribbean, there much variation between countries. The Dominican Republic has reported considerable areas designated for protection of soil and water and conservation of biodiversity. Cuba, Haiti and Trinidad and Tobago have more areas designated to production than the other countries.

Table 9. Forest area designated to different uses

Country / área	Production			Conservation of biodiversity			Protection of soil and water			Ecosystem services, cultural or spiritual values			Multiple use		
	1990	2005	2015	1990	2005	2015	1990	2005	2015	1990	2005	2015	1990	2005	2015
Argentina	2%	4%	4%	3%	4%	7%								7%	9%
Chile	42%	45%	39%	14%	14%	13%		33%	36%				12%	11%	12%
Paraguay	0%	0%	1%	9%	10%	16%									
Uruguay	40%	61%	66%	32%	17%	17%	75%	49%	43%						
Bolivia (plurinational state of)	0%	0%	0%		18%	20%							0%	0%	0%
Brazil	3%	8%	13%	3%	7%	10%	12%	12%	12%	4%	23%	27%	2%	7%	9%
Colombia				11%	14%	18%									
Ecuador	0%	0%	0%	17%	24%	40%	28%	38%	56%	28%	38%	56%	11%	14%	16%
French Guiana	2%				5%	32%			2%					22%	51%
Guyana	100%	99%	87%		1%	11%			13%			13%		1%	13%
Peru	51%	33%	24%	6%	25%	27%							5%	24%	29%
Suriname	2%	13%	13%	11%	11%	12%	0%	1%	1%				3%	4%	5%
Venezuela (Bolivarian Republic of)		50%	42%		33%	52%			6%			52%		50%	52%
Belize						44%									
Costa Rica		15%	7%		24%	27%								15%	0%
El Salvador	25%	24%	24%	9%	10%	12%	6%	6%	5%				61%	60%	59%
Guatemala	0%	1%	0%	33%	32%	33%	62%	52%	52%		42%	44%	17%	19%	19%
Honduras		23%	19%		39%	50%									
Mexico		14%	16%	6%	34%	42%			0%		0%	6%			
Nicaragua		23%	20%		59%	65%		7%	6%					2%	2%
Panama	10%	9%	9%	27%	28%	29%	2%	2%	2%	25%	26%	27%	62%	60%	60%
Barbados															100%
Cuba	36%	31%	34%	25%	22%	17%	39%	47%	49%		1%	0%			
Dominican Republic	1%	3%	3%	49%	58%	61%	49%	58%	61%				2%	5%	7%
Grenada				14%	14%	14%	3%	3%	3%						
Guadeloupe	17%	4%	4%	19%	73%	33%			45%				63%	76%	17%
Haiti	34%	50%	60%	3%	4%	4%									
Jamaica	3%	2%	2%	21%	21%	21%	100%	100%	100%	100%	100%	100%	6%	6%	6%
Martinique		29%	3%		12%	28%			100%			100%		4%	0%
Montserrat													100%	100%	100%
Saint Kitts and Nevis						100%							100%	100%	
Saint Lucia				37%	38%	47%	34%	35%	47%	29%	30%	31%	8%	8%	21%
Saint Martin (French part)						100%									
Trinidad and Tobago	32%	33%		8%	8%								37%	33%	

### Forests in protected areas

34. For the whole LAC region, 32.8 % of the total forest area is found within protected areas. The Amazon subregion has almost 36 %, while the Caribbean and Mesoamerica are slightly above 20 %. The Southern Cone only report 12.2 % of forests within protected areas (Figure 11). In general, there is a slight increasing trend with 8 countries reporting a gain between 2010 and 2015.

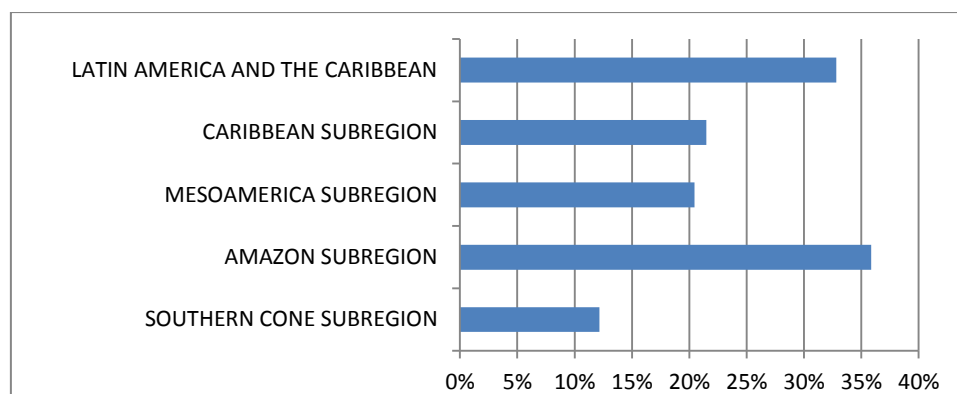


Figure 11. % of forest area within protected areas

### Forest with management plan

35. Table 10 shows the summary by subregion of forest area under management plan as reported by 28 countries and territories. In total, the area is about 147 million hectares. Most of the area under management plan is found in the Amazon subregion (almost 123 million hectares) followed by Mesoamerica (19 million hectares – most in Mexico), the Caribbean (2.7 million hectares – most in Cuba) and the Southern Cone (2.1 million hectares).

36. Four countries (Uruguay, Cuba, Saint Kitts and Nevis and Trinidad and Tobago) have reported that more than 50% of the forest area is under management plan. Eight countries have reported less than 10% of the forest area under management plan.

Table 10. Forest area with management plan 2010

Subregion	Forest área (1000 ha)
Southern Cone subregion	2,069
Amazon subregion	122,930
Mesoamerica subregion	19,010
Caribbean subregion	2,667
<b>Latin America and the Caribbean</b>	<b>146,677</b>

### Forest Certification

37. The dominating forest certification scheme in the region is the Forest Stewardship Council (FSC) with 12.8 million hectares certified in 2014, compared to 3.5 million hectares certified under the Programme for the Endorsement of Forest Certification (PEFC) and 0.3 million hectares under national certification schemes. 18 countries have forests certified under FSC, four in the Southern Cone, seven in the Amazon, and seven in the Mesoamerica subregion. Only two countries (Chile and Brazil) have forests certified under PEFC. In the Caribbean, two countries (Cuba and Guadeloupe) and in Mesoamerica one country (Mexico) have certified forests under national schemes.

Table 11. Forest certification in Latin America and the Caribbean

Subregion	FSC (2014)		PEFC (2014)		Nacional (2012)	
	1000 ha	#	1000 ha	#	1000 ha	#
Southern Cone subregion	3569	4	1905	1	0	0
Amazon subregion	7785	7	1637	1	0	0
Mesoamerica subregion	1451	7	0	0	207	1
Caribbean subregion	0	0	0	0	98	2
<b>Latin America and the Caribbean</b>	<b>12805</b>	<b>18</b>	<b>3542</b>	<b>2</b>	<b>306</b>	<b>3</b>

## Growing stock

38. For the LAC region, 29 countries and territories reported on growing stock, representing 87% of the total forest area in the region. The representativeness was slightly less in the Southern Cone (75%) and almost 100% in Mesoamerica.

39. Just adding the data from the 29 reporting countries, would lead to an underestimation of the total growing stock, so an estimate was done also for the non-reporting countries, multiplying the subregional average volume per hectare by the forest area of non-reporting countries in respective subregion.

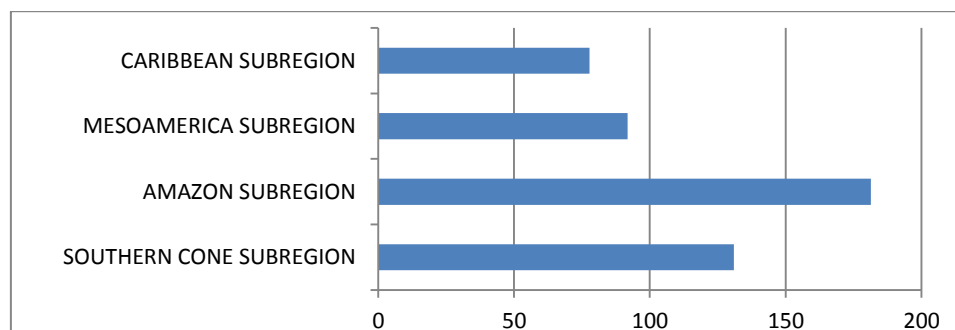
40. Table 12 shows that the estimated total growing stock in the LAC region is about 158 billion m<sup>3</sup>, of which 141.5 billion are found in the Amazonas subregion, 8.1 billion in the Southern Cone, 7.9 billion in Mesoamerica and 0.6 billion in the Caribbean.

41. The Amazon subregion has the highest average growing stock per hectare (181 m<sup>3</sup>/ha) followed by the Southern Cone (131 m<sup>3</sup>/ha), Mesoamerica (92 m<sup>3</sup>/ha) and the Caribbean (78 m<sup>3</sup>/ha). The Mesoamerica value is strongly affected by Mexico that has a considerably lower stock per hectare than the other countries. The average growing stock per hectare for the whole region is 168 m<sup>3</sup>/ha.

Table 12. Estimation of total growing stock

Subregion	Reporting countries			Non-Reporting countries		Total growing stock million m <sup>3</sup>
	Area	Growing stock	Growing stock	Area	Growing stock *)	
	1000 ha	million m <sup>3</sup>	m <sup>3</sup> /ha	1000 ha	million m <sup>3</sup>	
Southern Cone subregion	46,692	6,114	130.9	15,323	2,006	8,120
Amazon subregion	674,811	122,435	181.4	105,185	19,084	141,519
Mesoamerica subregion	86,025	7,894	91.8	265	24	7,919
Caribbean subregion	6,521	507	77.8	674	52	560
<b>Latin America and the Caribbean</b>	<b>814,049</b>	<b>136,950</b>	<b>168.2</b>	<b>121,447</b>	<b>21,167</b>	<b>158,118</b>

\* Estimated using subregional average volume per hectare multiplied by forest area

Figure 12. Average growing stock per hectare (m<sup>3</sup>/ha)

42. In the region, 15 countries have reported the presence of coniferous species. Honduras and Mexico report the highest proportion of coniferous species in the growing stock, 28% and 40% respectively (Table 13).

Table 13. LAC Countries that have reported on growing stock of coniferous species

Country/area	Growing stock in forest 2015		
	(million m <sup>3</sup> )	m <sup>3</sup> /ha	of which coniferous
Argentina	2667	98	16%
Chile	3316	187	13%
Uruguay	131	71	1.4%
Brazil	96745	196	0.4%
Guatemala	461	130	11%
Honduras	556	121	28%
Mexico	4727	72	40%
Nicaragua	482	155	3.0%
Panama	751	163	0.04%
Cuba	213	67	14%
Dominican Republic	119	60	18%
Guadeloupe	26	368	0.4%
Haiti	6.5	66	24%
Jamaica	52	154	0.7%
Puerto Rico	43	88	0.3%

43. The trends in total growing stock mainly follow the trends in forest area, so a loss of forest area also corresponds to a similar loss in growing stock. The analysis here is therefore focused on the trends in stock per hectare (see Figure 13).

44. LAC as region shows a slight increase in growing stock per hectare from 163 m<sup>3</sup>/ha in 1990 to 168 m<sup>3</sup>/ha in 2015. The Amazon and Southern Cone subregions also show an increase of stocks per hectare, while the Mesoamerica and Caribbean subregions don't present any clear trend.

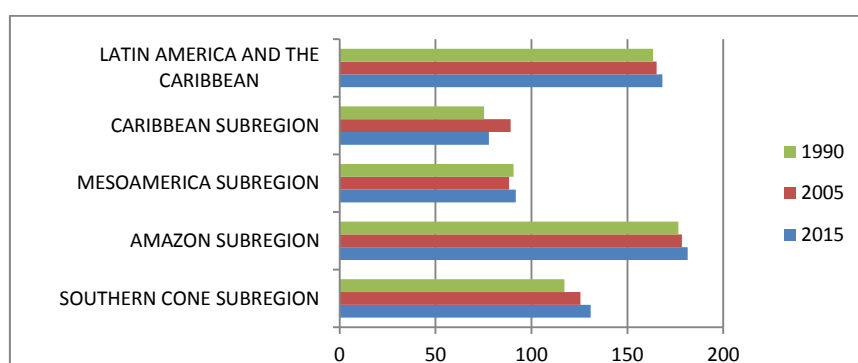


Figure 13. Growing stock per hectare – trends for the period 1990-2015

## Carbon stock

### Carbon in living biomass

45. The data presented below for total carbon stock in living forest biomass, are based on 27 reporting countries and territories representing 93 % of the Region's total forest area. For non-reporting countries and territories estimates were made using subregional average carbon stocks per hectare and reported forest area.

46. As shown in Table 14 and Figure 14, the LAC region has an estimated total carbon stock of living forest biomass of 107.3 billion tonnes in 2015, representing 36% of the global carbon stock in forest biomass. This corresponds to 114.6 tonnes per hectare forest land. The total carbon stock in living forest biomass has decreased since 1990, from 116.1 billion tonnes to 107.3 billion tonnes due to the loss of forest area. However, the stock per hectare in the region has increased slightly from 112.4 t/ha to 114.6 t/ha.

Table 14. Total carbon stock in living forest biomass and changes in carbon stock.

Subregion	Carbon stock in living biomass (Million tonnes)			Change in C stock (million t/year)		Carbon stock in living biomass (t/ha)	
	1990	2005	2015	1990-2005	2005-2015	1990	2015
Southern Cone subregion	6,936	6,587	6,230	-23.3	-35.7	96.3	100.5
Amazon subregion	104,171	98,525	96,551	-376.4	-197.4	121.3	123.8
Mesoamerica subregion	4,545	4,085	3,907	-30.7	-17.8	47.0	45.3
Caribbean subregion	462	649	636	12.4	-1.3	92.1	88.4
<b>Latin America and the Caribbean</b>	<b>116,114</b>	<b>109,846</b>	<b>107,324</b>	<b>-417.9</b>	<b>-252.2</b>	<b>112.4</b>	<b>114.6</b>

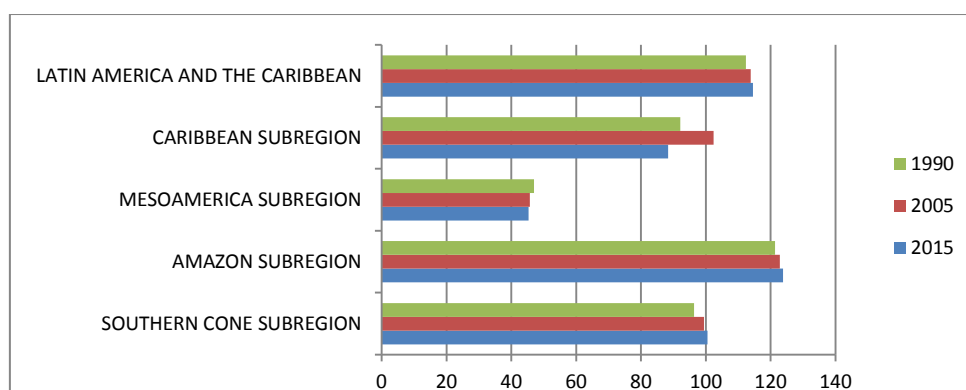


Figure 14. Carbon stock in living forest biomass (t/ha)

### Carbon in other pools and total carbon stock

47. Only 9 countries and territories in LAC have reported data on all five carbon pools for 2015 (above-ground, below-ground, dead wood, litter, soil carbon). It is therefore not meaningful to estimate total carbon stocks for the region. However, based on reported data from these 9 countries, the relative share of the different carbon pools has been estimated as shown in Figure 15. The most significant pool is carbon in above-ground biomass, which accounts for almost 59 % of the total forest carbon, followed by carbon in soil organic matter (25 %) and carbon in below-ground biomass (13 %). Litter and dead wood are carbon pools with little significance – less than 2 % each.

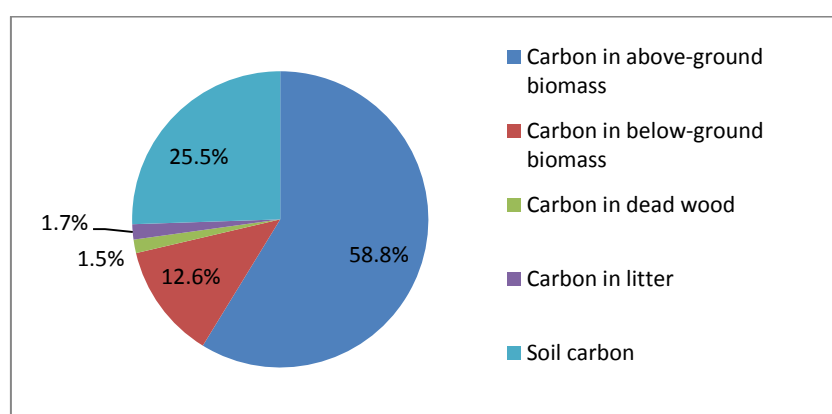


Figure 15. Percentage of the total carbon stock by different carbon pools

**Points for consideration**

## 1. The Regional Forestry Commission may wish to:

- Discuss about the principal figures of this secretariat note, related to: Forest area and area change, Forest characteristics, Forest ownership, designation and use, and Carbon stock, and their impact on the land use and sustainable development of the region.
- Identify main challenges for tackling deforestation and improving reforestation and sustainable forest management in the region.
- Identify themes for promoting the cooperation among the countries for increasing the relevance of the forest sector and promoting its stronger integration in the region's land use systems.
- Recommend the preparation of further analysis and studies relevant for the forestry sector development highlighting its contribution to the region's sustainable development, with special reference to food security and livelihoods, biodiversity conservation and the mitigation and adaptation to climate change.
- Discuss how the above regional and global data can help meet the forest-related indicators stated in the SDGs.

## 2. The Regional Forestry Commission may wish to recommend FAO to:

- Prepare, in base of the analysis of the figures and discussions, a regional forestry strategy taking into account the relevant national and subregional action plans, programmes and strategies related to forests that are already approved by the country members, promoting a more integrated approach to forestry in the region and an active south – south cooperation.