

WORLD FORESTS BY COUNTRIES

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Foreword

Forests will in the future have a very decisive role in climate change. They are consuming carbon dioxide and producing oxygen, which will be needed by the mankind and animals for breathing. They will also give home for many wild animals and plants.

But the forests are in danger to be disappearing in the future. The rate of forest loss has been about 144 million hectares (Mha) after 1990. This is 3.5 % from the forest land area in 1990 (4.2 billion hectares) during the last 26 years. The rate of forest losses is in particularly high in some African countries (Togo, Nigeria, Uganda), where more the 50 % of forest area has been lost in 26 years. In absolute terms the highest losses have been in Brazil (54 Mha), Indonesia (28 Mha) and Myanmar (11 Mha). All the forest loss countries have lost 250 million hectares of forests.

However, there are also 45 countries, which have managed to increase their forest land area considerably. They have managed to increase their forest area by 107 million hectares and thus the net loss of forest area is 144 Mha. The three countries, which have increased their forest area most are China (53 Mha), United States (9 Mha) and India (8 Mha).

I have been studying climate change in my latest book “*Fundamentals of Global Warming*” and I believe that forests can be utilized as a asset to fight against global warming. This requires that more countries will be increasing their forest area in the future. We have some 30-years to make the change. The first thing will be to know where we are today and where we should be going in the near future to achieve the change.

The data given here has been collected from FAOSTAT database, which is open for all. However, it must be noted that there are several countries which have been established after 1990 and thus all figures are not available from the year 1990. Also, the figures in those countries, which have been splitting, are also missing.

In Espoo

September 2019

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1 Forest data

1.1 Forest area

Global forest area (Table 1.1.1) has been decreasing about 7 million hectares (Mha) annually during the 1990's and about 3 Mha/a after the year 2000. The total net loss has been 132 Mha during these 26 years or in average 5.1 Mha annually. The area is still almost 4 billion hectares (Figure 1.1.1).

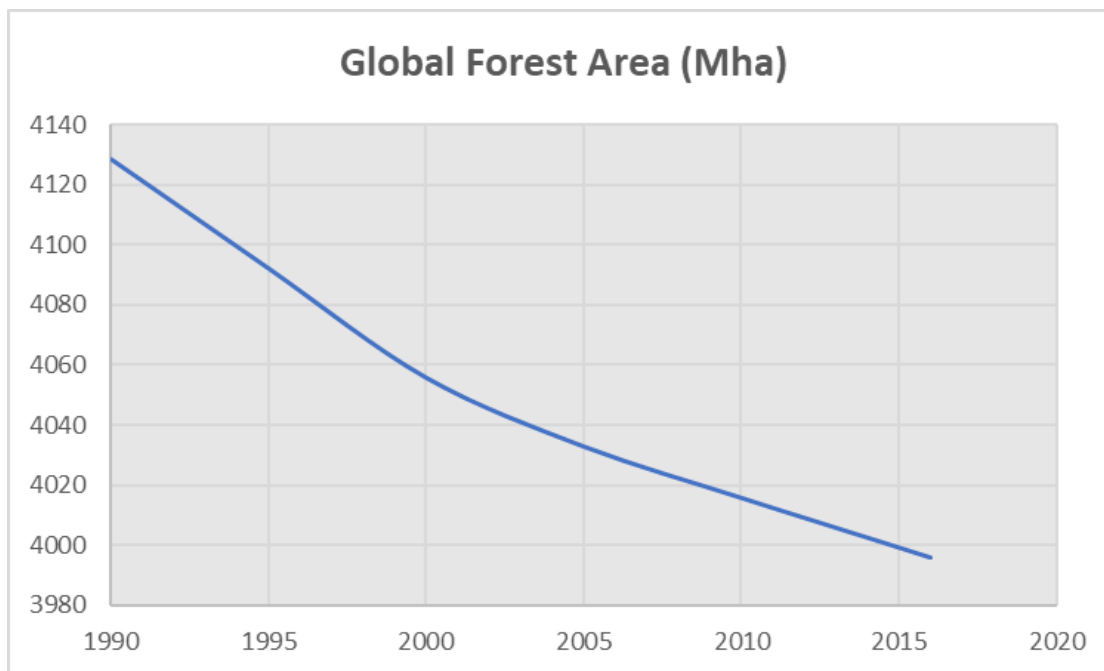


Figure 1.1.1 Global forest area (Mha).

The largest losses in forest area has been given by 40 countries (Table 1.1.2), which have caused losses of 240 Mha (9.2 Mha/a). However, there are 81 countries, which have have forest losses and the total losses will rise to 245 Mha (9.5 Mha/a).

Top five countries (Brasil, Indonesia, Myanmar, Nigeria and Tanzania) have lost more than 10 Mha of forest area and all together 114 Mha. However, the rate of forest losses has been decreasing from almost 6 Mha/a to about 3 Mha/a (Figure 1.1.3).

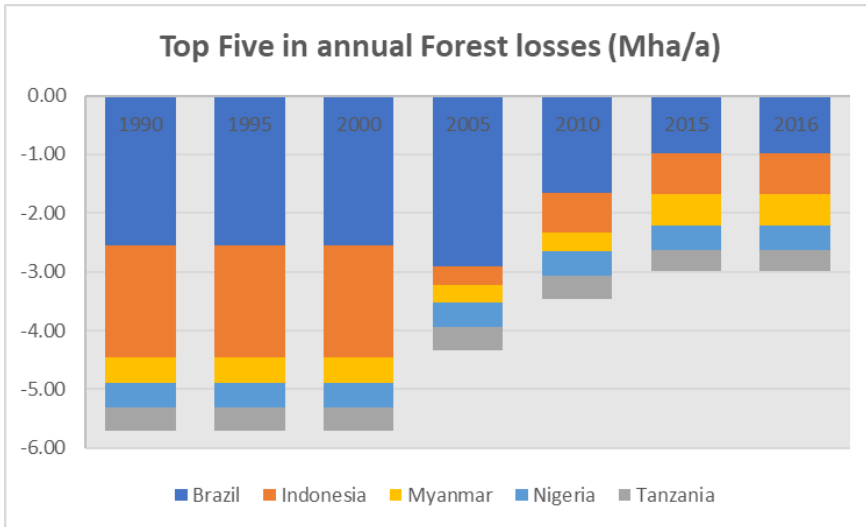


Figure 1.1.2 Top five countries in forest area losses.

The top 80 countries (Table 1.1.3), which have been increasing the forest area, have increased the forest area by 116 Mha (4.5 Mha/a). Top three (China, USA and India) countries have been increasing their forest area about two million ha annually (Figure 1.1.3)

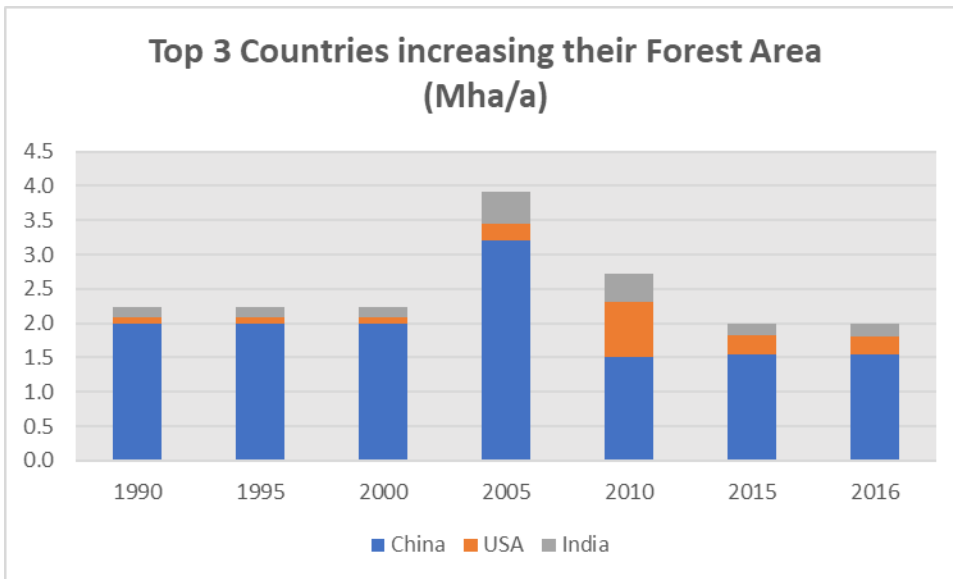


Figure 1.1.3 Top three countries increasing their forest area (Mha/a).

The total net loss can be calculated by forest area are increase (116 Mha) minus the decreases (245 Mha). The result will be - 129 Mha in 26 years (in average 5.0 Mha/a). However, the net losses were about 7 Mha/a in 1995 and only 3.2 Mha in 2016 (Figure 1.1.4).

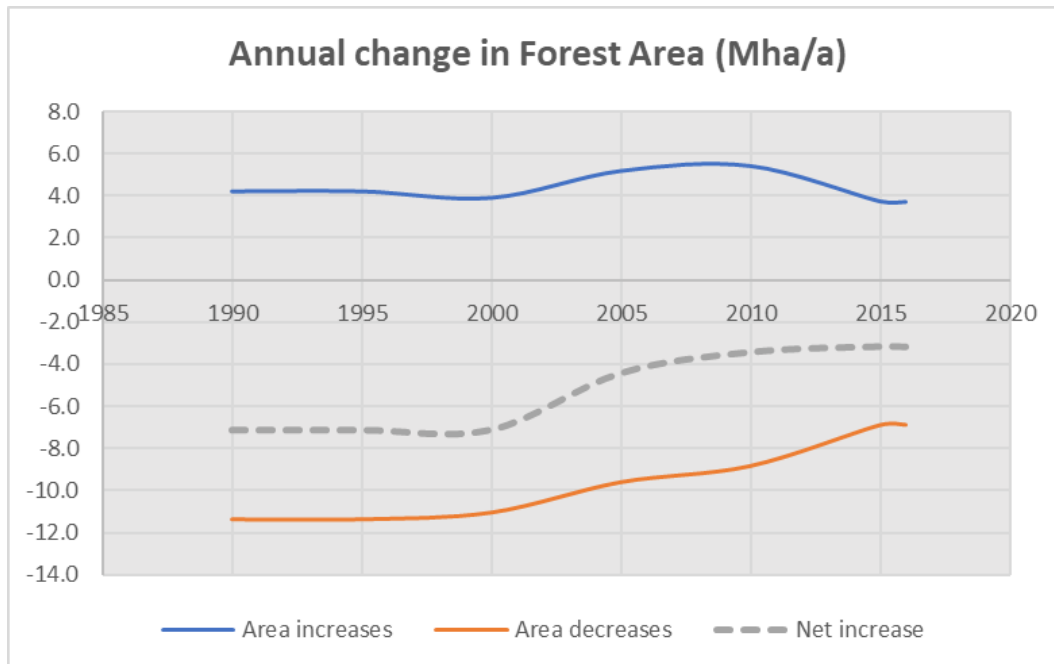


Figure 1.1.4 Net losses of forest area annually (Mha/a).

Top 40 countries, which have lost their forest area most in percent (Table 1.1.4) have lost their forest area more than 15 %. Top three (Togo, Mauritania and Uganda) have lost more than 50%.

A trend of top 40 countries in forest losses has been calculated by dividing the change in 2016 with average change during 1990 – 2016 (Table 1.1.5). If the trend has a minus mark, the losses have been declining. If the change is greater the – 100 %, the losses have turned to increases. This has happened in Australia.

1.2 Carbon sink of living forests

Most important matter in point of the climate change is the storage mass of CO₂ in the living forests or carbon sink. The trees take carbon from the air and release oxygen. But if the trees are burned, this carbon will be released as CO₂ into the atmosphere.

The mass of CO₂ stored in living forests has been declining from 1127 Gt in 1990 to 1084 Gt by 2016 (Figure 1.2.1). The loss of mass has been 43 Gt, which corresponds 1.7 GtCO₂ annually. It can be found that during the last 11 years the loss has been 12.5 Gt or 1.1 GtCO₂ annually.

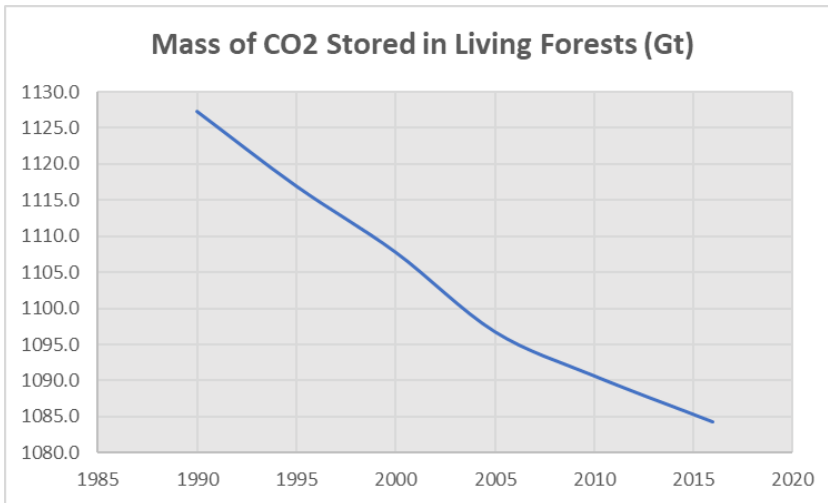


Figure 1.2.1 Mass of CO₂ stored in living forests (GtCO₂).

Top forty countries in CO₂ losses (emissions) have caused 88.6 GtCO₂ losses in 26 years (Table 1.2.2). The emissions have been in average 3.4 GtCO₂ annually.

Largest CO₂ emissions from forests have been released by five countries, which still are causing about 1.8 GtCO₂ emissions annually (Figure 1.2.2). Emissions in Indonesia have been growing considerably and are today about 1 GtCO₂ annually. Emissions in Brasilia have been decreasing, but they are together with Brasilia still the same as in 1990 or about 1.3 Gt/a.

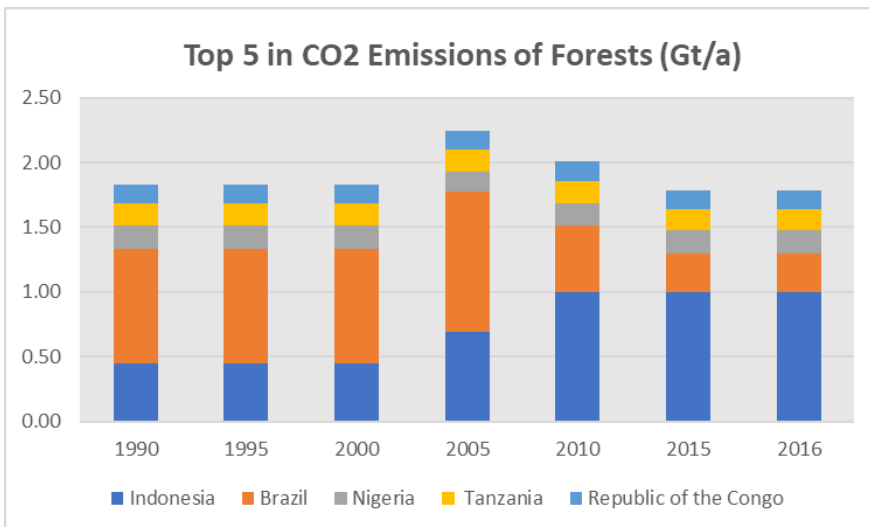


Figure 1.2.2 Five largest CO₂ emissions from forests (GtCO₂/a).

Top forty countries in CO₂ increases in carbon storages in forests have caused 45.5 GtCO₂ change in 26 years (Table 1.2.3). This causes in average 1.8 GtCO₂ carbon storage annually. The net emissions of living forests have been 43 GtCO₂ (88.6-45.5 Gt) or in average 1.8 GtCO₂ annually.

Largest increases of carbon sink in living forests has been in USA and China (Figure 1.2.3). However, carbon sink of USA has decreased to 0.2 GtCO₂/a, but carbon sink has remained in China at level of 0.4 GtCO₂/a. These five countries are increasing their carbon sink about 0.8 GtCO₂ annually.

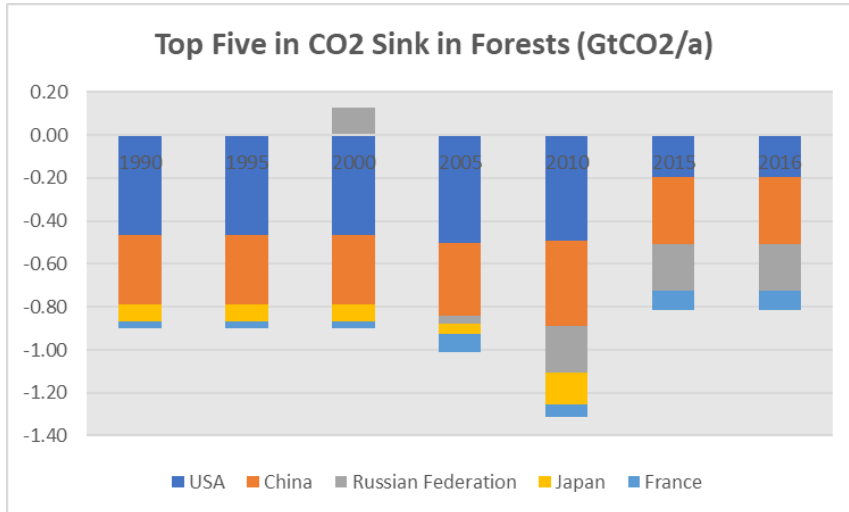


Figure 1.2.3 Increases of carbon sinks (GtCO₂/a).

The net change of CO₂ storage is indicating that the CO₂ emissions of forests have been decreasing from about 2 GtCO₂/a during years 1990 – 2005 to near 1 Gt/a in 2010 – 2016 (Figure 1.2.4).

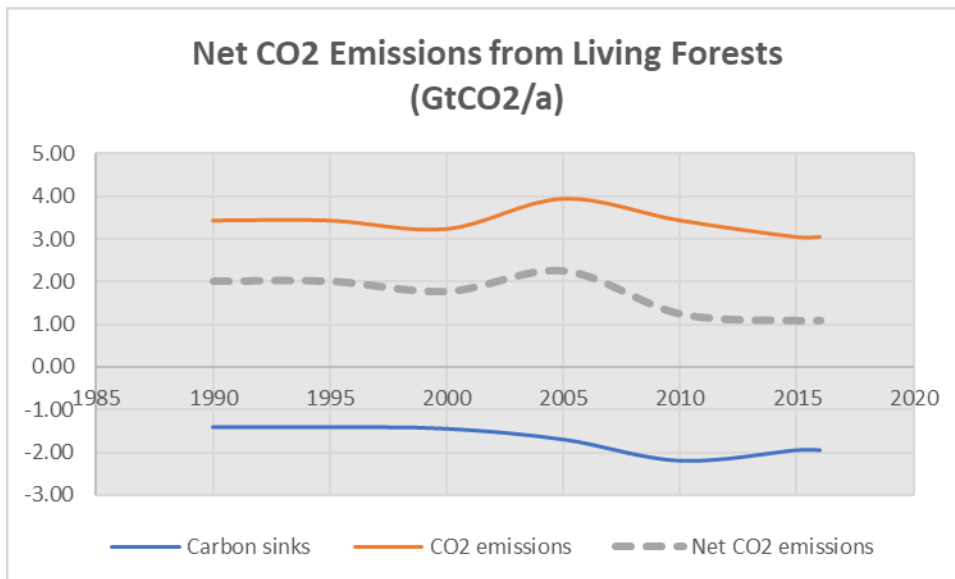


Figure 1.2.4 CO₂ emissions and sinks in living forests (Gt/a).

2. Forest products

2.1 Production of coniferous saw wood

Saw wood production has been increasing from 264 Mm³ in 1990 to about 334 Mm³ in 2016. The financial creases in 2009 can be seen in decreasing of production.

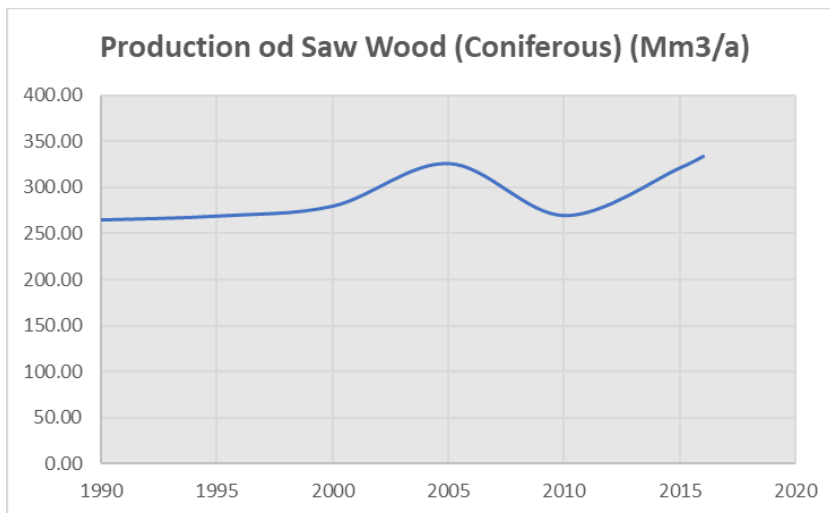


Figure 2.1.1 Production of saw wood (Mm³).

Top five countries of coniferous saw wood are USA, Canada, China, Russia and Germany. They are producing 190 Mm³ of coniferous saw wood, which is more than half of all.

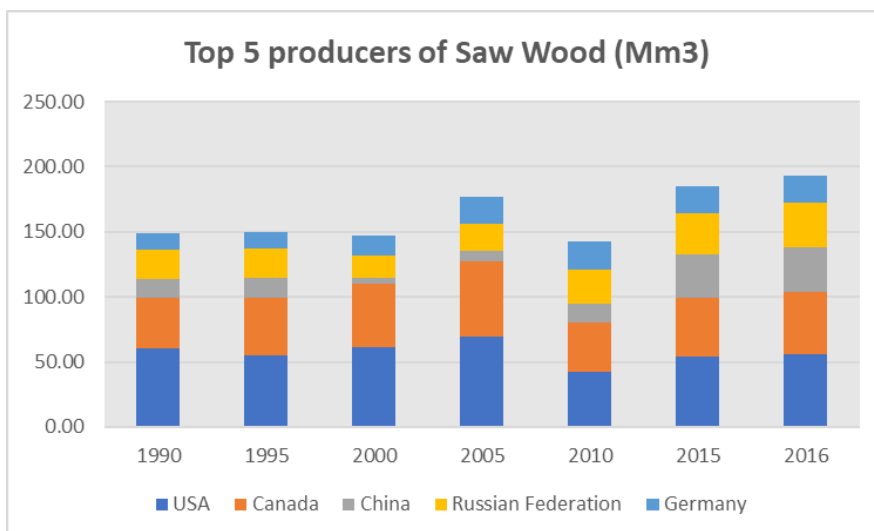


Figure 2.1.2 Top 5 in saw wood production (Mm³/a).

2.2 Non-coniferous saw wood production

Production of non-coniferous saw wood has been about 120-130 million cubic meters (Mm³/a) annually (Figure 2.2.1).

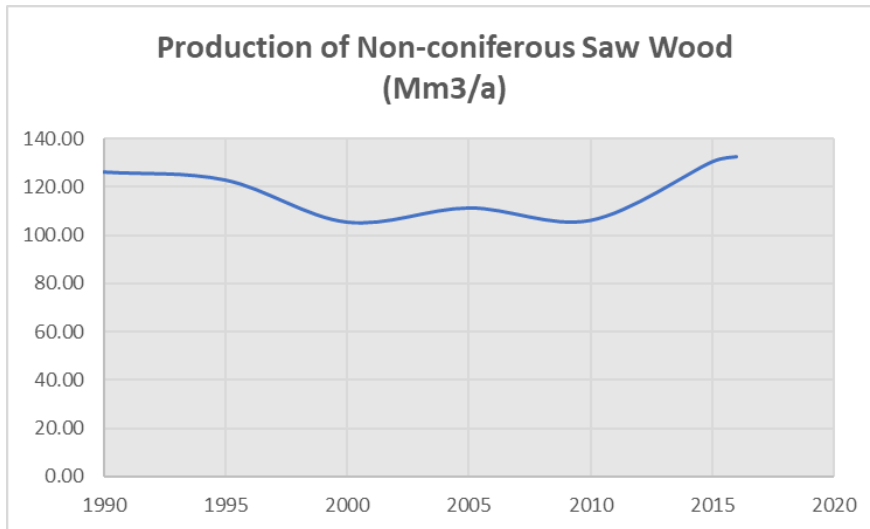


Figure 2.2.1 Production of non-coniferous wood (Mm³/a).

The top five countries in non-coniferous saw products are China, USA, Viet Nam, Brazil and India (Figure 2.1.2). They produce together 80 million cubic meters of saw wood.

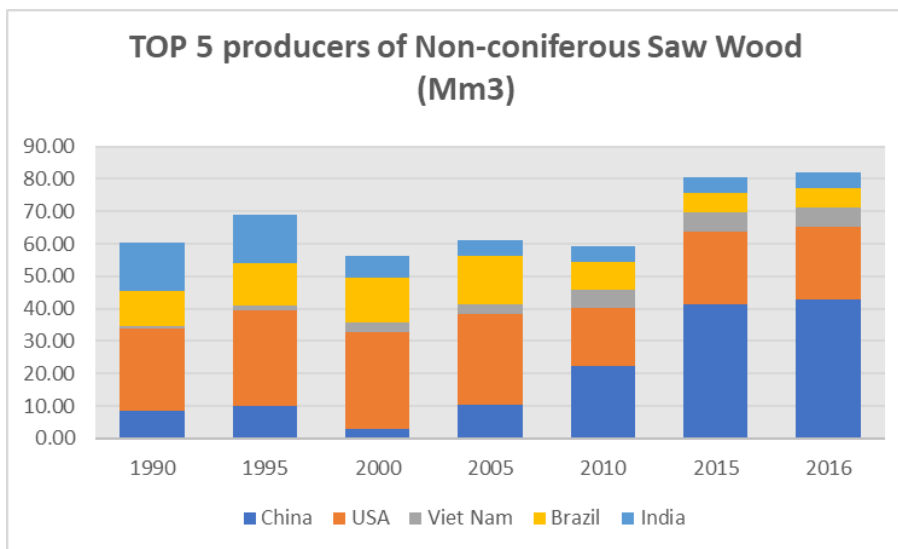


Figure 2.1.2 Top five producers of non-coniferous saw wood (Mm³/a).

2.3 Total saw wood production

Total saw wood production has been about 400 Mm³ in 1990 and has increased near 470 Mm³ by the year 2016 (Figure 2.3.1).

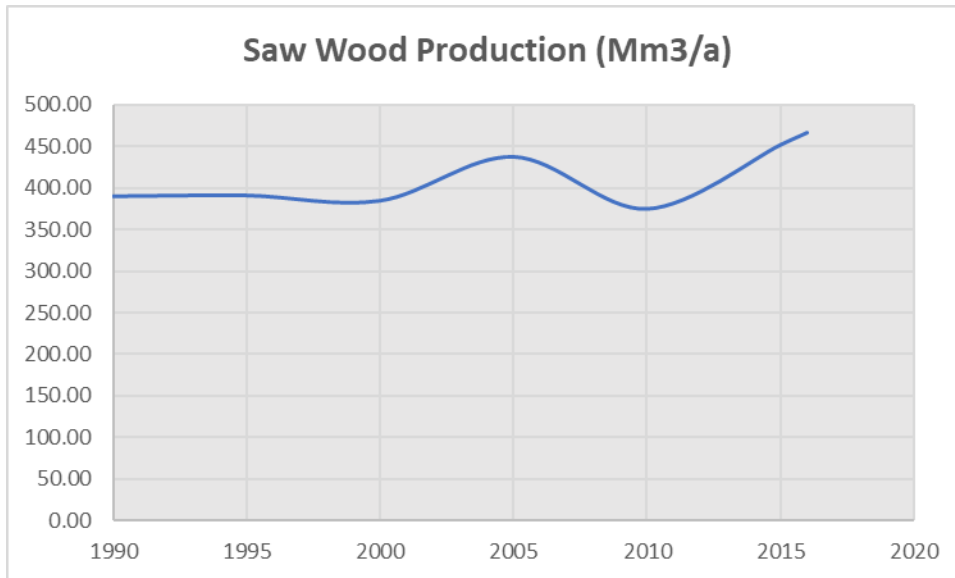


Figure 2.3.1 Saw wood production (Mm³/a).

The top five producers of saw wood are (USA, China, Canada, Russian Federation and Germany (Figure 2.3.2). They have increased their production from about 200 Mm³/a to 260 Mm³/a by 2016.

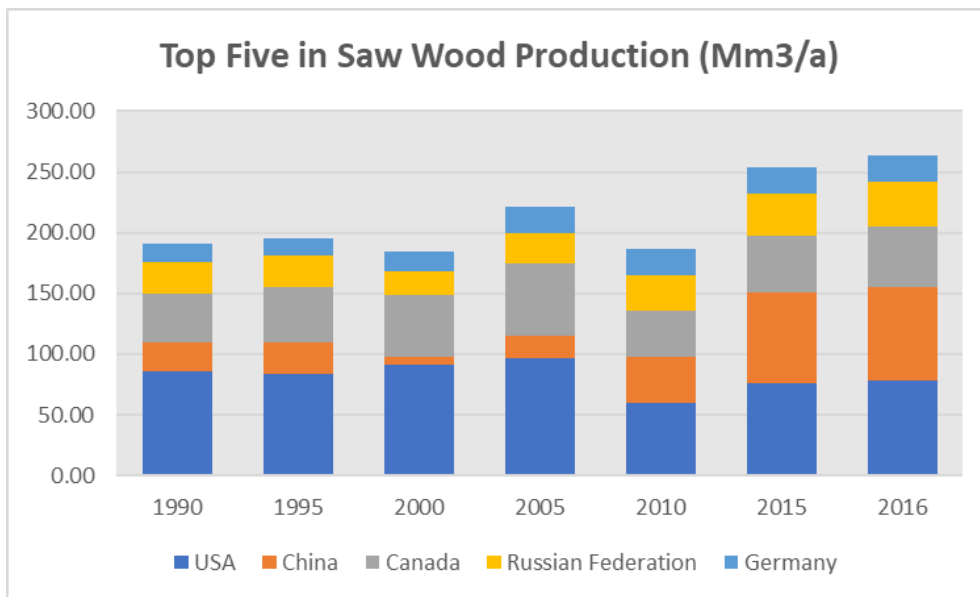


Figure 2.3.2 Top five in saw wood production (Mm³/a).

2.4 Carbon storage in saw wood

Saw wood is normally used for construction of houses. The carbon dioxide stored in saw wood remains in houses for 50 to 100 years. Thus, this CO₂ is out form atmosphere.

I have used heat value of 2 kWh/m³ for wood and a emissions value of 0.4 kgCO₂/kWh. Thus, stored CO₂ in saw wood is about 0.8 kg/m³ and world production of 467 Mm³ of saw wood corresponds to 374 million tons of CO₂.

If we sum the carbon sink of saw wood and carbon sink of living forests (Figure 1.2.2), we can calculate the net carbon sink of forests and saw wood (Figure 2.4.1). It has been about 730 MtCO₂ during years 2015-2016. This is less than half from the figures from the years 1990-2000, when the net sink was -1700 MtCO₂/a.

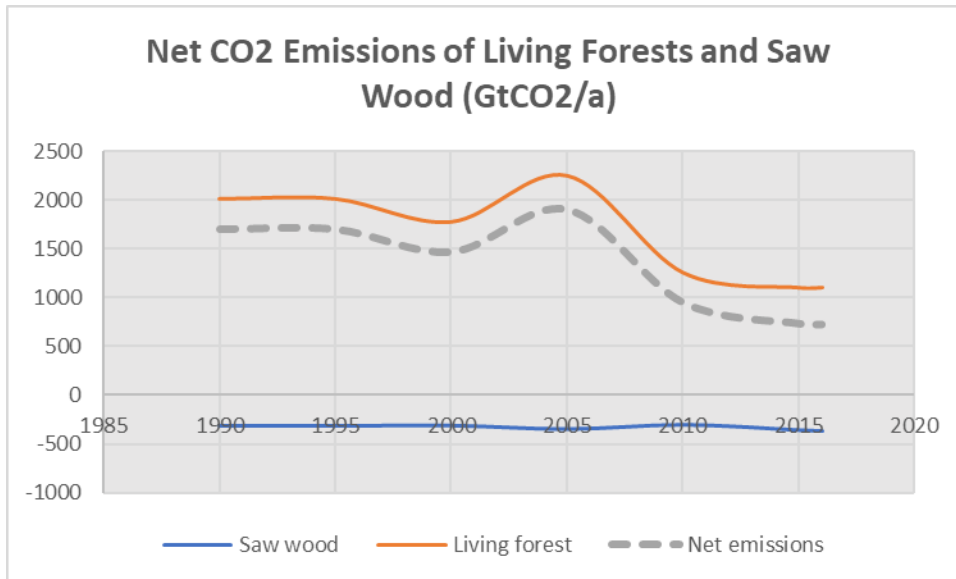


Figure 2.4.1 Net CO₂ emission living forests and saw wood (MtCO₂/a).

Tables

Table 1.1 Forest area

Table 1.1.1 Largest countries in forest area.

	Forest area	1990	1995	2000	2005	2010	2015	2016	Change	Percent
	Country	Mha	Mha	Mha	Mha	Mha	Mha	Mha	Mha	%
1	Russian Federation	809.11	809.11	809.27	808.79	815.14	814.93	814.89	5.78	1%
2	Brazil	546.71	533.99	521.27	506.73	498.46	493.54	492.55	-54.15	-10%
3	Canada	348.27	348.04	347.80	347.58	347.30	347.07	347.02	-1.25	0%
4	United States of Am	302.45	302.99	303.54	304.76	308.72	310.10	310.37	7.92	3%
5	China	157.14	167.07	177.00	193.04	200.61	208.32	209.86	52.72	34%
6	Democratic Republi	160.36	158.81	157.25	155.69	154.14	152.58	152.27	-8.10	-5%
7	Australia	128.54	128.69	128.84	127.64	123.21	124.75	125.06	-3.48	-3%
8	Indonesia	118.55	108.98	99.41	97.86	94.43	91.01	90.33	-28.22	-24%
9	Peru	77.92	77.03	76.15	75.53	74.81	73.97	73.81	-4.12	-5%
10	India	63.94	64.66	65.39	67.71	69.79	70.68	70.86	6.92	11%
11	Mexico	69.76	68.81	67.86	67.08	66.50	66.04	65.95	-3.81	-5%
12	Colombia	64.42	63.11	61.80	60.20	58.64	58.50	58.48	-5.94	-9%
13	Angola	60.98	60.35	59.73	59.10	58.48	57.86	57.73	-3.24	-5%
14	Bolivia (Plurinatio	62.80	61.44	60.09	58.73	56.21	54.76	54.48	-8.32	-13%
15	Zambia	52.80	51.97	51.13	50.30	49.47	48.64	48.47	-4.33	-8%
16	Venezuela (Bolivari	52.03	50.59	49.15	47.71	47.51	46.68	46.52	-5.51	-11%
17	United Republic of T	55.92	53.92	51.92	49.92	47.92	46.06	45.69	-10.23	-18%
18	Mozambique	43.38	42.28	41.19	40.08	38.97	37.94	37.73	-5.64	-13%
19	Papua New Guinea	33.63	33.61	33.60	33.59	33.57	33.56	33.56	-0.07	0%
20	Myanmar	39.22	37.04	34.87	33.32	31.77	29.04	28.49	-10.72	-27%
21	Sweden	28.06	28.11	28.16	28.22	28.07	28.07	28.07	0.01	0%
22	Argentina	34.79	33.33	31.86	30.19	28.60	27.11	26.82	-7.98	-23%
23	Japan	24.95	24.91	24.88	24.94	24.97	24.96	24.96	0.01	0%
24	Gabon	22.00	22.00	22.00	22.00	22.00	23.00	23.20	1.20	5%
25	Congo	22.73	22.64	22.56	22.47	22.41	22.33	22.32	-0.41	-2%
26	Finland	21.88	22.16	22.45	22.14	22.22	22.22	22.22	0.34	2%
27	Malaysia	22.38	21.98	21.59	20.89	22.12	22.20	22.21	-0.17	-1%
28	Central African Rept	22.56	22.48	22.40	22.33	22.25	22.17	22.15	-0.41	-2%
29	Sudan (former)	30.73	29.86	28.98	28.11	27.24	19.21	19.04	-11.69	-38%
30	Lao People's Democ	17.64	17.09	16.53	16.87	17.82	18.76	18.95	1.31	7%
31	Cameroon	24.32	23.22	22.12	21.02	19.92	18.82	18.60	-5.72	-24%
32	Spain	13.81	15.39	16.98	17.28	18.25	18.42	18.45	4.64	34%
33	Chile	15.26	15.55	15.83	16.04	16.23	17.74	18.04	2.77	18%
34	France	14.44	14.86	15.29	15.86	16.42	16.99	17.10	2.67	18%
35	Guyana	16.66	16.64	16.62	16.60	16.58	16.53	16.52	-0.14	-1%
36	Thailand	14.01	15.51	17.01	16.10	16.25	16.40	16.43	2.42	17%
37	Suriname	15.43	15.41	15.39	15.37	15.35	15.33	15.33	-0.10	-1%
38	Paraguay	21.16	20.26	19.37	18.48	16.95	15.32	15.00	-6.16	-29%
39	Viet Nam	9.36	10.55	11.73	13.08	14.13	14.77	14.90	5.54	59%
40	Zimbabwe	22.16	20.53	18.89	17.26	15.62	14.06	13.75	-8.41	-38%

Table 1.1.1 Continued

Forest area Country	1990 Mha	1995 Mha	2000 Mha	2005 Mha	2010 Mha	2015 Mha	2016 Mha	Change Mha	Percent %
41 Ethiopia	16.74	14.41	13.71	13.00	12.30	12.50	12.54	-4.20	-25%
42 Ecuador	14.63	14.18	13.73	13.34	12.94	12.55	12.47	-2.16	-15%
43 Madagascar	13.69	13.36	13.02	12.84	12.55	12.47	12.46	-1.24	-9%
44 Mongolia	12.54	12.13	11.72	11.31	13.04	12.55	12.46	-0.08	-1%
45 Norway	12.13	12.12	12.11	12.09	12.10	12.11	12.11	-0.02	0%
46 Turkey	9.62	9.90	10.18	10.66	11.20	11.72	11.82	2.20	23%
47 Germany	11.30	11.33	11.35	11.38	11.41	11.42	11.42	0.12	1%
48 Botswana	13.72	13.13	12.54	11.94	11.35	10.84	10.74	-2.98	-22%
49 Iran (Islamic Republi	9.08	9.20	9.33	10.69	10.69	10.69	10.69	1.62	18%
50 CÃ´te d'Ivoire	10.22	10.28	10.33	10.41	10.40	10.40	10.40	0.18	2%
51 New Zealand	9.66	9.90	10.14	10.18	10.15	10.15	10.15	0.49	5%
52 Ukraine	9.39	9.39	9.51	9.58	9.55	9.66	9.68	0.29	3%
53 Poland	8.88	8.97	9.06	9.20	9.33	9.44	9.46	0.58	6%
54 Ghana	8.63	8.77	8.91	9.05	9.20	9.34	9.37	0.74	9%
55 Italy	7.59	7.98	8.37	8.76	9.03	9.30	9.35	1.76	23%
56 Cambodia	12.94	12.25	11.55	10.73	10.09	9.46	9.33	-3.61	-28%
57 South Africa	9.24	9.24	9.24	9.24	9.24	9.24	9.24	0.00	0%
58 Belarus	8.03	8.03	8.27	8.44	8.53	8.63	8.65	0.63	8%
59 Philippines	6.56	6.79	7.03	7.07	6.84	8.04	8.28	1.73	26%
60 Senegal	9.35	9.12	8.90	8.67	8.47	8.27	8.23	-1.12	-12%
61 French Guiana	8.22	8.20	8.18	8.17	8.14	8.13	8.13	-0.09	-1%
62 South Sudan	0.00	0.00	0.00	0.00	0.00	7.16	7.16	0.00	#DIV/0!
63 Romania	6.37	6.37	6.37	6.39	6.52	6.86	6.93	0.56	9%
64 Namibia	8.76	8.40	8.03	7.66	7.29	6.92	6.84	-1.92	-22%
65 Nigeria	17.23	15.19	13.14	11.09	9.04	6.99	6.58	-10.65	-62%
66 Guinea	7.26	7.08	6.90	6.72	6.54	6.36	6.33	-0.94	-13%
67 Somalia	8.28	7.90	7.52	7.13	6.75	6.36	6.29	-2.00	-24%
68 Republic of Korea	6.37	6.33	6.29	6.26	6.22	6.18	6.18	-0.19	-3%
69 Morocco	4.95	4.97	4.99	5.40	5.67	5.63	5.62	0.67	14%
70 Burkina Faso	6.85	6.55	6.25	5.95	5.65	5.35	5.29	-1.56	-23%
71 People's Rep. of Kor	8.20	7.57	6.93	6.30	5.67	5.03	4.90	-3.30	-40%
72 Chad	6.71	6.52	6.33	6.14	5.51	4.88	4.75	-1.96	-29%
73 Mali	6.69	6.30	5.90	5.51	5.11	4.72	4.64	-2.05	-31%
74 Panama	5.04	4.95	4.87	4.78	4.70	4.62	4.60	-0.44	-9%
75 Honduras	8.14	7.26	6.39	5.79	5.19	4.59	4.47	-3.66	-45%
76 Kenya	4.72	4.14	3.56	4.05	4.23	4.41	4.45	-0.27	-6%
77 Benin	5.76	5.41	5.06	4.81	4.56	4.31	4.26	-1.50	-26%
78 Liberia	4.93	4.78	4.63	4.48	4.33	4.18	4.15	-0.78	-16%
79 Turkmenistan	4.13	4.13	4.13	4.13	4.13	4.13	4.13	0.00	0%
80 Greece	3.30	3.45	3.60	3.75	3.90	4.05	4.08	0.79	24%

Table 1.1.1 Continued

Forest area Country	1990 Mha	1995 Mha	2000 Mha	2005 Mha	2010 Mha	2015 Mha	2016 Mha	Change Mha	Percent %
81 Austria	3.78	3.81	3.84	3.85	3.86	3.87	3.87	0.09	3%
82 Bulgaria	3.33	3.35	3.38	3.65	3.74	3.82	3.84	0.51	15%
83 Nepal	4.82	4.36	3.90	3.64	3.64	3.64	3.64	-1.18	-25%
84 Guatemala	4.75	4.48	4.21	3.94	3.72	3.54	3.50	-1.24	-26%
85 Latvia	3.21	3.21	3.24	3.30	3.35	3.36	3.36	0.15	5%
86 Kazakhstan	3.39	3.39	3.37	3.34	3.31	3.31	3.31	-0.08	-2%
87 Cuba	2.06	2.25	2.44	2.70	2.93	3.20	3.25	1.20	58%
88 Uzbekistan	3.13	3.13	3.21	3.30	3.28	3.22	3.21	0.08	3%
89 Portugal	3.44	3.39	3.34	3.30	3.24	3.18	3.17	-0.27	-8%
90 United Kingdom	2.78	2.87	2.95	3.02	3.06	3.14	3.16	0.38	14%
91 Malawi	3.90	3.73	3.57	3.40	3.24	3.15	3.13	-0.77	-20%
92 Nicaragua	4.51	4.16	3.81	3.46	3.11	3.11	3.11	-1.40	-31%
93 Sierra Leone	3.12	3.02	2.92	2.82	2.73	3.04	3.11	-0.01	0%
94 Georgia	2.76	2.76	2.76	2.77	2.82	2.82	2.82	0.07	2%
95 Costa Rica	2.56	2.47	2.38	2.49	2.61	2.76	2.79	0.22	9%
96 Bhutan	2.51	2.56	2.61	2.66	2.71	2.75	2.76	0.26	10%
97 Serbia and Montene	3.01	3.01	3.09	3.10	2.71	2.72	2.72	-0.29	-10%
98 Czechia	2.63	2.63	2.64	2.65	2.66	2.67	2.67	0.04	1%
99 Estonia	2.22	2.22	2.24	2.25	2.23	2.23	2.23	0.01	0%
100 Bosnia and Herzegov	2.20	2.20	2.19	2.19	2.19	2.19	2.19	-0.01	-1%
101 Lithuania	1.98	1.98	2.02	2.12	2.17	2.18	2.18	0.20	10%
102 Solomon Islands	2.32	2.30	2.27	2.24	2.21	2.19	2.18	-0.14	-6%
103 Hungary	1.80	1.86	1.92	1.98	2.05	2.07	2.07	0.27	15%
104 Sri Lanka	2.28	2.24	2.19	2.12	2.10	2.07	2.06	-0.22	-10%
105 Dominican Republic	1.11	1.30	1.49	1.65	1.82	1.98	2.02	0.91	82%
106 Algeria	1.67	1.62	1.58	1.54	1.92	1.96	1.96	0.30	18%
107 Guinea-Bissau	2.22	2.17	2.12	2.07	2.02	1.97	1.96	-0.25	-11%
108 Uganda	4.75	4.31	3.87	3.43	2.75	2.08	1.94	-2.81	-59%
109 Slovakia	1.92	1.92	1.92	1.93	1.94	1.94	1.94	0.02	1%
110 Croatia	1.87	1.87	1.89	1.90	1.92	1.92	1.92	0.05	3%
111 Uruguay	0.80	1.08	1.37	1.52	1.73	1.85	1.87	1.07	134%
112 Equatorial Guinea	1.86	1.80	1.74	1.69	1.63	1.57	1.56	-0.30	-16%
113 Eritrea	1.60	1.60	1.58	1.55	1.53	1.51	1.51	-0.09	-6%
114 Pakistan	0.15	2.32	2.12	1.90	1.69	1.47	1.43	1.28	866%
115 Bangladesh	1.49	1.48	1.47	1.46	1.44	1.43	1.43	-0.07	-5%
116 Belize	1.62	1.54	1.46	1.42	1.39	1.37	1.36	-0.25	-16%
117 Afghanistan	1.35	1.35	1.35	1.35	1.35	1.35	1.35	0.00	0%
118 Switzerland	1.15	1.17	1.19	1.22	1.24	1.25	1.26	0.11	9%
119 Slovenia	1.21	1.21	1.23	1.24	1.25	1.25	1.25	0.04	3%
120 Azerbaijan	0.86	0.86	0.87	0.88	1.01	1.14	1.17	0.30	35%

Table 1.1.2 Top 80 countries in losses of forest area

	Forest area Country	1990 Mha	1995 Mha	2000 Mha	2005 Mha	2010 Mha	2015 Mha	2016 Mha	Change Mha	Percent %	Cumulat Mha
1	Brazil	546.7	534.0	521.3	506.7	498.5	493.5	492.6	-54.2	-10%	-54.2
2	Indonesia	118.6	109.0	99.4	97.9	94.4	91.0	90.3	-28.2	-24%	-82.4
3	Myanmar	39.2	37.0	34.9	33.3	31.8	29.0	28.5	-10.7	-27%	-93.1
4	Nigeria	17.2	15.2	13.1	11.1	9.0	7.0	6.6	-10.7	-62%	-103.7
5	Tanzania	55.9	53.9	51.9	49.9	47.9	46.1	45.7	-10.2	-18%	-114.0
6	Zimbabwe	22.2	20.5	18.9	17.3	15.6	14.1	13.8	-8.4	-38%	-122.4
7	Bolivia (Plurinatio	62.8	61.4	60.1	58.7	56.2	54.8	54.5	-8.3	-13%	-130.7
8	Dem. Rep. of Cong	160.4	158.8	157.3	155.7	154.1	152.6	152.3	-8.1	-5%	-138.8
9	Argentina	34.8	33.3	31.9	30.2	28.6	27.1	26.8	-8.0	-23%	-146.8
10	Paraguay	21.2	20.3	19.4	18.5	17.0	15.3	15.0	-6.2	-29%	-152.9
11	Colombia	64.4	63.1	61.8	60.2	58.6	58.5	58.5	-5.9	-9%	-158.9
12	Cameroon	24.3	23.2	22.1	21.0	19.9	18.8	18.6	-5.7	-24%	-164.6
13	Mozambique	43.4	42.3	41.2	40.1	39.0	37.9	37.7	-5.6	-13%	-170.2
14	Venezuela (Boliva	52.0	50.6	49.2	47.7	47.5	46.7	46.5	-5.5	-11%	-175.8
15	Zambia	52.8	52.0	51.1	50.3	49.5	48.6	48.5	-4.3	-8%	-180.1
16	Ethiopia	16.7	14.4	13.7	13.0	12.3	12.5	12.5	-4.2	-25%	-184.3
17	Peru	77.9	77.0	76.2	75.5	74.8	74.0	73.8	-4.1	-5%	-188.4
18	Mexico	69.8	68.8	67.9	67.1	66.5	66.0	66.0	-3.8	-5%	-192.2
19	Honduras	8.1	7.3	6.4	5.8	5.2	4.6	4.5	-3.7	-45%	-195.9
20	Cambodia	12.9	12.3	11.6	10.7	10.1	9.5	9.3	-3.6	-28%	-199.5
21	Australia	128.5	128.7	128.8	127.6	123.2	124.8	125.1	-3.5	-3%	-203.0
22	People's Rep. of Kc	8.2	7.6	6.9	6.3	5.7	5.0	4.9	-3.3	-40%	-206.3
23	Angola	61.0	60.4	59.7	59.1	58.5	57.9	57.7	-3.2	-5%	-209.5
24	Botswana	13.7	13.1	12.5	11.9	11.4	10.8	10.7	-3.0	-22%	-212.5
25	Uganda	4.8	4.3	3.9	3.4	2.8	2.1	1.9	-2.8	-59%	-215.3
26	Ecuador	14.6	14.2	13.7	13.3	12.9	12.6	12.5	-2.2	-15%	-217.5
27	Mali	6.7	6.3	5.9	5.5	5.1	4.7	4.6	-2.1	-31%	-219.5
28	Somalia	8.3	7.9	7.5	7.1	6.8	6.4	6.3	-2.0	-24%	-221.5
29	Chad	6.7	6.5	6.3	6.1	5.5	4.9	4.8	-2.0	-29%	-223.5
30	Namibia	8.8	8.4	8.0	7.7	7.3	6.9	6.8	-1.9	-22%	-225.4
31	Burkina Faso	6.9	6.6	6.3	6.0	5.7	5.4	5.3	-1.6	-23%	-226.9
32	Benin	5.8	5.4	5.1	4.8	4.6	4.3	4.3	-1.5	-26%	-228.4
33	Nicaragua	4.5	4.2	3.8	3.5	3.1	3.1	3.1	-1.4	-31%	-229.8
34	Canada	348.3	348.0	347.8	347.6	347.3	347.1	347.0	-1.3	0%	-231.1
35	Guatemala	4.8	4.5	4.2	3.9	3.7	3.5	3.5	-1.2	-26%	-232.3
36	Madagascar	13.7	13.4	13.0	12.8	12.6	12.5	12.5	-1.2	-9%	-233.6
37	Nepal	4.8	4.4	3.9	3.6	3.6	3.6	3.6	-1.2	-25%	-234.8
38	Senegal	9.4	9.1	8.9	8.7	8.5	8.3	8.2	-1.1	-12%	-235.9
39	Guinea	7.3	7.1	6.9	6.7	6.5	6.4	6.3	-0.9	-13%	-236.8
40	Niger	2.0	1.6	1.3	1.3	1.2	1.1	1.1	-0.8	-42%	-237.6
	Top 40	2169.8	2116.0	2063.7	2017.8	1972.3	1938.9	1932.2	-0.8	-42%	-237.6

Table 1.1.2 Continued

Forest area Country	1990 Mha	1995 Mha	2000 Mha	2005 Mha	2010 Mha	2015 Mha	2016 Mha	Change Mha	Percent %	Cumulat. Mha
41 Liberia	4.93	4.78	4.63	4.48	4.33	4.18	4.15	-0.78	-16%	-238.4
42 Malawi	3.9	3.73	3.57	3.4	3.24	3.15	3.13	-0.77	-20%	-239.2
43 Togo	0.69	0.59	0.49	0.39	0.29	0.19	0.17	-0.52	-75%	-239.7
44 Panama	5.04	4.95	4.87	4.78	4.7	4.62	4.6	-0.44	-9%	-240.1
45 Congo	22.73	22.64	22.56	22.47	22.41	22.33	22.32	-0.41	-2%	-240.6
46 Central African Rej	22.56	22.48	22.4	22.33	22.25	22.17	22.15	-0.41	-2%	-241.0
47 Equatorial Guinea	1.86	1.8	1.74	1.69	1.63	1.57	1.56	-0.3	-16%	-241.3
48 Timor-Leste	0.97	0.91	0.85	0.8	0.74	0.69	0.67	-0.29	-30%	-241.6
49 Serbia and Monter	3.01	3.01	3.09	3.1	2.71	2.72	2.72	-0.29	-10%	-241.8
50 Kenya	4.72	4.14	3.56	4.05	4.23	4.41	4.45	-0.27	-6%	-242.1
51 Portugal	3.44	3.39	3.34	3.3	3.24	3.18	3.17	-0.27	-8%	-242.4
52 Belize	1.62	1.54	1.46	1.42	1.39	1.37	1.36	-0.25	-16%	-242.6
53 Guinea-Bissau	2.22	2.17	2.12	2.07	2.02	1.97	1.96	-0.25	-11%	-242.9
54 Sri Lanka	2.28	2.24	2.19	2.12	2.1	2.07	2.06	-0.22	-10%	-243.1
55 Kyrgyzstan	0.85	0.85	0.86	0.87	0.68	0.64	0.63	-0.22	-26%	-243.3
56 Mauritania	0.42	0.37	0.32	0.27	0.24	0.22	0.22	-0.19	-47%	-243.5
57 Republic of Korea	6.37	6.33	6.29	6.26	6.22	6.18	6.18	-0.19	-3%	-243.7
58 Malaysia	22.38	21.98	21.59	20.89	22.12	22.2	22.21	-0.17	-1%	-243.9
59 Solomon Islands	2.32	2.3	2.27	2.24	2.21	2.19	2.18	-0.14	-6%	-244.0
60 Guyana	16.66	16.64	16.62	16.6	16.58	16.53	16.52	-0.14	-1%	-244.2
61 El Salvador	0.38	0.35	0.33	0.31	0.29	0.27	0.26	-0.12	-31%	-244.3
62 Suriname	15.43	15.41	15.39	15.37	15.35	15.33	15.33	-0.1	-1%	-244.4
63 Eritrea	1.6	1.6	1.58	1.55	1.53	1.51	1.51	-0.09	-6%	-244.5
64 French Guiana	8.22	8.2	8.18	8.17	8.14	8.13	8.13	-0.09	-1%	-244.6
65 Kazakhstan	3.39	3.39	3.37	3.34	3.31	3.31	3.31	-0.08	-2%	-244.6
66 Mongolia	12.54	12.13	11.72	11.31	13.04	12.55	12.46	-0.08	-1%	-244.7
67 Belgium-Luxembo	0.76	0.76	0.67	0.67	0.68	0.68	0.68	-0.08	-10%	-244.8
68 Papua New Guineaz	33.63	33.61	33.6	33.59	33.57	33.56	33.56	-0.07	0%	-244.9
69 Bangladesh	1.49	1.48	1.47	1.46	1.44	1.43	1.43	-0.07	-5%	-244.9
70 Brunei Darussalam	0.41	0.41	0.4	0.39	0.38	0.38	0.38	-0.03	-8%	-245.0
71 Haiti	0.12	0.11	0.11	0.11	0.1	0.1	0.1	-0.02	-17%	-245.0
72 Albania	0.79	0.78	0.77	0.78	0.78	0.77	0.77	-0.02	-2%	-245.0
73 Norway	12.13	12.12	12.11	12.09	12.1	12.11	12.11	-0.02	0%	-245.0
74 Bosnia and Herzeg	2.2	2.2	2.19	2.19	2.19	2.19	2.19	-0.01	-1%	-245.0
75 Comoros	0.05	0.05	0.05	0.04	0.04	0.04	0.04	-0.01	-25%	-245.0
76 Sierra Leone	3.12	3.02	2.92	2.82	2.73	3.04	3.11	-0.01	0%	-245.1
77 Jamaica	0.34	0.34	0.34	0.34	0.34	0.34	0.33	-0.01	-3%	-245.1
78 Burundi	0.29	0.24	0.2	0.18	0.25	0.28	0.28	-0.01	-3%	-245.1
79 Dominica	0.05	0.05	0.05	0.05	0.04	0.04	0.04	-0.01	-14%	-245.1
80 United States Virgi	0.02	0.02	0.02	0.02	0.02	0.02	0.02	-0.01	-26%	-245.1
Countries 41-80	225.9	223.1	220.3	218.3	219.7	218.7	218.5	-7.5	-3%	-237.63
Countries 1-80	2395.8	2339.1	2284.0	2236.1	2192.0	2157.5	2150.6	-245.1	-10%	-245.09

Table 1.1.3 Top 80 countries increasing their forest area

	Forest area Countries	1990 Mha	1995 Mha	2000 Mha	2005 Mha	2010 Mha	2015 Mha	2016 Mha	Change Mha	%	Cumulat. Mha
1	China	157.1	167.1	177.0	193.0	200.6	208.3	209.9	52.7	34%	52.7
2	United St. of Amer	302.5	303.0	303.5	304.8	308.7	310.1	310.4	7.9	3%	60.6
3	India	63.9	64.7	65.4	67.7	69.8	70.7	70.9	6.9	11%	67.6
4	Russian Federati	809.1	809.1	809.3	808.8	815.1	814.9	814.9	5.8	1%	73.3
5	Viet Nam	9.4	10.6	11.7	13.1	14.1	14.8	14.9	5.5	59%	78.9
6	Spain	13.8	15.4	17.0	17.3	18.3	18.4	18.5	4.6	34%	83.5
7	Chile	15.3	15.6	15.8	16.0	16.2	17.7	18.0	2.8	18%	86.3
8	France	14.4	14.9	15.3	15.9	16.4	17.0	17.1	2.7	18%	89.0
9	Thailand	14.0	15.5	17.0	16.1	16.3	16.4	16.4	2.4	17%	91.4
10	Turkey	9.6	9.9	10.2	10.7	11.2	11.7	11.8	2.2	23%	93.6
11	Italy	7.6	8.0	8.4	8.8	9.0	9.3	9.4	1.8	23%	95.3
12	Philippines	6.6	6.8	7.0	7.1	6.8	8.0	8.3	1.7	26%	97.1
13	Iran (Islamic Reput	9.1	9.2	9.3	10.7	10.7	10.7	10.7	1.6	18%	98.7
14	Lao People's Demc	17.6	17.1	16.5	16.9	17.8	18.8	19.0	1.3	7%	100.0
15	Pakistan	0.2	2.3	2.1	1.9	1.7	1.5	1.4	1.3	866%	101.3
16	Gabon	22.0	22.0	22.0	22.0	22.0	23.0	23.2	1.2	5%	102.5
17	Cuba	2.1	2.3	2.4	2.7	2.9	3.2	3.3	1.2	58%	103.7
18	Uruguay	0.8	1.1	1.4	1.5	1.7	1.9	1.9	1.1	134%	104.8
19	Dominican Republ	1.1	1.3	1.5	1.7	1.8	2.0	2.0	0.9	82%	105.7
20	Greece	3.3	3.5	3.6	3.8	3.9	4.1	4.1	0.8	24%	106.5
21	Ghana	8.6	8.8	8.9	9.1	9.2	9.3	9.4	0.7	9%	107.2
22	Morocco	5.0	5.0	5.0	5.4	5.7	5.6	5.6	0.7	14%	107.9
23	Belarus	8.0	8.0	8.3	8.4	8.5	8.6	8.7	0.6	8%	108.5
24	Poland	8.9	9.0	9.1	9.2	9.3	9.4	9.5	0.6	6%	109.1
25	Romania	6.4	6.4	6.4	6.4	6.5	6.9	6.9	0.6	9%	109.6
26	Bulgaria	3.3	3.4	3.4	3.7	3.7	3.8	3.8	0.5	15%	110.1
27	New Zealand	9.7	9.9	10.1	10.2	10.2	10.2	10.2	0.5	5%	110.6
28	Tunisia	0.6	0.7	0.8	0.9	1.0	1.0	1.1	0.4	63%	111.0
29	United Kingdom	2.8	2.9	3.0	3.0	3.1	3.1	3.2	0.4	14%	111.4
30	Finland	21.9	22.2	22.5	22.1	22.2	22.2	22.2	0.3	2%	111.8
31	Azerbaijan	0.9	0.9	0.9	0.9	1.0	1.1	1.2	0.3	35%	112.1
32	Algeria	1.7	1.6	1.6	1.5	1.9	2.0	2.0	0.3	18%	112.4
33	Ireland	0.5	0.6	0.6	0.7	0.7	0.8	0.8	0.3	63%	112.7
34	Ukraine	9.4	9.4	9.5	9.6	9.6	9.7	9.7	0.3	3%	112.9
35	Hungary	1.8	1.9	1.9	2.0	2.1	2.1	2.1	0.3	15%	113.2
36	Bhutan	2.5	2.6	2.6	2.7	2.7	2.8	2.8	0.3	10%	113.5
37	Costa Rica	2.6	2.5	2.4	2.5	2.6	2.8	2.8	0.2	9%	113.7
38	Puerto Rico	0.3	0.4	0.5	0.5	0.5	0.5	0.5	0.2	74%	113.9
39	Lithuania	2.0	2.0	2.0	2.1	2.2	2.2	2.2	0.2	10%	114.1
40	CÃ´te d'Ivoire	10.2	10.3	10.3	10.4	10.4	10.4	10.4	0.2	2%	114.3
	Top 40	1586.3	1607.1	1626.2	1651.4	1678.2	1696.9	1700.6	114.3	7%	

Table 1.1.3 Continued

	Forest area Countries	1990 Mha	1995 Mha	2000 Mha	2005 Mha	2010 Mha	2015 Mha	2016 Mha	Change Mha	%	Cumulat. Mha
41	Rwanda	0.32	0.33	0.34	0.39	0.45	0.48	0.49	0.17	53%	114.5
42	Latvia	3.21	3.21	3.24	3.3	3.35	3.36	3.36	0.15	5%	114.6
43	Germany	11.3	11.33	11.35	11.38	11.41	11.42	11.42	0.12	1%	114.7
44	Syrian Arab Repub	0.37	0.4	0.43	0.46	0.49	0.49	0.49	0.12	32%	114.8
45	Eswatini	0.47	0.5	0.52	0.54	0.56	0.59	0.59	0.12	25%	115.0
46	Switzerland	1.15	1.17	1.19	1.22	1.24	1.25	1.26	0.11	9%	115.1
47	French Polynesia	0.06	0.08	0.11	0.13	0.16	0.16	0.16	0.1	182%	115.2
48	Austria	3.78	3.81	3.84	3.85	3.86	3.87	3.87	0.09	3%	115.3
49	Republic of Moldo	0.32	0.32	0.32	0.36	0.39	0.41	0.41	0.09	29%	115.4
50	Uzbekistan	3.13	3.13	3.21	3.3	3.28	3.22	3.21	0.08	3%	115.4
51	United Arab Emirat	0.25	0.28	0.31	0.31	0.32	0.32	0.32	0.08	32%	115.5
52	Denmark	0.54	0.56	0.59	0.56	0.59	0.61	0.62	0.07	14%	115.6
53	Fiji	0.95	0.97	0.98	1	0.99	1.02	1.02	0.07	7%	115.7
54	Georgia	2.76	2.76	2.76	2.77	2.82	2.82	2.82	0.07	2%	115.7
55	North Macedonia	0.94	0.94	0.96	0.98	1	1	1	0.06	7%	115.8
56	Croatia	1.87	1.87	1.89	1.9	1.92	1.92	1.92	0.05	3%	115.8
57	Gambia	0.44	0.45	0.46	0.47	0.48	0.49	0.49	0.05	11%	115.9
58	Samoa	0.13	0.15	0.17	0.17	0.17	0.17	0.17	0.04	32%	115.9
59	Slovenia	1.21	1.21	1.23	1.24	1.25	1.25	1.25	0.04	3%	116.0
60	Czechia	2.63	2.63	2.64	2.65	2.66	2.67	2.67	0.04	1%	116.0
61	Israel	0.13	0.14	0.15	0.16	0.15	0.17	0.17	0.04	27%	116.0
62	Iceland	0.02	0.02	0.03	0.04	0.04	0.05	0.05	0.03	214%	116.1
63	Cabo Verde	0.06	0.07	0.08	0.08	0.09	0.09	0.09	0.03	57%	116.1
64	Netherlands	0.35	0.35	0.36	0.37	0.37	0.38	0.38	0.03	9%	116.1
65	Egypt	0.04	0.05	0.06	0.07	0.07	0.07	0.07	0.03	67%	116.2
66	Iraq	0.8	0.81	0.82	0.83	0.83	0.83	0.83	0.02	3%	116.2
67	Slovakia	1.92	1.92	1.92	1.93	1.94	1.94	1.94	0.02	1%	116.2
68	Cyprus	0.16	0.17	0.17	0.17	0.17	0.17	0.17	0.01	7%	116.2
69	Sweden	28.06	28.11	28.16	28.22	28.07	28.07	28.07	0.01	0%	116.2
70	Lesotho	0.04	0.04	0.04	0.04	0.04	0.05	0.05	0.01	25%	116.2
71	Estonia	2.22	2.22	2.24	2.25	2.23	2.23	2.23	0.01	0%	116.2
72	Japan	24.95	24.91	24.88	24.94	24.97	24.96	24.96	0.01	0%	116.3
73	Lebanon	0.13	0.13	0.13	0.14	0.14	0.14	0.14	0.01	5%	116.3
74	Tajikistan	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0	1%	116.3
75	Kuwait	0	0	0	0.01	0.01	0.01	0.01	0	81%	116.3
76	Saint Vincent and t	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0	8%	116.3
77	RÅ©union	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0	1%	116.3
78	Cook Islands	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0	5%	116.3
79	Micronesia (Feder	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0	1%	116.3
80	Liechtenstein	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0	6%	116.3
	Top 41-80	95.32	95.65	96.2	96.85	97.13	97.3	97.32	1.98	2%	
	Top 1-80	1681.7	1702.8	1722.4	1748.3	1775.4	1794.2	1797.9	116.3	7%	

Table 1.1.4 Top 80 countries in percent change in forest area.

Forest area Country	1990 Mha	1995 Mha	2000 Mha	2005 Mha	2010 Mha	2015 Mha	2016 Mha	Change Mha	Percent %	Cumulat. Mha
1 Togo	0.7	0.6	0.5	0.4	0.3	0.2	0.2	-0.5	-75%	-0.5
2 Nigeria	17.2	15.2	13.1	11.1	9.0	7.0	6.6	-10.7	-62%	-11.2
3 Uganda	4.8	4.3	3.9	3.4	2.8	2.1	1.9	-2.8	-59%	-14.0
4 Mauritania	0.4	0.4	0.3	0.3	0.2	0.2	0.2	-0.2	-47%	-14.2
5 Honduras	8.1	7.3	6.4	5.8	5.2	4.6	4.5	-3.7	-45%	-17.8
6 Niger	2.0	1.6	1.3	1.3	1.2	1.1	1.1	-0.8	-42%	-18.7
7 Peop. Rep. of Kore	8.2	7.6	6.9	6.3	5.7	5.0	4.9	-3.3	-40%	-22.0
8 Zimbabwe	22.2	20.5	18.9	17.3	15.6	14.1	13.8	-8.4	-38%	-30.4
9 Mali	6.7	6.3	5.9	5.5	5.1	4.7	4.6	-2.1	-31%	-32.4
10 Nicaragua	4.5	4.2	3.8	3.5	3.1	3.1	3.1	-1.4	-31%	-33.8
11 El Salvador	0.4	0.4	0.3	0.3	0.3	0.3	0.3	-0.1	-31%	-33.9
12 Timor-Leste	1.0	0.9	0.9	0.8	0.7	0.7	0.7	-0.3	-30%	-34.2
13 Paraguay	21.2	20.3	19.4	18.5	17.0	15.3	15.0	-6.2	-29%	-40.4
14 Chad	6.7	6.5	6.3	6.1	5.5	4.9	4.8	-2.0	-29%	-42.3
15 Montserrat	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-29%	-42.3
16 Cambodia	12.9	12.3	11.6	10.7	10.1	9.5	9.3	-3.6	-28%	-46.0
17 Myanmar	39.2	37.0	34.9	33.3	31.8	29.0	28.5	-10.7	-27%	-56.7
18 Benin	5.8	5.4	5.1	4.8	4.6	4.3	4.3	-1.5	-26%	-58.2
19 Guatemala	4.8	4.5	4.2	3.9	3.7	3.5	3.5	-1.2	-26%	-59.4
20 Kyrgyzstan	0.9	0.9	0.9	0.9	0.7	0.6	0.6	-0.2	-26%	-59.6
21 United States Virgi	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-26%	-59.6
22 Ethiopia	16.7	14.4	13.7	13.0	12.3	12.5	12.5	-4.2	-25%	-63.8
23 Nepal	4.8	4.4	3.9	3.6	3.6	3.6	3.6	-1.2	-25%	-65.0
24 Comoros	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	-25%	-65.0
25 Indonesia	118.6	109.0	99.4	97.9	94.4	91.0	90.3	-28.2	-24%	-93.3
26 Cameroon	24.3	23.2	22.1	21.0	19.9	18.8	18.6	-5.7	-24%	-99.0
27 Somalia	8.3	7.9	7.5	7.1	6.8	6.4	6.3	-2.0	-24%	-101.0
28 Argentina	34.8	33.3	31.9	30.2	28.6	27.1	26.8	-8.0	-23%	-109.0
29 Burkina Faso	6.9	6.6	6.3	6.0	5.7	5.4	5.3	-1.6	-23%	-110.5
30 Botswana	13.7	13.1	12.5	11.9	11.4	10.8	10.7	-3.0	-22%	-113.5
31 Namibia	8.8	8.4	8.0	7.7	7.3	6.9	6.8	-1.9	-22%	-115.4
32 Malawi	3.9	3.7	3.6	3.4	3.2	3.2	3.1	-0.8	-20%	-116.2
33 Tanzania	55.9	53.9	51.9	49.9	47.9	46.1	45.7	-10.2	-18%	-126.4
34 Saint Pierre and M	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-18%	-126.4
35 Haiti	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	-17%	-126.4
36 Liberia	4.9	4.8	4.6	4.5	4.3	4.2	4.2	-0.8	-16%	-127.2
37 Equatorial Guinea	1.9	1.8	1.7	1.7	1.6	1.6	1.6	-0.3	-16%	-127.5
38 Belize	1.6	1.5	1.5	1.4	1.4	1.4	1.4	-0.3	-16%	-127.8
39 Ecuador	14.6	14.2	13.7	13.3	12.9	12.6	12.5	-2.2	-15%	-129.9
40 Dominica	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	-14%	-129.9
Top 1-40	487.4	456.5	427.1	407.0	384.1	361.9	357.5	-129.9	-27%	

Table 1.1.4 Continued.

	Forest area	1990	1995	2000	2005	2010	2015	2016	Change	Percent	Cumulat.
	Country	Mha	Mha	Mha	Mha	Mha	Mha	Mha	Mha	%	Mha
41	Bolivia (Plurinatioi	62.8	61.44	60.09	58.73	56.21	54.76	54.48	-8.32	-13%	-138.3
42	Mozambique	43.38	42.28	41.19	40.08	38.97	37.94	37.73	-5.64	-13%	-143.9
43	Guinea	7.26	7.08	6.9	6.72	6.54	6.36	6.33	-0.94	-13%	-144.8
44	Niue	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0	-13%	-144.8
45	Senegal	9.35	9.12	8.9	8.67	8.47	8.27	8.23	-1.12	-12%	-146.0
46	Venezuela (Boliva	52.03	50.59	49.15	47.71	47.51	46.68	46.52	-5.51	-11%	-151.5
47	Guinea-Bissau	2.22	2.17	2.12	2.07	2.02	1.97	1.96	-0.25	-11%	-151.7
48	Northern Mariana	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0	-11%	-151.7
49	Brazil	546.71	533.99	521.27	506.73	498.46	493.54	492.55	-54.15	-10%	-205.9
50	Serbia and Monter	3.01	3.01	3.09	3.1	2.71	2.72	2.72	-0.29	-10%	-206.2
51	Sri Lanka	2.28	2.24	2.19	2.12	2.1	2.07	2.06	-0.22	-10%	-206.4
52	Belgium-Luxembo	0.76	0.76	0.67	0.67	0.68	0.68	0.68	-0.08	-10%	-206.5
53	Colombia	64.42	63.11	61.8	60.2	58.64	58.5	58.48	-5.94	-9%	-212.4
54	Madagascar	13.69	13.36	13.02	12.84	12.55	12.47	12.46	-1.24	-9%	-213.6
55	Panama	5.04	4.95	4.87	4.78	4.7	4.62	4.6	-0.44	-9%	-214.1
56	Zambia	52.8	51.97	51.13	50.3	49.47	48.64	48.47	-4.33	-8%	-218.4
57	Portugal	3.44	3.39	3.34	3.3	3.24	3.18	3.17	-0.27	-8%	-218.7
58	Brunei Darussalam	0.41	0.41	0.4	0.39	0.38	0.38	0.38	-0.03	-8%	-218.7
59	Saint Lucia	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0	-7%	-218.7
60	Kenya	4.72	4.14	3.56	4.05	4.23	4.41	4.45	-0.27	-6%	-219.0
61	Solomon Islands	2.32	2.3	2.27	2.24	2.21	2.19	2.18	-0.14	-6%	-219.1
62	Eritrea	1.6	1.6	1.58	1.55	1.53	1.51	1.51	-0.09	-6%	-219.2
63	Mauritius	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0	-6%	-219.2
64	Dem. Rep. of Cong	160.36	158.81	157.25	155.69	154.14	152.58	152.27	-8.1	-5%	-227.3
65	Peru	77.92	77.03	76.15	75.53	74.81	73.97	73.81	-4.12	-5%	-231.4
66	Mexico	69.76	68.81	67.86	67.08	66.5	66.04	65.95	-3.81	-5%	-235.2
67	Angola	60.98	60.35	59.73	59.1	58.48	57.86	57.73	-3.24	-5%	-238.5
68	Bangladesh	1.49	1.48	1.47	1.46	1.44	1.43	1.43	-0.07	-5%	-238.5
69	American Samoa	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0	-5%	-238.5
70	Antigua and Barbu	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0	-5%	-238.5
71	Sao Tome and Prin	0.06	0.06	0.06	0.06	0.05	0.05	0.05	0	-4%	-238.5
72	Australia	128.54	128.69	128.84	127.64	123.21	124.75	125.06	-3.48	-3%	-242.0
73	Republic of Korea	6.37	6.33	6.29	6.26	6.22	6.18	6.18	-0.19	-3%	-242.2
74	Jamaica	0.34	0.34	0.34	0.34	0.34	0.34	0.33	-0.01	-3%	-242.2
75	Burundi	0.29	0.24	0.2	0.18	0.25	0.28	0.28	-0.01	-3%	-242.2
76	Congo	22.73	22.64	22.56	22.47	22.41	22.33	22.32	-0.41	-2%	-242.6
77	Central African Rej	22.56	22.48	22.4	22.33	22.25	22.17	22.15	-0.41	-2%	-243.1
78	Kazakhstan	3.39	3.39	3.37	3.34	3.31	3.31	3.31	-0.08	-2%	-243.1
79	Albania	0.79	0.78	0.77	0.78	0.78	0.77	0.77	-0.02	-2%	-243.2
80	Trinidad and Tobağ	0.24	0.24	0.23	0.23	0.23	0.23	0.24	0	-2%	-243.2
	Tp 40-80	1434.2	1409.7	1385.2	1358.9	1335.2	1323.3	1321	-113.2	-8%	
	Top 1-80	1921.6	1866.2	1812.3	1765.9	1719.3	1685.2	1678.4	-243.2	-13%	

1.1.5 Top 40 in annual forest losses 1990 – 2016.

	Forest area Country	1990 Mha	1995 Mha	2000 Mha	2005 Mha	2010 Mha	2015 Mha	2016 Mha	Average Mha	Trend %
1	Brazil	-2.54	-2.54	-2.54	-2.91	-1.65	-0.98	-0.99	-2.08	-52%
2	Indonesia	-1.91	-1.91	-1.91	-0.31	-0.69	-0.68	-0.68	-1.09	-37%
3	Myanmar	-0.44	-0.44	-0.43	-0.31	-0.31	-0.55	-0.55	-0.41	33%
4	Nigeria	-0.41	-0.41	-0.41	-0.41	-0.41	-0.41	-0.41	-0.41	0%
5	Tanzania	-0.40	-0.40	-0.40	-0.40	-0.40	-0.37	-0.37	-0.39	-6%
6	Zimbabwe	-0.33	-0.33	-0.33	-0.33	-0.33	-0.31	-0.31	-0.32	-4%
7	Bolivia (Plurinatio	-0.27	-0.27	-0.27	-0.27	-0.50	-0.29	-0.28	-0.32	-12%
8	Dem. Rep. of Cong	-0.31	-0.31	-0.31	-0.31	-0.31	-0.31	-0.31	-0.31	0%
9	Argentina	-0.29	-0.29	-0.29	-0.33	-0.32	-0.30	-0.29	-0.31	-6%
10	Paraguay	-0.18	-0.18	-0.18	-0.18	-0.31	-0.33	-0.32	-0.24	35%
11	Colombia	-0.26	-0.26	-0.26	-0.32	-0.31	-0.03	-0.02	-0.23	-91%
12	Cameroon	-0.22	-0.22	-0.22	-0.22	-0.22	-0.22	-0.22	-0.22	0%
13	Mozambique	-0.22	-0.22	-0.22	-0.22	-0.22	-0.21	-0.21	-0.22	-3%
14	Venezuela (Boliva	-0.29	-0.29	-0.29	-0.29	-0.04	-0.17	-0.16	-0.21	-25%
15	Zambia	-0.17	-0.17	-0.17	-0.17	-0.17	-0.17	-0.17	-0.17	2%
16	Ethiopia	-0.47	-0.47	-0.14	-0.14	-0.14	0.04	0.04	-0.16	-125%
17	Peru	-0.18	-0.18	-0.18	-0.12	-0.14	-0.17	-0.16	-0.16	1%
18	Mexico	-0.19	-0.19	-0.19	-0.16	-0.12	-0.09	-0.09	-0.15	-39%
19	Honduras	-0.18	-0.18	-0.17	-0.12	-0.12	-0.12	-0.12	-0.14	-15%
20	Cambodia	-0.14	-0.14	-0.14	-0.16	-0.13	-0.13	-0.13	-0.14	-6%
21	Australia	0.03	0.03	0.03	-0.24	-0.89	0.31	0.31	-0.13	-332%
22	People's Rep. of K	-0.13	-0.13	-0.13	-0.13	-0.13	-0.13	-0.13	-0.13	2%
23	Angola	-0.13	-0.13	-0.12	-0.13	-0.12	-0.12	-0.13	-0.12	4%
24	Botswana	-0.12	-0.12	-0.12	-0.12	-0.12	-0.10	-0.10	-0.11	-13%
25	Uganda	-0.09	-0.09	-0.09	-0.09	-0.14	-0.13	-0.14	-0.11	30%
26	Ecuador	-0.09	-0.09	-0.09	-0.08	-0.08	-0.08	-0.08	-0.08	-4%
27	Mali	-0.08	-0.08	-0.08	-0.08	-0.08	-0.08	-0.08	-0.08	1%
28	Somalia	-0.08	-0.08	-0.08	-0.08	-0.08	-0.08	-0.07	-0.08	-9%
29	Chad	-0.04	-0.04	-0.04	-0.04	-0.13	-0.13	-0.13	-0.08	72%
30	Namibia	-0.07	-0.07	-0.07	-0.07	-0.07	-0.07	-0.08	-0.07	8%
31	Burkina Faso	-0.06	-0.06	-0.06	-0.06	-0.06	-0.06	-0.06	-0.06	0%
32	Benin	-0.07	-0.07	-0.07	-0.05	-0.05	-0.05	-0.05	-0.06	-13%
33	Nicaragua	-0.07	-0.07	-0.07	-0.07	-0.07	0.00	0.00	-0.05	-100%
34	Canada	-0.05	-0.05	-0.05	-0.04	-0.06	-0.05	-0.05	-0.05	4%
35	Guatemala	-0.05	-0.05	-0.05	-0.05	-0.04	-0.04	-0.04	-0.05	-16%
36	Madagascar	-0.07	-0.07	-0.07	-0.04	-0.06	-0.02	-0.01	-0.05	-79%
37	Nepal	-0.09	-0.09	-0.09	-0.05	0.00	0.00	0.00	-0.05	-100%
38	Senegal	-0.05	-0.05	-0.04	-0.05	-0.04	-0.04	-0.04	-0.04	-7%
39	Guinea	-0.04	-0.04	-0.04	-0.04	-0.04	-0.04	-0.03	-0.04	-17%
40	Niger	-0.06	-0.06	-0.06	-0.01	-0.01	-0.01	-0.01	-0.03	-68%
	40 largest	-10.77	-10.77	-10.45	-9.19	-9.09	-6.70	-6.67	-9.14	-27%

Table 1.2 Mass of CO2 Stored in forests

Table 1.2.1 Top 120 countries in CO2 stored in living forests.

CO2 storage in living forests		1990	1995	2000	2005	2010	2015	2016	Change	Change
Countries		GtCO2	GtCO2	GtCO2	GtCO2	GtCO2	GtCO2	GtCO2	GtCO2	%
1	Brazil	235.4	231.1	226.7	221.2	218.6	217.1	216.9	-18.6	-8%
2	Russian Federation	118.5	118.5	117.9	118.1	119.2	120.3	120.5	1.9	2%
3	Republic of the Congo	74.9	74.2	73.5	72.7	72.0	71.3	71.1	-3.8	-5%
4	United States of America	53.0	55.3	57.6	60.1	62.6	63.5	63.7	10.8	20%
5	Canada	52.9	52.9	52.8	51.8	51.3	51.3	51.3	-1.6	-3%
6	Indonesia	63.7	61.5	59.2	55.8	50.8	45.8	44.8	-18.9	-30%
7	Colombia	35.7	34.9	34.2	33.4	32.6	32.5	32.5	-3.2	-9%
8	Peru	32.4	32.2	31.9	31.7	31.4	31.0	31.0	-1.4	-4%
9	Australia	29.3	29.3	29.4	29.2	29.2	29.6	29.6	0.3	1%
10	China	16.4	18.0	19.6	21.3	23.3	24.9	25.2	8.8	54%
11	Papua New Guinea	22.4	22.4	22.4	22.4	22.4	22.4	22.4	0.0	0%
12	Venezuela (Bolivarian R	22.9	22.3	21.8	21.2	21.3	21.0	20.9	-2.0	-9%
13	Tanzania	24.2	23.3	22.5	21.6	20.7	19.9	19.8	-4.4	-18%
14	Guyana	17.8	17.8	17.7	17.7	17.7	17.6	17.6	-0.2	-1%
15	Angola	16.8	16.6	16.4	16.3	16.1	15.9	15.9	-0.9	-5%
16	Bolivia (Plurinational St	17.9	17.5	17.1	16.7	16.3	15.9	15.8	-2.1	-12%
17	Congo	12.8	12.7	12.7	12.6	12.6	12.6	12.6	-0.2	-2%
18	Gabon	10.5	10.5	10.5	10.5	10.5	11.0	11.1	0.6	5%
19	Argentina	12.9	12.6	12.3	12.0	11.5	11.0	11.0	-2.0	-15%
20	Central African Republic	10.8	10.7	10.6	10.6	10.5	10.4	10.4	-0.4	-3%
21	Malaysia	10.3	9.9	9.5	9.0	9.3	10.2	10.4	0.1	1%
22	India	8.2	8.4	8.7	9.6	10.3	9.7	9.6	1.4	18%
23	Cameroon	12.1	11.5	11.0	10.4	9.9	9.3	9.2	-2.8	-23%
24	Zambia	9.5	9.3	9.2	9.0	8.9	8.8	8.8	-0.6	-7%
25	Mexico	7.7	7.6	7.5	7.4	7.3	7.3	7.3	-0.4	-5%
26	Sudan	8.7	8.6	8.4	7.6	7.5	7.2	7.2	-1.6	-18%
27	Suriname	7.1	7.1	7.1	7.1	7.1	7.1	7.1	0.0	-1%
28	Paraguay	9.3	8.9	8.6	8.2	7.6	6.9	6.7	-2.6	-28%
29	Côte d'Ivoire	6.6	6.7	6.7	6.8	6.8	6.7	6.7	0.1	1%
30	French Guiana	6.2	6.1	6.1	6.1	6.1	6.1	6.1	-0.1	-1%
31	Japan	4.2	4.7	5.1	5.3	6.0	6.0	6.0	1.8	42%
32	Mozambique	6.9	6.7	6.5	6.4	6.2	6.0	6.0	-0.9	-13%
33	Madagascar	6.5	6.4	6.2	6.1	6.0	5.9	5.9	-0.6	-10%
34	Myanmar	7.5	7.1	6.7	6.4	6.1	5.7	5.6	-1.9	-25%
35	Chile	4.7	4.8	4.9	4.9	4.9	5.5	5.6	0.8	18%
36	Ecuador	6.4	6.2	6.0	5.8	5.6	5.5	5.4	-1.0	-15%
37	New Zealand	4.6	4.7	4.8	4.9	5.0	5.1	5.1	0.5	12%
38	France	3.5	3.7	3.8	4.3	4.6	5.0	5.1	1.5	44%
39	Germany	3.2	3.5	3.8	4.0	4.1	4.4	4.4	1.2	38%
40	Sweden	3.5	3.6	3.7	4.0	4.0	4.1	4.1	0.6	17%
Top 40		1018	1010	1001	990	984	978	976	-42	-4%

Table 1.2.1 Continued.

CO2 storage in living forests		1990	1995	2000	2005	2010	2015	2016	Change	Change
Countries		GtCO2	GtCO2	GtCO2	GtCO2	GtCO2	GtCO2	GtCO2	GtCO2	%
41	Lao People's Dem. Rep.	4.23	4.19	4.14	4.06	3.98	3.90	3.88	-0.34	-8%
42	Viet Nam	2.85	3.13	3.40	3.53	3.62	3.76	3.79	0.93	33%
43	Thailand	3.33	3.28	3.23	3.22	3.23	3.16	3.15	-0.18	-5%
44	Poland	1.71	1.86	2.00	2.20	2.81	3.01	3.05	1.34	78%
45	Turkey	2.00	2.11	2.22	2.36	2.64	2.96	3.03	1.03	51%
46	South Africa	2.96	2.96	2.96	2.96	2.96	2.96	2.96	0.00	0%
47	Ukraine	2.13	2.13	2.43	2.61	2.78	2.87	2.89	0.76	36%
48	Nigeria	7.39	6.47	5.56	4.83	3.98	3.06	2.88	-4.51	-61%
49	Finland	2.32	2.47	2.62	2.73	2.86	2.86	2.86	0.54	23%
50	Ghana	3.01	2.91	2.80	2.62	2.65	2.61	2.60	-0.40	-13%
51	Philippines	2.35	2.37	2.38	2.32	2.18	2.48	2.54	0.18	8%
52	Romania	1.40	1.40	1.40	1.41	1.43	2.26	2.43	1.02	73%
53	Belarus	1.59	1.59	1.77	1.98	2.24	2.37	2.39	0.80	50%
54	Italy	1.47	1.64	1.82	2.00	2.17	2.35	2.39	0.92	63%
55	Kenya	2.35	2.06	1.77	2.01	2.17	2.32	2.36	0.00	0%
56	Botswana	2.49	2.46	2.43	2.40	2.37	2.33	2.32	-0.17	-7%
57	Spain	1.19	1.43	1.66	1.90	2.07	2.23	2.27	1.08	90%
58	Guinea	2.52	2.46	2.39	2.33	2.27	2.21	2.19	-0.32	-13%
59	Liberia	2.44	2.37	2.29	2.22	2.14	2.14	2.14	-0.30	-12%
60	Panama	2.28	2.24	2.20	2.16	2.12	2.09	2.08	-0.20	-9%
61	Mongolia	2.46	2.38	2.30	2.22	2.14	2.06	2.04	-0.42	-17%
62	South Sudan	1.82	1.82	1.82	1.82	1.82	1.82	1.82	0.00	0%
63	Nepal	2.21	2.06	1.91	1.78	1.78	1.78	1.78	-0.43	-19%
64	Norway	1.22	1.30	1.38	1.50	1.62	1.75	1.77	0.55	45%
65	Zimbabwe	2.56	2.37	2.18	1.99	1.80	1.62	1.59	-0.97	-38%
66	Republic of Korea	0.54	0.71	0.88	1.10	1.34	1.54	1.58	1.04	194%
67	Cambodia	2.23	2.10	1.97	1.82	1.70	1.59	1.56	-0.67	-30%
68	Austria	1.23	1.29	1.35	1.39	1.41	1.43	1.44	0.21	17%
69	Somalia	1.77	1.69	1.61	1.52	1.44	1.38	1.37	-0.40	-23%
70	Czechia	1.65	1.12	1.18	1.24	1.28	1.34	1.36	-0.29	-18%
71	Nicaragua	1.86	1.71	1.57	1.42	1.28	1.28	1.28	-0.58	-31%
72	Senegal	1.38	1.34	1.31	1.28	1.25	1.22	1.22	-0.16	-11%
73	Cuba	0.75	0.93	1.10	1.26	1.08	1.15	1.16	0.41	54%
74	Bhutan	0.98	1.00	1.02	1.04	1.06	1.08	1.08	0.10	10%
75	Latvia	0.77	0.77	0.85	0.88	0.97	1.05	1.06	0.29	38%
76	Honduras	1.90	1.69	1.49	1.35	1.21	1.07	1.04	-0.85	-45%
77	Guatemala	1.34	1.26	1.19	1.11	1.03	0.99	0.99	-0.35	-26%
78	Chad	1.36	1.32	1.28	1.24	1.11	0.99	0.96	-0.40	-29%
79	Croatia	0.75	0.75	0.81	0.87	0.92	0.94	0.94	0.19	25%
80	Costa Rica	0.86	0.83	0.79	0.83	0.87	0.93	0.94	0.08	10%
Top 41-80		81.63	79.94	79.46	79.51	79.77	80.94	81.17	-0.46	-1%
Top 1- 80		1099.5	1089.8	1080.7	1069.7	1063.5	1058.5	1057.5	-42.0	-4%

Table 1.2.1 Continued.

CO2 storage in living forests		1990	1995	2000	2005	2010	2015	2016	Change	Change
Countries		GtCO2	GtCO2	GtCO2	GtCO2	GtCO2	GtCO2	GtCO2	GtCO2	%
81	Benin	1.22	1.14	1.07	1.02	0.96	0.91	0.90	-0.32	-26%
82	Burkina Faso	1.16	1.10	1.05	1.00	0.95	0.91	0.90	-0.26	-22%
83	Morocco	0.74	0.79	0.83	0.88	0.88	0.88	0.89	0.14	19%
84	United Kingdom	0.49	0.56	0.64	0.72	0.79	0.87	0.88	0.40	81%
85	Serbia	0.60	0.60	0.63	0.66	0.86	0.87	0.87	0.27	45%
86	Uruguay	0.35	0.48	0.61	0.68	0.77	0.83	0.84	0.49	139%
87	Ethiopia	1.46	1.00	0.93	0.87	0.80	0.82	0.82	-0.65	-44%
88	Slovakia	0.65	0.65	0.70	0.74	0.77	0.80	0.81	0.16	25%
89	Bulgaria	0.46	0.53	0.59	0.67	0.72	0.78	0.79	0.33	71%
90	Sierra Leone	0.91	0.88	0.85	0.82	0.79	0.76	0.76	-0.15	-16%
91	Namibia	0.93	0.89	0.85	0.81	0.77	0.73	0.72	-0.20	-22%
92	Equatorial Guinea	0.85	0.82	0.80	0.77	0.74	0.72	0.71	-0.14	-16%
93	Solomon Islands	0.70	0.69	0.68	0.68	0.67	0.66	0.66	-0.05	-6%
94	Fiji	0.61	0.61	0.62	0.63	0.63	0.65	0.65	0.05	7%
95	Belize	0.72	0.69	0.67	0.65	0.63	0.62	0.62	-0.10	-14%
96	Lithuania	0.51	0.51	0.53	0.55	0.58	0.61	0.62	0.10	20%
97	Pakistan	1.21	1.10	0.99	0.89	0.78	0.64	0.61	-0.60	-50%
98	Estonia	0.55	0.55	0.58	0.58	0.60	0.61	0.61	0.06	11%
99	Switzerland	0.50	0.51	0.52	0.53	0.55	0.56	0.56	0.06	12%
100	Iran (Islamic Republic of	0.91	0.91	0.91	0.93	0.95	0.61	0.54	-0.37	-40%
101	People's Rep. of Korea	0.88	0.82	0.76	0.70	0.63	0.56	0.54	-0.33	-38%
102	Dominican Republic	0.29	0.34	0.39	0.43	0.48	0.52	0.53	0.24	83%
103	Slovenia	0.36	0.36	0.39	0.45	0.48	0.52	0.52	0.16	46%
104	Malawi	0.63	0.61	0.58	0.55	0.53	0.51	0.51	-0.12	-20%
105	Kazakhstan	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.00	0%
106	Hungary	0.35	0.37	0.39	0.41	0.43	0.45	0.45	0.10	29%
107	Bosnia and Herzegovina	0.39	0.39	0.43	0.43	0.43	0.43	0.43	0.04	10%
108	Mali	0.55	0.52	0.49	0.46	0.42	0.39	0.38	-0.17	-31%
109	Eritrea	0.40	0.40	0.39	0.39	0.39	0.38	0.38	-0.02	-4%
110	Portugal	0.41	0.41	0.40	0.37	0.38	0.37	0.37	-0.04	-11%
111	Bangladesh	0.31	0.30	0.30	0.30	0.35	0.36	0.37	0.06	19%
112	Guinea-Bissau	0.39	0.38	0.37	0.36	0.35	0.34	0.34	-0.04	-11%
113	Greece	0.25	0.26	0.27	0.28	0.29	0.30	0.30	0.06	23%
114	Vanuatu	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.00	0%
115	Azerbaijan	0.17	0.17	0.18	0.18	0.22	0.26	0.27	0.10	58%
116	Belgium	0.21	0.23	0.22	0.24	0.25	0.27	0.27	0.06	27%
117	Brunei Darussalam	0.29	0.29	0.28	0.27	0.26	0.26	0.26	-0.03	-10%
118	Sri Lanka	0.31	0.30	0.29	0.28	0.27	0.26	0.26	-0.05	-16%
119	Uganda	0.63	0.57	0.51	0.45	0.37	0.28	0.26	-0.37	-58%
120	Timor-Leste	0.39	0.37	0.35	0.32	0.28	0.25	0.24	-0.14	-37%
Top 81-120		23.50	22.88	22.84	22.71	22.80	22.33	22.23	-1.27	-5%
Top 1-120		1123.0	1112.7	1103.6	1092.5	1086.3	1080.8	1079.7	-43.3	-4%
All	Total 1-226	1127.4	1117.0	1107.8	1096.8	1090.7	1085.4	1084.3	-43.1	-4%

Table 1.2.2 Top 40 in CO2 losses in living forests

CO2 storage in living forests		1990	1995	2000	2005	2010	2015	2016	Change	Change
Countries		GtCO2	GtCO2	GtCO2	GtCO2	GtCO2	GtCO2	GtCO2	GtCO2	%
1	Indonesia	63.72	61.47	59.22	55.78	50.78	45.79	44.79	-18.93	-30%
2	Brazil	235.44	231.05	226.66	221.21	218.62	217.15	216.85	-18.59	-8%
3	Nigeria	7.39	6.47	5.56	4.83	3.98	3.06	2.88	-4.51	-61%
4	Tanzania	24.21	23.34	22.48	21.61	20.75	19.94	19.78	-4.43	-18%
5	Republic of the Congo	74.92	74.19	73.47	72.74	72.01	71.28	71.14	-3.78	-5%
6	Colombia	35.67	34.94	34.22	33.38	32.58	32.51	32.50	-3.17	-9%
7	Cameroon	12.07	11.52	10.97	10.43	9.89	9.34	9.23	-2.84	-23%
8	Paraguay	9.30	8.94	8.59	8.23	7.59	6.88	6.74	-2.56	-28%
9	Bolivia (Plurinational St	17.88	17.50	17.11	16.72	16.29	15.87	15.78	-2.10	-12%
10	Argentina	12.94	12.64	12.35	11.95	11.49	11.05	10.96	-1.98	-15%
11	Venezuela (Bolivarian R	22.86	22.33	21.80	21.25	21.26	20.96	20.90	-1.96	-9%
12	Myanmar	7.48	7.07	6.65	6.36	6.06	5.69	5.61	-1.87	-25%
13	Canada	52.90	52.86	52.83	51.83	51.30	51.27	51.26	-1.64	-3%
14	Sudan	8.75	8.56	8.37	7.62	7.45	7.23	7.19	-1.56	-18%
15	Peru	32.38	32.16	31.95	31.73	31.39	31.04	30.96	-1.42	-4%
16	Zimbabwe	2.56	2.37	2.18	1.99	1.80	1.62	1.59	-0.97	-38%
17	Ecuador	6.39	6.18	5.97	5.80	5.63	5.46	5.43	-0.96	-15%
18	Mozambique	6.89	6.71	6.53	6.35	6.20	6.02	5.98	-0.91	-13%
19	Angola	16.77	16.60	16.42	16.25	16.08	15.91	15.87	-0.90	-5%
20	Honduras	1.90	1.69	1.49	1.35	1.21	1.07	1.04	-0.85	-45%
21	Cambodia	2.23	2.10	1.97	1.82	1.70	1.59	1.56	-0.67	-30%
22	Ethiopia	1.46	1.00	0.93	0.87	0.80	0.82	0.82	-0.65	-44%
23	Madagascar	6.52	6.35	6.19	6.10	5.96	5.89	5.87	-0.65	-10%
24	Zambia	9.46	9.31	9.16	9.01	8.86	8.83	8.82	-0.63	-7%
25	Pakistan	1.21	1.10	0.99	0.89	0.78	0.64	0.61	-0.60	-50%
26	Nicaragua	1.86	1.71	1.57	1.42	1.28	1.28	1.28	-0.58	-31%
27	Nepal	2.21	2.06	1.91	1.78	1.78	1.78	1.78	-0.43	-19%
28	Mongolia	2.46	2.38	2.30	2.22	2.14	2.06	2.04	-0.42	-17%
29	Ghana	3.01	2.91	2.80	2.62	2.65	2.61	2.60	-0.40	-13%
30	Somalia	1.77	1.69	1.61	1.52	1.44	1.38	1.37	-0.40	-23%
31	Chad	1.36	1.32	1.28	1.24	1.11	0.99	0.96	-0.40	-29%
32	Iran (Islamic Republic of	0.91	0.91	0.91	0.93	0.95	0.61	0.54	-0.37	-40%
33	Uganda	0.63	0.57	0.51	0.45	0.37	0.28	0.26	-0.37	-58%
34	Mexico	7.66	7.57	7.49	7.40	7.34	7.31	7.30	-0.36	-5%
35	Central African Republic	10.77	10.70	10.63	10.56	10.49	10.42	10.41	-0.35	-3%
36	Guatemala	1.34	1.26	1.19	1.11	1.03	0.99	0.99	-0.35	-26%
37	Lao People's Dem. Rep.	4.23	4.19	4.14	4.06	3.98	3.90	3.88	-0.34	-8%
38	People's Rep. of Korea	0.88	0.82	0.76	0.70	0.63	0.56	0.54	-0.33	-38%
39	Guinea	2.52	2.46	2.39	2.33	2.27	2.21	2.19	-0.32	-13%
40	Benin	1.22	1.14	1.07	1.02	0.96	0.91	0.90	-0.32	-26%
CO2 losses in 72 countries		805.53	788.35	772.18	752.43	735.24	720.02	716.97	-88.56	-11%

Table 1.2.3 CO2 storage increases in 40 countries

CO2 storage in living forests	1990	1995	2000	2005	2010	2015	2016	Change	Change
Countries	GtCO2	GtCO2	GtCO2	GtCO2	GtCO2	GtCO2	GtCO2	GtCO2	%
1 United States of Americ	52.98	55.29	57.61	60.11	62.58	63.54	63.74	10.76	20%
2 China	16.39	18.01	19.62	21.33	23.32	24.88	25.20	8.81	54%
3 Russian Federation	118.55	118.55	117.91	118.10	119.17	120.27	120.49	1.94	2%
4 Japan	4.25	4.66	5.06	5.29	6.04	6.04	6.04	1.79	42%
5 France	3.54	3.69	3.85	4.27	4.57	5.00	5.09	1.55	44%
6 India	8.15	8.43	8.72	9.59	10.27	9.71	9.59	1.44	18%
7 Poland	1.71	1.86	2.00	2.20	2.81	3.01	3.05	1.34	78%
8 Germany	3.19	3.51	3.82	3.98	4.11	4.36	4.41	1.22	38%
9 Spain	1.19	1.43	1.66	1.90	2.07	2.23	2.27	1.08	90%
10 Republic of Korea	0.54	0.71	0.88	1.10	1.34	1.54	1.58	1.04	194%
11 Turkey	2.00	2.11	2.22	2.36	2.64	2.96	3.03	1.03	51%
12 Romania	1.40	1.40	1.40	1.41	1.43	2.26	2.43	1.02	73%
13 Viet Nam	2.85	3.13	3.40	3.53	3.62	3.76	3.79	0.93	33%
14 Italy	1.47	1.64	1.82	2.00	2.17	2.35	2.39	0.92	63%
15 Chile	4.74	4.81	4.87	4.91	4.94	5.47	5.58	0.83	18%
16 Belarus	1.59	1.59	1.77	1.98	2.24	2.37	2.39	0.80	50%
17 Ukraine	2.13	2.13	2.43	2.61	2.78	2.87	2.89	0.76	36%
18 Sweden	3.48	3.60	3.73	4.00	4.04	4.09	4.09	0.61	17%
19 Gabon	10.50	10.50	10.50	10.50	10.50	10.97	11.07	0.57	5%
20 Norway	1.22	1.30	1.38	1.50	1.62	1.75	1.77	0.55	45%
21 Finland	2.32	2.47	2.62	2.73	2.86	2.86	2.86	0.54	23%
22 New Zealand	4.57	4.69	4.81	4.90	4.99	5.09	5.10	0.54	12%
23 Uruguay	0.35	0.48	0.61	0.68	0.77	0.83	0.84	0.49	139%
24 Cuba	0.75	0.93	1.10	1.26	1.08	1.15	1.16	0.41	54%
25 United Kingdom	0.49	0.56	0.64	0.72	0.79	0.87	0.88	0.40	81%
26 Bulgaria	0.46	0.53	0.59	0.67	0.72	0.78	0.79	0.33	71%
27 Australia	29.31	29.34	29.37	29.17	29.19	29.56	29.63	0.32	1%
28 Latvia	0.77	0.77	0.85	0.88	0.97	1.05	1.06	0.29	38%
29 Serbia	0.60	0.60	0.63	0.66	0.86	0.87	0.87	0.27	45%
30 Dominican Republic	0.29	0.34	0.39	0.43	0.48	0.52	0.53	0.24	83%
31 Austria	1.23	1.29	1.35	1.39	1.41	1.43	1.44	0.21	17%
32 Croatia	0.75	0.75	0.81	0.87	0.92	0.94	0.94	0.19	25%
33 Philippines	2.35	2.37	2.38	2.32	2.18	2.48	2.54	0.18	8%
34 Slovenia	0.36	0.36	0.39	0.45	0.48	0.52	0.52	0.16	46%
35 Slovakia	0.65	0.65	0.70	0.74	0.77	0.80	0.81	0.16	25%
36 Morocco	0.74	0.79	0.83	0.88	0.88	0.88	0.89	0.14	19%
37 Uzbekistan	0.04	0.04	0.05	0.06	0.07	0.15	0.17	0.13	324%
38 Lithuania	0.51	0.51	0.53	0.55	0.58	0.61	0.62	0.10	20%
39 Hungary	0.35	0.37	0.39	0.41	0.43	0.45	0.45	0.10	29%
40 Bhutan	0.98	1.00	1.02	1.04	1.06	1.08	1.08	0.10	10%
CO2 losses in 72 countries	805.53	788.35	772.18	752.43	735.24	720.02	716.97	-88.56	-11%
Forest increases 67 countries	311.78	318.91	326.20	334.71	345.63	355.35	357.29	45.51	15%
Net losses	1117.31	1107.26	1098.38	1087.14	1080.87	1075.36	1074.26	-43.05	-4%

Table 2 Saw wood Production

Table 2.1.1 Coniferous saw wood production.

Coniferous sawwood Countries	1990 Mm3	1995 Mm3	2000 Mm3	2005 Mm3	2010 Mm3	2015 Mm3	2016 Mm3	Change Mm3
1 USA	60.84	54.80	61.14	69.19	42.16	53.79	55.63	-5.22
2 Canada	38.54	44.35	49.38	58.47	37.71	45.36	48.16	9.62
3 China	14.78	15.23	3.86	7.51	14.90	33.10	34.38	19.60
4 Russia	22.53	22.53	17.46	21.27	26.41	32.15	34.29	11.76
5 Germany	12.38	12.93	15.02	20.80	21.16	20.43	21.11	8.73
6 Sweden	11.80	14.74	15.97	17.44	16.64	18.07	18.26	6.46
7 Finland	7.42	9.86	13.32	12.19	9.40	10.60	11.37	3.95
8 Austria	7.21	7.55	10.15	10.88	9.45	8.61	9.26	2.04
9 Brazil	2.80	4.87	7.50	8.94	8.97	8.80	8.60	5.80
10 Japan	26.42	23.39	16.48	12.52	9.28	8.30	8.42	-18.00
11 Chile	2.89	3.39	5.40	8.03	6.18	8.21	8.31	5.42
12 France	7.05	6.83	7.57	7.75	6.89	6.22	6.41	-0.64
13 Turkey	3.35	2.50	3.12	3.79	3.98	5.10	5.82	2.47
14 Australia	1.41	2.12	2.62	3.46	4.20	4.46	4.43	3.02
15 Poland	3.40	3.07	3.53	2.81	3.77	4.32	4.36	0.96
16 Romania	1.36	0.88	2.08	2.58	2.71	4.60	4.34	2.98
17 New Zealand	2.16	2.93	3.90	4.26	4.07	4.02	4.23	2.07
18 Czechia	3.22	3.22	3.78	3.73	4.49	3.92	3.83	0.61
19 United Kingdom	1.94	2.11	2.51	2.73	3.05	3.45	3.62	1.69
20 Latvia	0.95	0.95	3.32	3.22	2.60	2.81	3.21	2.26
21 Norway	2.40	2.21	2.27	2.30	2.12	2.44	2.53	0.13
22 Belarus	0.88	0.94	1.21	2.17	2.30	2.60	2.52	1.64
23 Ukraine	1.60	1.60	1.17	1.74	1.29	2.20	2.50	0.90
24 Mexico	2.03	2.21	2.90	2.22	2.14	2.26	2.40	0.37
25 Republic of Korea	2.88	3.05	4.04	4.20	2.02	2.30	2.18	-0.70
26 India	2.50	2.50	1.10	9.90	2.00	2.00	2.00	-0.50
27 South Africa	1.73	1.44	1.40	2.01	1.58	1.82	1.98	0.25
28 Spain	2.70	2.51	2.80	2.75	1.48	1.42	1.82	-0.88
29 Argentina	0.13	0.63	0.69	1.08	0.76	1.63	1.63	1.50
30 Estonia	0.32	0.32	1.35	1.91	1.64	1.62	1.58	1.27
31 Belgium-Luxembourg	0.93	0.88	0.95	1.08	1.14	1.50	1.40	0.47
32 Slovakia	0.43	0.43	0.85	1.98	1.78	1.15	1.20	0.77
33 Switzerland	1.78	1.34	1.43	1.50	1.40	1.09	1.07	-0.71
34 Portugal	1.75	1.25	1.02	0.91	0.93	1.10	1.05	-0.70
35 Ireland	0.38	0.66	0.89	1.01	0.77	0.90	0.99	0.61
36 Italy	0.88	0.80	0.73	0.79	0.70	0.92	0.95	0.08
37 Lithuania	0.87	0.87	1.00	1.03	0.82	0.78	0.93	0.06
38 Bosnia and Herzegovina	0.45	0.45	0.45	0.62	0.51	0.71	0.75	0.30
39 Bulgaria	0.86	0.19	0.26	0.43	0.44	0.78	0.71	-0.15
40 Venezuela (Bolivarian I	0.02	0.02	0.03	0.37	0.67	0.67	0.67	0.65
Total 1-40	257.95	262.50	274.63	321.56	264.52	316.22	328.88	70.93

Table 2.1.1 Continues

	Confenous sawwood Countries	1990 Mm3	1995 Mm3	2000 Mm3	2005 Mm3	2010 Mm3	2015 Mm3	2016 Mm3	Change Mm3
41	Slovenia	0.34	0.34	0.30	0.39	0.63	0.63	0.63	0.28
42	Pakistan	0.31	0.49	0.42	0.43	0.46	0.46	0.46	0.15
43	Afghanistan	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.00
44	Denmark	0.46	0.34	0.33	0.18	0.24	0.31	0.32	-0.14
45	Kenya	0.18	0.18	0.18	0.12	0.12	0.27	0.27	0.08
46	Honduras	0.33	0.23	0.44	0.40	0.23	0.30	0.25	-0.07
47	Uruguay	0.08	0.08	0.10	0.09	0.13	0.21	0.23	0.15
48	Croatia	0.10	0.10	0.10	0.08	0.09	0.27	0.22	0.12
49	Kazakhstan	0.23	0.23	0.23	0.11	0.10	0.21	0.21	-0.02
50	Democratic People's Re	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.00
51	Zimbabwe	0.17	0.36	0.34	0.27	0.16	0.18	0.18	0.02
52	Montenegro	0.05	0.05	0.05	0.05	0.05	0.18	0.17	0.12
53	Serbia and Montenegrc	0.16	0.16	0.11	0.15	0.15	0.14	0.15	-0.01
54	Zambia	0.05	0.30	0.15	0.15	0.15	0.15	0.15	0.09
55	Hungary	0.33	0.08	0.08	0.08	0.01	0.17	0.14	-0.19
56	Uganda	0.01	0.05	0.07	0.02	0.02	0.13	0.13	0.12
57	Kyrgyzstan	0.00	0.00	0.00	0.01	0.04	0.12	0.13	0.13
58	Netherlands	0.18	0.20	0.25	0.18	0.15	0.13	0.13	-0.05
59	Colombia	0.24	0.24	0.02	0.10	0.17	0.11	0.10	-0.14
60	Eswatini	0.08	0.09	0.10	0.10	0.10	0.10	0.10	0.03
61	Cuba	0.06	0.06	0.10	0.13	0.13	0.12	0.10	0.04
62	Myanmar	0.04	0.04	0.00	0.06	0.08	0.08	0.08	0.04
63	Fiji	0.04	0.04	0.03	0.04	0.07	0.07	0.07	0.02
64	Greece	0.19	0.21	0.07	0.07	0.07	0.06	0.06	-0.12
65	Rwanda	0.01	0.02	0.02	0.02	0.05	0.05	0.05	0.04
66	Morocco	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.00
67	Georgia	0.00	0.00	0.00	0.01	0.03	0.03	0.04	0.04
68	Luxembourg	0.11	0.11	0.11	0.11	0.04	0.04	0.04	-0.07
69	Guatemala	0.03	0.26	0.18	0.25	0.04	0.04	0.04	0.01
70	Malawi	0.03	0.03	0.03	0.03	0.03	0.04	0.04	0.01
71	China, Taiwan Province	0.27	0.03	0.02	0.02	0.01	0.03	0.03	-0.24
72	Nicaragua	0.03	0.04	0.10	0.02	0.03	0.03	0.03	-0.01
73	Tunisia	0.02	0.01	0.01	0.01	0.01	0.02	0.02	0.01
74	Madagascar	0.00	0.02	0.00	0.01	0.04	0.05	0.02	0.02
75	Cameroon	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.01
76	Mongolia	0.51	0.06	0.30	0.30	0.30	0.02	0.02	-0.49
77	Burundi	0.00	0.02	0.02	0.02	0.02	0.02	0.02	0.02
78	Malaysia	0.07	0.15	0.00	0.02	0.02	0.02	0.02	-0.05
79	Nepal	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.00
80	Papua New Guinea	0.04	0.04	0.00	0.01	0.01	0.02	0.02	-0.02
	Total 41-80	5.38	5.31	4.88	4.67	4.60	5.43	5.31	-0.07
	Total 1-80	263.33	267.82	279.51	326.23	269.13	321.65	334.19	70.87
	Total 1-116	264.63	268.86	279.84	326.54	269.40	321.82	334.35	69.72

Table 2.1.1

Non-Conif. Saw wood Country	1990 Mm3	1995 Mm3	2000 Mm3	2005 Mm3	2010 Mm3	2015 Mm3	2016 Mm3	Change Mm3
1 China	8.53	10.01	2.80	10.43	22.32	41.22	42.81	34.27
2 United St. of America	25.30	29.34	29.93	27.83	17.85	22.57	22.54	-2.76
3 Viet Nam	0.79	1.61	2.95	3.23	5.80	6.00	6.00	5.21
4 Brazil	10.93	13.23	13.80	14.62	8.48	6.00	6.00	-4.93
5 India	14.96	14.96	6.80	4.89	4.89	4.89	4.89	-10.07
6 Indonesia	9.01	6.50	6.50	4.33	4.17	4.17	4.17	-4.84
7 Thailand	1.17	0.40	0.20	2.85	2.85	2.85	3.70	2.53
8 Malaysia	8.78	8.23	5.59	5.17	4.30	3.50	3.40	-5.38
9 Turkey	1.57	1.83	2.41	2.66	2.26	2.67	2.68	1.11
10 Russian Federation	3.98	3.98	2.54	2.65	2.46	2.35	2.51	-1.47
11 Nigeria	2.72	2.36	2.00	2.00	2.00	2.00	2.00	-0.72
12 Romania	1.55	0.90	1.32	1.74	1.61	1.70	1.70	0.15
13 Canada	1.20	1.09	1.08	1.72	0.96	1.75	1.56	0.36
14 Myanmar	0.30	0.31	0.55	1.53	1.53	1.53	1.53	1.23
15 Argentina	0.82	0.70	0.72	0.66	1.40	1.50	1.50	0.68
16 France	3.91	3.02	2.97	1.97	1.42	1.29	1.49	-2.42
17 Croatia	0.48	0.48	0.55	0.54	0.58	1.22	1.21	0.74
18 Germany	2.34	1.18	1.32	1.13	0.90	1.06	1.09	-1.25
19 Cameroon	0.59	0.68	1.15	0.66	0.91	1.00	1.00	0.41
20 Pakistan	1.14	0.78	0.67	0.86	0.92	0.92	0.92	-0.22
21 Japan	3.36	1.10	0.62	0.31	0.14	0.93	0.87	-2.49
22 Lao People's Democrati	0.10	0.29	0.20	0.13	0.35	0.75	0.75	0.65
23 Latvia	0.35	0.35	0.58	1.00	0.55	0.67	0.70	0.35
24 Australia	1.75	1.57	1.47	1.23	0.88	0.63	0.67	-1.07
25 Gabon	0.04	0.10	0.09	0.23	0.35	0.65	0.65	0.61
26 Nepal	0.55	0.60	0.61	0.61	0.61	0.61	0.61	0.06
27 Poland	0.73	0.78	0.73	0.55	0.46	0.52	0.59	-0.14
28 Italy	1.08	1.05	0.90	0.80	0.50	0.55	0.55	-0.53
29 Paraguay	0.23	0.40	0.55	0.55	0.55	0.55	0.55	0.32
30 Ukraine	1.31	1.31	0.96	0.67	0.45	0.50	0.55	-0.76
31 Peru	0.49	0.63	0.64	0.74	0.63	0.58	0.53	0.03
32 Ghana	0.47	0.56	0.48	0.52	0.50	0.52	0.52	0.05
33 Ecuador	1.64	1.36	0.59	0.66	0.40	0.50	0.50	-1.14
34 Lithuania	0.08	0.08	0.30	0.42	0.45	0.47	0.48	0.40
35 Bolivia (Plurinational St	0.10	0.15	0.24	0.41	0.46	0.46	0.46	0.36
36 Costa Rica	0.40	0.77	0.37	0.48	0.54	0.46	0.46	0.06
37 Philippines	0.84	0.29	0.15	0.29	0.70	0.32	0.42	-0.42
38 Mexico	0.34	0.12	0.21	0.45	0.30	0.30	0.42	0.08
39 Serbia and Montenegrc	0.15	0.15	0.40	0.34	0.44	0.37	0.40	0.25
40 Bangladesh	0.08	0.07	0.07	0.39	0.39	0.39	0.39	0.31
Top 1-40	114.14	113.30	96.00	102.24	97.23	120.91	123.76	9.62

Table 2.1.2 Continued

Non-Conif. Saw wood Country	1990 Mm3	1995 Mm3	2000 Mm3	2005 Mm3	2010 Mm3	2015 Mm3	2016 Mm3	Change Mm3
41 Slovakia	0.22	0.22	0.42	0.64	0.80	0.45	0.38	0.16
42 Mozambique	0.02	0.03	0.03	0.03	0.19	0.40	0.38	0.36
43 Hungary	0.77	0.15	0.21	0.13	0.15	0.32	0.38	-0.39
44 Côte d'Ivoire	0.75	0.70	0.60	0.36	0.70	0.87	0.37	-0.38
45 Bosnia and Herzegovina	0.02	0.02	0.27	0.70	0.31	0.35	0.36	0.34
46 Congo	0.05	0.06	0.09	0.22	0.18	0.37	0.36	0.31
47 Colombia	0.57	0.40	0.57	0.31	0.53	0.34	0.32	-0.25
48 Spain	0.57	0.76	0.96	0.91	0.56	0.27	0.32	-0.25
49 Uganda	0.02	0.15	0.20	0.10	0.09	0.31	0.31	0.29
50 Belgium-Luxembourg	0.26	0.27	0.20	0.21	0.24	0.30	0.30	0.04
51 Venezuela (Bolivarian F	0.18	0.20	0.18	0.19	0.28	0.28	0.28	0.10
52 Cambodia	0.07	0.14	0.02	0.07	0.10	0.45	0.25	0.18
53 Czechoslovakia	0.68	0.27	0.32	0.27	0.25	0.23	0.23	-0.45
54 Belarus	0.61	0.61	0.60	0.57	0.27	0.28	0.23	-0.38
55 Uruguay	0.15	0.19	0.10	0.18	0.22	0.28	0.21	0.06
56 Guatemala	0.01	0.09	0.16	0.10	0.09	0.21	0.21	0.20
57 Papua New Guinea	0.07	0.18	0.04	0.05	0.08	0.06	0.20	0.13
58 South Africa	0.20	0.14	0.10	0.20	0.30	0.15	0.16	-0.05
59 Austria	0.30	0.25	0.24	0.19	0.16	0.13	0.15	-0.14
60 Democratic Republic of	0.12	0.07	0.04	0.08	0.15	0.15	0.15	0.03
61 Chile	0.44	0.41	0.30	0.27	0.17	0.16	0.15	-0.29
62 Benin	0.01	0.02	0.01	0.03	0.08	0.13	0.13	0.12
63 Mali	0.01	0.01	0.01	0.01	0.01	0.13	0.13	0.12
64 Suriname	0.04	0.03	0.06	0.07	0.08	0.15	0.12	0.08
65 Estonia	0.04	0.04	0.09	0.15	0.13	0.15	0.12	0.09
66 Bulgaria	0.25	0.07	0.05	0.14	0.12	0.16	0.11	-0.13
67 Republic of Korea	1.01	0.39	0.50	0.17	0.12	0.12	0.11	-0.90
68 Slovenia	0.17	0.17	0.14	0.14	0.14	0.10	0.11	-0.06
69 Sweden	0.22	0.21	0.21	0.16	0.12	0.10	0.10	-0.12
70 Democratic People's Re	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.00
71 Rwanda	0.03	0.04	0.06	0.06	0.09	0.09	0.09	0.06
72 Switzerland	0.20	0.14	0.20	0.09	0.06	0.08	0.08	-0.12
73 Denmark	0.41	0.25	0.04	0.02	0.21	0.07	0.07	-0.34
74 Fiji	0.05	0.06	0.04	0.09	0.07	0.07	0.07	0.01
75 Malawi	0.02	0.02	0.02	0.02	0.07	0.07	0.07	0.05
76 Jamaica	0.04	0.06	0.06	0.06	0.06	0.06	0.06	0.02
77 Liberia	0.09	0.09	0.01	0.05	0.08	0.06	0.06	-0.02
78 Netherlands	0.28	0.23	0.14	0.10	0.08	0.06	0.06	-0.22
79 Georgia	0.04	0.04	0.04	0.22	0.04	0.05	0.06	0.02
80 Central African Republi	0.06	0.07	0.10	0.07	0.05	0.07	0.05	-0.01
Top 41-80	9.14	7.28	7.53	7.52	7.49	8.13	7.37	-1.77
Top 1-80	123.28	120.58	103.53	109.76	104.72	129.04	131.13	7.85
All 154	126.07	122.82	105.50	111.35	106.23	130.30	132.37	6.30

Table 2.3.1 Saw wood production

	Saw wood	1990	1995	2000	2005	2010	2015	2016	Change
	Countries	Mm3	Mm3	Mm3	Mm3	Mm3	Mm3	Mm3	Mm3
1	United States of A	86.14	84.14	91.08	97.02	60.01	76.36	78.17	-7.98
2	China	23.58	25.27	6.68	17.96	37.23	74.36	77.21	53.63
3	Canada	39.74	45.44	50.46	60.19	38.67	47.11	49.72	9.98
4	Russian Federatio	26.50	26.50	20.00	23.91	28.87	34.50	36.79	10.29
5	Germany	14.72	14.11	16.34	21.93	22.06	21.49	22.20	7.47
6	Sweden	12.02	14.94	16.18	17.60	16.76	18.17	18.36	6.34
7	Brazil	13.73	18.10	21.30	23.56	17.45	14.80	14.60	0.87
8	Finland	7.50	9.94	13.42	12.27	9.47	10.64	11.42	3.92
9	Austria	7.51	7.80	10.39	11.07	9.60	8.73	9.41	1.90
10	Japan	29.78	24.49	17.09	12.83	9.42	9.23	9.29	-20.49
11	Turkey	4.92	4.33	5.53	6.45	6.24	7.77	8.50	3.58
12	Chile	3.33	3.80	5.70	8.30	6.35	8.37	8.46	5.13
13	France	10.96	9.85	10.54	9.72	8.32	7.51	7.89	-3.07
14	India	17.46	17.46	7.90	14.79	6.89	6.89	6.89	-10.57
15	Romania	2.91	1.78	3.40	4.32	4.32	6.30	6.04	3.13
16	Viet Nam	0.90	1.61	2.95	3.23	5.80	6.00	6.00	5.10
17	Australia	3.15	3.69	4.09	4.69	5.08	5.08	5.10	1.95
18	Poland	4.13	3.84	4.26	3.36	4.22	4.84	4.94	0.82
19	New Zealand	2.20	2.95	3.91	4.27	4.08	4.03	4.24	2.04
20	Indonesia	9.15	6.64	6.50	4.33	4.17	4.17	4.17	-4.98
21	Czechia	3.90	3.49	4.11	4.00	4.74	4.15	4.06	0.16
22	Latvia	1.30	1.30	3.90	4.23	3.15	3.48	3.90	2.60
23	Thailand	1.19	0.43	0.22	2.87	2.85	2.85	3.70	2.51
24	United Kingdom	2.27	2.30	2.62	2.78	3.10	3.49	3.67	1.40
25	Malaysia	8.85	8.38	5.59	5.19	4.32	3.52	3.42	-5.43
26	Ukraine	2.92	2.92	2.13	2.42	1.74	2.70	3.05	0.13
27	Mexico	2.37	2.33	3.11	2.67	2.43	2.55	2.82	0.46
28	Belarus	1.49	1.55	1.81	2.74	2.57	2.88	2.75	1.26
29	Norway	2.41	2.21	2.28	2.33	2.12	2.44	2.53	0.12
30	Republic of Korea	3.90	3.44	4.54	4.37	2.15	2.42	2.29	-1.60
31	Spain	3.27	3.26	3.76	3.66	2.04	1.69	2.14	-1.13
32	South Africa	1.94	1.57	1.50	2.22	1.88	1.97	2.14	0.20
33	Nigeria	2.73	2.36	2.00	2.00	2.00	2.00	2.00	-0.73
34	Estonia	0.35	0.35	1.44	2.06	1.77	1.77	1.70	1.35
35	Belgium-Luxembc	1.19	1.15	1.15	1.29	1.38	1.80	1.70	0.51
36	Angola	0.14	0.63	0.69	1.08	0.77	1.64	1.64	1.51
37	Myanmar	0.33	0.35	0.55	1.59	1.61	1.61	1.61	1.28
38	Slovakia	0.65	0.65	1.27	2.62	2.58	1.60	1.58	0.93
39	Argentina	0.82	0.70	0.72	0.66	1.40	1.50	1.50	0.68
40	Italy	1.95	1.85	1.63	1.59	1.20	1.47	1.50	-0.45
	Top 1-40	364.29	367.89	362.71	414.15	350.80	423.89	439.12	74.84

Table 1.3.1 Continued

	Saw wood	1990	1995	2000	2005	2010	2015	2016	Change
	Countries	Mm3	Mm3	Mm3	Mm3	Mm3	Mm3	Mm3	Mm3
41	Croatia	0.58	0.58	0.64	0.62	0.68	1.49	1.43	0.86
42	Lithuania	0.94	0.94	1.30	1.45	1.27	1.25	1.41	0.47
43	Pakistan	1.45	1.27	1.09	1.29	1.38	1.38	1.38	-0.07
44	Switzerland	1.99	1.48	1.63	1.59	1.46	1.16	1.15	-0.83
45	Bosnia and Herzeğ	0.47	0.47	0.72	1.32	0.82	1.06	1.11	0.64
46	Portugal	2.09	1.73	1.43	1.01	1.04	1.13	1.09	-1.00
47	Cameroon	0.60	0.69	1.16	0.67	0.92	1.02	1.02	0.42
48	Ireland	0.39	0.68	0.89	1.02	0.77	0.91	0.99	0.60
49	Venezuela (Boliva	0.20	0.22	0.20	0.56	0.95	0.95	0.95	0.75
50	Bulgaria	1.11	0.25	0.31	0.57	0.55	0.94	0.83	-0.28
51	Lao People's Dem	0.37	0.56	0.20	0.13	0.35	0.75	0.75	0.38
52	Slovenia	0.51	0.51	0.44	0.53	0.76	0.73	0.73	0.22
53	Gabon	0.04	0.10	0.09	0.23	0.35	0.65	0.65	0.61
54	Nepal	0.57	0.62	0.63	0.63	0.63	0.63	0.63	0.06
55	Paraguay	0.23	0.40	0.55	0.55	0.55	0.55	0.55	0.32
56	Serbia and Monte	0.30	0.30	0.50	0.50	0.59	0.51	0.54	0.24
57	Ghana	0.53	0.61	0.48	0.53	0.51	0.53	0.53	0.01
58	Peru	0.50	0.63	0.65	0.74	0.63	0.58	0.53	0.03
59	Hungary	1.10	0.23	0.29	0.22	0.16	0.49	0.52	-0.58
60	Ecuador	1.98	1.70	0.72	0.76	0.52	0.51	0.51	-1.47
61	Bolivia (Plurinatio	0.10	0.16	0.24	0.41	0.47	0.47	0.47	0.36
62	Costa Rica	0.41	0.78	0.37	0.48	0.54	0.46	0.46	0.04
63	Uganda	0.03	0.20	0.26	0.13	0.12	0.44	0.44	0.41
64	Uruguay	0.23	0.27	0.20	0.27	0.35	0.49	0.43	0.21
65	Colombia	0.81	0.64	0.59	0.41	0.69	0.45	0.43	-0.39
66	Philippines	0.85	0.29	0.15	0.29	0.70	0.32	0.42	-0.42
67	Afghanistan	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.00
68	Bangladesh	0.08	0.07	0.07	0.39	0.39	0.39	0.39	0.31
69	Denmark	0.86	0.58	0.36	0.20	0.45	0.38	0.39	-0.47
70	Mozambique	0.03	0.04	0.03	0.04	0.20	0.40	0.39	0.36
71	Côte d'Ivoire	0.75	0.70	0.60	0.36	0.70	0.87	0.37	-0.38
72	Congo	0.05	0.06	0.09	0.22	0.18	0.37	0.36	0.31
73	Kenya	0.19	0.19	0.19	0.14	0.14	0.30	0.30	0.11
74	Democratic Peopl	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.00
75	Honduras	0.33	0.23	0.44	0.41	0.23	0.30	0.26	-0.07
76	Cambodia	0.07	0.14	0.02	0.07	0.10	0.45	0.25	0.18
77	Guatemala	0.04	0.36	0.34	0.35	0.13	0.25	0.25	0.21
78	Kazakhstan	0.24	0.24	0.24	0.14	0.11	0.23	0.23	-0.01
79	Montenegro	0.05	0.05	0.05	0.05	0.05	0.22	0.22	0.17
80	Papua New Guine	0.12	0.22	0.04	0.06	0.09	0.08	0.22	0.10
	Top 41-80	21.85	19.87	18.88	19.98	21.21	24.75	24.25	2.40
	Top 1- 80	386.14	387.76	381.59	434.13	372.01	448.64	463.37	77.23
	Top 1- 156	390.70	391.68	385.35	437.89	375.63	452.12	466.72	76.02