Food and Agriculture Organization of the United Nations

Global Forest Resources Assessment 2020

Report

Sri Lanka

Rome, 2020

FAO has been monitoring the world's forests at 5 to 10 year intervals since 1946. The Global Forest Resources Assessments (FRA) are now produced every five years in an attempt to provide a consistent approach to describing the world's forests and how they are changing. The FRA is a country-driven process and the assessments are based on reports prepared by officially nominated National Correspondents. If a report is not available, the FRA Secretariat prepares a desk study using earlier reports, existing information and/or remote sensing based analysis.

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Introduction

Report preparation and contact persons

The present report was prepared by the following person(s)

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Introductory text

Place an introductory text on the content of this report

1 Forest extent, characteristics and changes

1a Extent of forest and other wooded land

National Data

Data sources + type of data source eg NFI, etc

1992

References	Christopher Legg and Nicholas Jewell., 1995., A 1:50.000 scale Forest Map of Sri Lanka: The basis for National Geographic System. The Sri Lanka Forester,Special Issue _ Remote Sensing,1995,3-24
Methods used	Full-cover forest/vegetation maps
Additional comments	Landsat TM Satellite imagery and IRS 1 imagery were used for Visual interpretation. Reference year for the data1992

1996

References	GOSL. 2000. Forest Cover Mapping 2000. Forest Inventory Division. Forest Department. Sri Lanka
Methods used	Full-cover forest/vegetation maps
Additional comments	Landsat 7 Satellite imagery and aerial photos were used to prepare this map. Reference year for the data 1996

2010

References	Edirisinghe. E. A. P. N, Ariyadasa., K. P., Chandani.,R. P. D.S.2012, Forest Cover Assessment of Sri Lanka,The Sri Lanka Forester,Vol 34
Methods used	Full-cover forest/vegetation maps
Additional comments	IRS LISS III P6 images acquired during 2008-2009 Satellite imagery were screen digitized to prepare forest cover map and then field verified with the help of Forest department Field Staff. Reference year for the data19922010

Extent of rubber was taken from the central bank report .Central Bank of Sri Lanka 2018, Annual Report 2017, Volume 1, Colombo, Sri Lanka

National classification and definitions

National class	Definition
Lowland rain forests	Dense forests located in area below 1000 m elevation with rainfall greater than 2500 mm.
Moist monsoon forests	Dense forests located in areas below 1000 m elevation with rainfall between 1900 mm and 2500 mm.
Dry monsoon forests	Dense forests located in areas below 1000 m elevation with rainfall below 1900 mm.
Montane forests	Dense forests located in areas above 1500 m elevation
Sub montane forests	Dense forests located in areas where the elevation between 1000 m and 1500 m.
Forest plantation	Man made forests such as Pines,Teak,Eucalyptus,Exclude naturalized forests plantation with native plant species.
Mangroves	Mangrove forests located in coastal area.
Riverine forests	Rich vegetation associated with river banks in dry and inter mediate zone.
Open forests	Land spanning more than 5 hectares the tree canopy cover is between to 40 percent.It excludes all land use classes which are mentioned under dense forest category.
Other wooded land	

Original data

Classifications and definitions	1992
Class	Area (1000 ha)
Lowland rain forests	141.55
Moist monsoon forests	243.87
Dry monsoon forests	1094.29
Montane forests	3.11
Sub montane forests	68.84
Forest plantation	72.34
Mangroves	8.69
Riverine forests	22.41
Open forests	463.84
Other wooded land	52
Total	2170.94
Classifications and definitions	1996
Class	Area (1000 ha)
Lowland rain forests	124.34
Moist monsoon forests	221.98
Dry monsoon forests	1027.54
Montane forests	3.09
Sub montane forests	65.79
Forest Plantation	79.94
Mangroves	9.53
Riverine forests	18.35
Open forests	471.58
other wooded land	52
Total	2074.14
Classifications and definitions	2010
Class	Area (1000 ha)
Lowland rain forests	123.3
Moist monsoon forests	117.89
Dry monsoon forests	1123.3
Montane forests	44.76

Sub montane forests	28.51
Forest Plantation	78.49
Mangroves	15.67
Riverine forests	0.24
Open forests	445.46
Other wooded land	52
Total	2029.62

Rubber wood plantations were added to the total forest area to comply with the FRA definition of forest, but rubber wood plantation are not categorized as forest in Sri Lanka.

Area (000 ha)	1990	2000	2010	2015
Rubber wood plantations	183	157	126	167

Analysis and processing of national data

Estimation and forecasting

Forest cover maps of 1992, 1996 and 2010 which were produced interpreting medium resolution satellite imageries were used for area estimation to report for FRA report. Although the latest forest cover has been produced in 2015 using high resolution images (Google imageries), it has not yet been field verified. Hence, the annual change of -24,195 ha which is the annual change of forest cover during the 1992 to 1996 period was used to estimate forest cover of 1990. Similarly, annual change of -3,160.3 ha which is the annual change of forest cover during the 1996 to 2010 period was used to estimate the forest cover of 2015 and onwards.

Rubber plantations were then added to the estimated forest area as explained above.

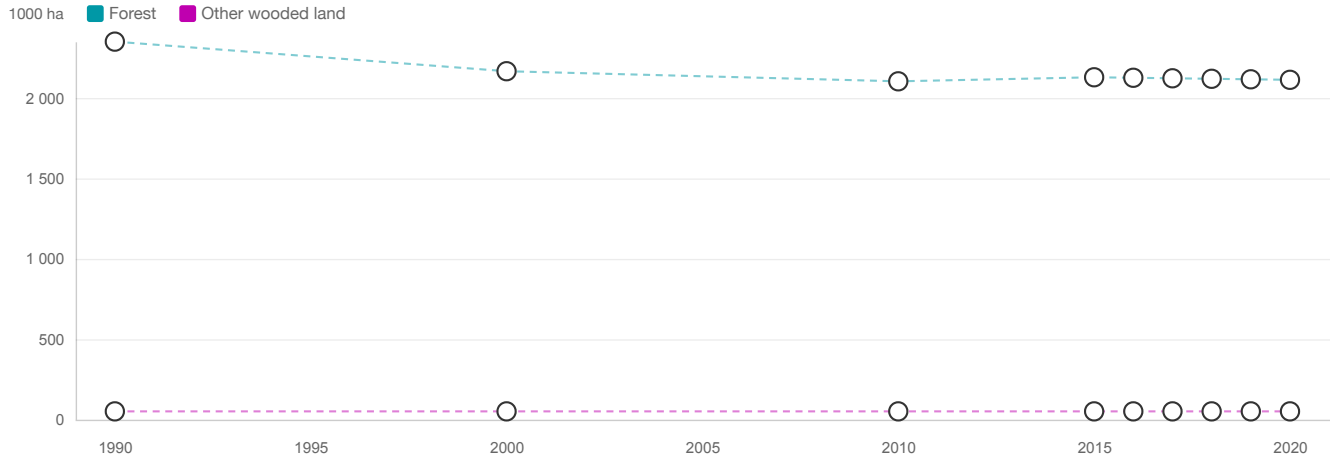
	1990	**1992**	**1996**	**2000**	**2010**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**
Forest	2167.33	2118.94	2022.14	2009.42	1977.62	1961.82	1958.66	1955.5	1952.34	1949.18	1946.02
Rubber	183			157	126	167	167	167	167	167	167
Tot forest	**2350.33**	**2118.94**	**2022.14**	**2166.42**	**2103.62**	**2128.82**	**2125.66**	**2122.5**	**2119.34**	**2116.18**	**2113.02**

Reclassification into FRA 2020 categories

	%		
Class	Forest	Other wooded land	Other land
Lowland rain forests	100	0	0
Moist monsoon forests	100	0	0
Dry monsoon forests	100	0	0
Montane forests	100	0	0
Sub montane forests	100	0	0
Forest Plantation	100	0	0
Mangroves	100	0	0
Riverine forests	100	0	0
Open forests	100	0	0

Other wooded land	0	100	0

Rubber wood plantations were added to the total forest area to comply with the FRA definition of forest, but rubber wood plantation are not part of the official forest area in Sri Lanka.


1000 ha
Forest
Other wooded land
2 000
1 500
1 000
500
0
1990
1995
2000
2005
2010
2015
2020

FRA categories	Area (1000 ha)								
	1990	2000	2010	2015	2016	2017	2018	2019	2020
Forest (a)	2 350.33	2 166.42	2 103.62	2 128.82	2 125.66	2 122.50	2 119.34	2 116.18	2 113.02
Other wooded land (a)	52.00	52.00	52.00	52.00	52.00	52.00	52.00	52.00	52.00
Other land (c-a-b)	**3 868.67**	**4 052.58**	**4 115.38**	**4 090.18**	**4 093.34**	**4 096.50**	**4 099.66**	**4 102.82**	**4 105.98**
Total land area (c)	**6 271.00**	**6 271.00**	**6 271.00**	**6 271.00**	**6 271.00**	**6 271.00**	**6 271.00**	**6 271.00**	**6 271.00**

The FAOSTAT land area figure for the year 2015 is used for all reference years

Climatic domain	% of forest area 2015	Override value
Boreal	**0.00**	
Temperate	**0.00**	
Sub-tropical	**0.00**	
Tropical	**100.00**	

Comments

Forest cover maps of 1992, 1996 and 2010 which were produced interpreting medium resolution satellite imageries were used for area estimation to report for FRA report. Although the latest forest cover has been produced in 2015 using high resolution images (Google imageries), it has not yet been field verified. Hence, the annual change of -24,195 ha which is the annual change of forest cover (excluding rubber) during the 1992 to 1996 period was used to estimate forest cover of 1990. Similarly, annual change of -3,160.3 ha which is the annual change of forest cover (excluding rubber) during the 1996 to 2010 period was used to estimate the forest cover of 2015 and onwards.

Areas of rubber wood plantations were added to the above estimated forest areas. The increase in rubber plantations is causing a slight increase of the forest area between 2010 and 2015. Forest area excluding rubber wood plantations shows a decreasing trend throught out the reporting period.

Forest area for 1990, 2000 and 2015 slightly differs from what previously reported to FRA 2015 because of different estimation methodology.

1b Forest characteristics

National Data

Data sources + type of data source eg NFI, etc

National forest cover estimate reports as mentionrd in the table 1a, Plantation database of the Forest Department

National classification and definitions

National classification and the definitions are provided in the table 1 a

Original data

Data from the Forest cover maps

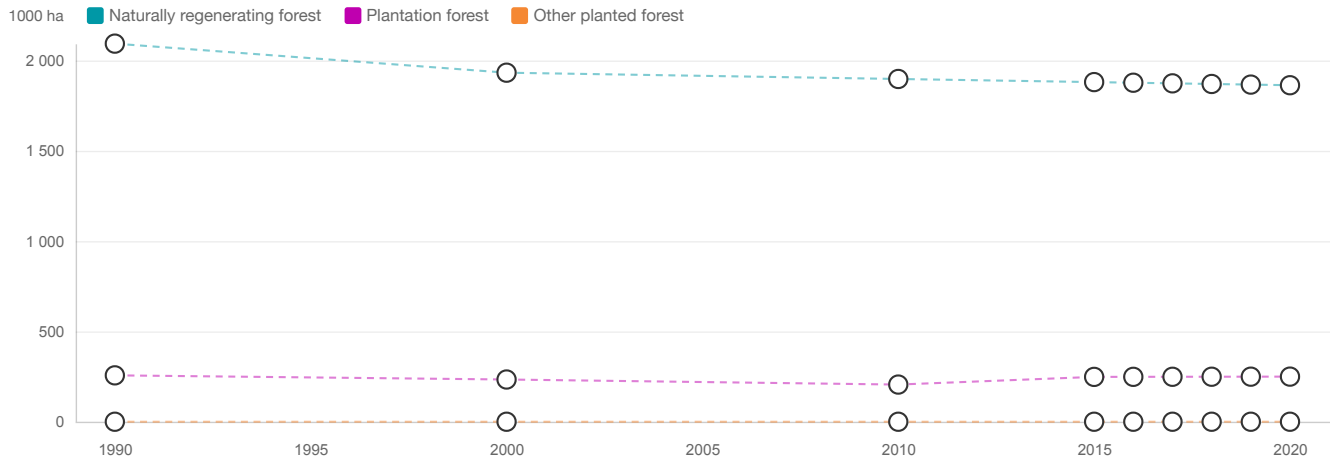
Analysis and processing of national data

Estimation and forecasting

Linear interpolation and extrapolation was used to estimate past and future forest cover estimates

Reclassification into FRA 2020 categories

Forest categories otherthan forest plantations are considered as naturally regenerating forests. Shrubs category was reclassified as other wooded lands.


1000 ha
Naturally regenerating forest
Plantation forest
Other planted forest
2 000
1 500
1 000
500
0
1990
1995
2000
2005
2010
2015
2020

FRA categories	Forest area (1000 ha)								
	1990	2000	2010	2015	2016	2017	2018	2019	2020
Naturally regenerating forest (a)	2 093.50	1 932.59	1 897.80	1 880.50	1 877.04	1 873.58	1 870.13	1 866.67	1 863.21
Planted forest (b)	**256.83**	**233.83**	**205.82**	**248.32**	**248.62**	**248.92**	**249.21**	**249.51**	**249.81**
Plantation forest	256.83	233.83	205.82	248.32	248.62	248.92	249.21	249.51	249.81
…of which introduced species									
Other planted forest	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total (a+b)	**2 350.33**	**2 166.42**	**2 103.62**	**2 128.82**	**2 125.66**	**2 122.50**	**2 119.34**	**2 116.18**	**2 113.02**
Total forest area	**2 350.33**	**2 166.42**	**2 103.62**	**2 128.82**	**2 125.66**	**2 122.50**	**2 119.34**	**2 116.18**	**2 113.02**

Comments

All the forests other than Forest plantations are considered as Naturally regenerated forests in Sri Lanka. FAO definition of Plantation forests include both forest plantations established for obtaining forest products and the rubber plantations established for latex productions. However, It should be noted that Rubber plantations are excluded in the definition of forest cover of Sri Lanka.

1c Primary forest and special forest categories

National Data

Data sources + type of data source eg NFI, etc

Forest Cover estimates of the Forest Department was used to estimate extent of mangrove vegetation , Extent of rubber was taken from the central bank report .Central Bank of Sri Lanka 2018, Annual Report 2017, Volume 1, Colombo, Sri Lanka

National classification and definitions

Mangrove is the vegitation exist in the intertidal zone.

Original data

Forest Department Records

Analysis and processing of national data

Estimation and forecasting

Mangroves: 1990-2015 we used linear extrapolation. Although the mangrove area is increasing annualy there are no space for further enhancement of the mangrove extent. So repeat last value was for 2020.

Rubber Plantations: Repeat last value was used for 2020.

Reclassification into FRA 2020 categories

Mangrove is classified as Forests.

Rubber is not categorized as Forests

FRA categories	Area (1000 ha)				
	1990	2000	2010	2015	2020
Primary forest	257.00	197.00	167.00	167.00	167.00
Temporarily unstocked and/or recently regenerated	0.00	0.00	0.00	0.00	0.00
Bamboos	0.00	0.00	0.00	0.00	0.00
Mangroves	9.10	11.21	15.69	20.15	20.15
Rubber wood	183.00	157.00	126.00	137.00	137.00

Comments

As mentioned in the table 1a Field verification of latest forest cover map prepared in 2015 has not been completed. However, field verification for mangrove is completed. therefore, 2015 data has been included into the table 1e.

1d Annual forest expansion, deforestation and net change

National Data

Data sources + type of data source eg NFI, etc

Administration Reports of the Forest Department

National classification and definitions

Same as FAO

Original data

Forest Department Records and Forest cover maps

Analysis and processing of national data

Estimation and forecasting

Based on data comparison

Reclassification into FRA 2020 categories

Reclsiification was done as mentioned in previous sections

FRA categories	Area (1000 ha/year)			
	1990-2000	2000-2010	2010-2015	2015-2020
Forest expansion (a)				
…of which afforestation				
…of which natural expansion				
Deforestation (b)				
Forest area net change (a-b)	**-18.39**	**-6.28**	**5.04**	**-3.16**

Comments

8,700 ha of scrublands have been brought under restoration through assisted natural regeneration during the period of 2010 -2015. Another 600 ha of scrublands have been brought under restoration during 2015 - 2020. However, it cannot be included into the table as forest cover maps have not been prepared for those time periods. Even if forest cover maps were prepared, these lands might not be interpreted as forests since the vegetation has not been grown enough to identify as forests.

1e Annual reforestation

National Data

Data sources + type of data source eg NFI, etc

Administration Reports of the Forest Department from 1990 to 2017, Plantation data base of the Forest Inventory & GIS Branch and the records of the Silviculture and Forest Mangement Branch of the Forest Department

National classification and definitions

Establishment of forests on a land where forest was present within 50 years. Establishment of rubber is not included

Original data

Plantation establishment and maintenance records

Analysis and processing of national data

Estimation and forecasting

Linear estimation was done to predict upto 2020

Reclassification into FRA 2020 categories

No

FRA categories	Area (1000 ha/year)			
	1990-2000	2000-2010	2010-2015	2015-2020
Reforestation	0.88	0.79	0.84	0.83

Comments

1f Other land with tree cover

National Data

Data sources + type of data source eg NFI, etc

Central Bank of Sri Lanka 2018, Annual Report 2017, Volume 1, Colombo, Sri Lanka, CEA 2018, A Study to Identify Environmental and
Social Issues of Oil Palm Cultivation in Sri Lanka, Central Environment authority, Colombo, Sri Lanka. Jewell, N. (1995). The use of Landsat TM data for estimating the area of homegarden . The Sri Lanka Forester (the Ceylon Forester) Special Issue in 1995: 79-86.

National classification and definitions

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Original data

-

Analysis and processing of national data

Estimation and forecasting

-

Reclassification into FRA 2020 categories

There is a high demand for lands to be used as settlements. Therefore we cannot extect a increase in Coconut cultivation whereas there is a social pressure for establising oil palm. that repeat last value was used for palm.

Agroforestry extent was calculated as linnear extrapolation methord using 2000 and 2010 data.

FRA categories	Area (1000 ha)				
	1990	2000	2010	2015	2020
Palms (a)			401.60	464.00	464.00
Tree orchards (b)			7.89	8.90	8.07
Agroforestry (c)		818.00	971.00	1 047.50	1 124.00
Trees in urban settings (d)					
Other (specify in comments) (e)					
Total (a+b+c+d+e)	–	**818.00**	**1 380.49**	**1 520.40**	**1 596.07**
Other land area	**3 868.67**	**4 052.58**	**4 115.38**	**4 090.18**	**4 105.98**

Comments

Extents of Coconut and Oil palm were addedtogether to get the total Palm extent.

Only the extent of homegardens (Homesteads) were cosidered as agroforestry.

2 Forest growing stock, biomass and carbon

2a Growing stock

National Data

Data sources + type of data source eg NFI, etc

1984 and 1993 (NFI, 1986) and (GOSL, 1995)

National classification and definitions

Wood volume of all the trees above 10 cm diameter at breast height

Original data

Forest Type	**1992 (Legg and Jwell, 1995) (Area in ha)**	**1996 (GOSL, 2000) (Area in ha) 2008 (GOSL 2010) (Area in ha)**	**2008 (GOSL,2010) (Area in ha)**	**1984 and 1993 (NFI, 1986) and (GOSL, 1995) (cubic meter/ha)**
Montane Forest	3,108	3,099	44,758	9
Sub-montane Forest	68,838	65,792	28,512	9
Lowland Rain Forest	141,549	124,340	123,302	126
Moist Monsoon Forest	243,877	221977	117,885	29
Dry Monsoon Forest	1,094,287	1,027,544	1,121,392	15
Riverine Dry Forest	22,411	18,352	2,425	15
Mangroves	8,687	9,530	15,669	10
Forest Plantations Excluding Rubber	72,340	79,940	78,448	40
Sparse Forest	463,842	471,583	445,485	5
Other wooded Lands	0	0	52,000	3

Analysis and processing of national data

Estimation and forecasting

Weighted avaearge of all the forest caregories were caculated to get the growing stock m2/ha for naturally regenerating forests.

Reclassification into FRA 2020 categories

Forests catogories otherthan forest plantations were considerd as naturally regenerating forests

FRA categories	Growing stock m³/ha (over bark)								
	1990	2000	2010	2015	2016	2017	2018	2019	2020
Naturally regenerating forest	19.99	19.99	19.99	19.99	19.99	19.99	19.99	19.99	19.99
Planted forest	40.00	40.00	40.00	40.00	40.00	40.00	40.00	40.00	40.00
…of which plantation forest	40.00	40.00	40.00	40.00	40.00	40.00	40.00	40.00	40.00
…of which other planted forest	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Forest	22.18	22.15	21.95	22.32	22.33	22.34	22.34	22.35	22.36
Other wooded land	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00

FRA categories	Total growing stock (million m³ over bark)								
	1990	2000	2010	2015	2016	2017	2018	2019	2020
Naturally regenerating forest	41.85	38.63	37.94	37.59	37.52	37.45	37.38	37.31	37.25
Planted forest	10.27	9.35	8.23	9.93	9.94	9.96	9.97	9.98	9.99
…of which plantation forest	10.27	9.35	8.23	9.93	9.94	9.96	9.97	9.98	9.99
…of which other planted forest	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Forest	52.12	47.98	46.17	47.52	47.46	47.41	47.35	47.29	47.24
Other wooded land	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16

Comments

2b Growing stock composition

National Data

Data sources + type of data source eg NFI, etc

No data on growing stock by main tree species available.

National classification and definitions

-

Original data

-

Analysis and processing of national data

Estimation and forecasting

-

Reclassification into FRA 2020 categories

-

FRA categories	Scientific name	Common name	Growing stock in forest (million m³ over bark)				
			1990	2000	2010	2015	2020
Native tree species							
#1 Ranked in terms of volume	Drypetes sepiaria	Weera					
#2 Ranked in terms of volume	Vitex alticima	Milla					
#3 Ranked in terms of volume	Chloroxyclons witinia	Burutha					
#4 Ranked in terms of volume	Berria cordifolia	Halmilla					
#5 Ranked in terms of volume	Dimocarpus longan	Mora					
#6 Ranked in terms of volume	Bauhinia racimosa	Maila					
#7 Ranked in terms of volume	Prerospermum canscens	Welan					
#8 Ranked in terms of volume	Schleichera oleosa	Kon					
#9 Ranked in terms of volume	Syzybium cumini	Madan					
#10 Ranked in terms of volume	Myristica dactiloydes	Malaboda					
Remaining native tree species							
Total volume of native tree species			–	–	–	–	–
Introduced tree species							
#1 Ranked in terms of volume	Tectona grandis	Teak					
#2 Ranked in terms of volume	Eucalyptus grandis	Eucalyptus					
#3 Ranked in terms of volume	Sweetinia macrophyila	Mahogany					

FRA categories	Scientific name	Common name	Growing stock in forest (million m³ over bark)				
			1990	2000	2010	2015	2020
Native tree species							
#4 Ranked in terms of volume	Kahaya senagalensis	Kaya					
#5 Ranked in terms of volume	Accasia	Accasia					
Remaining introduced tree species							
Total volume of introduced tree species			–	–	–	–	–
Total growing stock			–	–	–	–	–

Comments

2c Biomass stock

National Data

Data sources + type of data source eg NFI, etc

Forest cover maps prepared by Forest department

National classification and definitions

-

Original data

Forest cover estimates and plantation data

Analysis and processing of national data

Estimation and forecasting

Using biomass calculator

Insert the percentages of Growing stock by IPCC forest type for each of the FRA forest categories									
IPCC forest types	**FRA forest categories**								
	Naturally regenerating forest	**Plantation forest**	**Other planted forest**						
	% of Growing stock								
Broadleaved humid	13%	29%							
Broadleaved dry	87%	50%							
Coniferous		21%							
	100%	*100%*	*0%*	*Must add up to 100%*					
Insert Carbon fraction used by country (IPCC default = 0.47)									
Carbon Fraction	47%								
Biomass conversion and expansion factors (BCEF)									
Naturally regenerating forest	**1990**	**2000**	**2010**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**
Broadleaved humid	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Broadleaved dry	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00

Coniferous	1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.75
Plantation forest									
Broadleaved humid	2.05	2.05	2.05	2.05	2.05	2.05	2.05	2.05	2.05
Broadleaved dry	2.05	2.05	2.05	2.05	2.05	2.05	2.05	2.05	2.05
Coniferous	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Other planted forest									
Broadleaved humid	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Broadleaved dry	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Coniferous	1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.75
Weighted BCEF									
Naturally regenerating forest	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Plantation forest	1.83	1.83	1.83	1.83	1.83	1.83	1.83	1.83	1.83
Other planted forest									
Root-shoot ratios									
Naturally regenerating forest	**1990**	**2000**	**2010**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**
Broadleaved humid	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20
Broadleaved dry	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28
Coniferous	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29
Plantation forest									
Broadleaved humid	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20
Broadleaved dry	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28
Coniferous	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29
Other planted forest									
Broadleaved humid	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20
Broadleaved dry	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56
Coniferous	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40
Weighted RS ratio									
Naturally regenerating forest	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27
Plantation forest	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26

Other planted forest									
Above-ground biomass (t/ha)									
	1990	**2000**	**2010**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**
Naturally regenerating forest	79.96	79.96	79.96	79.96	79.96	79.96	79.96	79.96	79.96
Plantation forest	73.18	73.18	73.18	73.18	73.18	73.18	73.18	73.18	73.18
Other planted forest	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	**79.22**	**79.23**	**79.30**	**79.17**	**79.17**	**79.16**	**79.16**	**79.16**	**79.16**
Below-ground biomass (t/ha)									
	1990	**2000**	**2010**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**
Naturally regenerating forest	21.56	21.56	21.56	21.56	21.56	21.56	21.56	21.56	21.56
Plantation forest	18.95	18.95	18.95	18.95	18.95	18.95	18.95	18.95	18.95
Other planted forest	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	**21.27**	**21.28**	**21.30**	**21.25**	**21.25**	**21.25**	**21.25**	**21.25**	**21.25**

Reclassification into FRA 2020 categories

Forest type	**Forest category**		**Forest plantation species**	**Plantation Category**	
Lowland rain forests	Broad leaved humid	13%	*Dipterocarpus zeylanicum*	Broad leaved humid	29%
Moist monsoon forests	Broad leaved humid		*Khaya senegalensis*		
Montane forests	Broad leaved humid		*Eucalyptus species*		
Sub montane forests	Broad leaved humid		*Tectona grandis*	Broad leaved dry	50%
Dry monsoon forests	Broad leaved dry	87%	*Swietenia macrophylla*		
Mangroves	Broad leaved dry		*Accasia bspecies*		
Riverine forests	Broad leaved dry		*Pinus species*	Conifers	21%
Open forests	Broad leaved dry				

FRA categories	Forest biomass (tonnes/ha)								
	1990	2000	2010	2015	2016	2017	2018	2019	2020
Above-ground biomass	79.22	79.23	79.30	79.17	79.17	79.16	79.16	79.16	79.16
Below-ground biomass	21.27	21.28	21.30	21.25	21.25	21.25	21.25	21.25	21.25
Dead wood									

Comments

2d Carbon stock

National Data

Data sources + type of data source eg NFI, etc

Forest cover maps of 1992, 1999 and 2010

Kuruppuarachchi., K.A.J.M., Senaviratne, G. and Madurapperuma, B.D., 2016, Crbon Sequreation in tropical forest stand: Its controal by plant , soil,and climatic factors.,Open jounal of forestry 6:57- 71

National classification and definitions

-

Original data

Extent of forest cover from forest cover maps

Analysis and processing of national data

Estimation and forecasting

Carbon in dead wood and soil were not estimated

Reclassification into FRA 2020 categories

Crbon pool	National range (t ha $^{-1}$)
liter	
Topical moist forest	7.74
Tropical dry forest	7.08

FRA categories	Forest carbon (tonnes/ha)								
	1990	2000	2010	2015	2016	2017	2018	2019	2020
Carbon in above-ground biomass	37.23	37.24	37.27	37.21	37.21	37.21	37.21	37.21	37.20
Carbon in below-ground biomass	10.00	10.00	10.01	9.99	9.99	9.99	9.99	9.99	9.99
Carbon in dead wood									
Carbon in litter	15.00	14.35	14.06	13.91	13.88	13.85	13.82	13.80	13.76
Soil carbon									

Soil depth (cm) used for soil carbon estimates	

Comments

3 Forest designation and management

3a Designated management objective

National Data

Data sources + type of data source eg NFI, etc

Forest cover map

National classification and definitions

-

Original data

-

Analysis and processing of national data

Estimation and forecasting

Forest plantations=100% production

Remaining forest= multiple use

Reclassification into FRA 2020 categories

-

Primary designated management objective

FRA 2020 categories	Forest area (1000 ha)				
	1990	2000	2010	2015	2020
Production (a)	73.83	76.83	79.82	81.32	82.81
Protection of soil and water (b)	0.00	0.00	0.00	0.00	0.00
Conservation of biodiversity (c)	0.00	0.00	0.00	0.00	0.00
Social Services (d)	0.00	0.00	0.00	0.00	0.00
Multiple use (e)	2 072.77	1 941.26	1 897.80	1 876.07	1 854.34
Other (specify in comments) (f)	0.00	0.00	0.00	0.00	0.00
None/unknown (g)	**203.73**	**148.33**	**126.00**	**171.43**	**175.87**
Total forest area	**2 350.33**	**2 166.42**	**2 103.62**	**2 128.82**	**2 113.02**

Total area with designated management objective

FRA 2020 categories	Forest area (1000 ha)				
	1990	2000	2010	2015	2020
Production	73.83	76.83	79.82	81.32	82.81
Protection of soil and water	223.00	198.00	167.00	177.00	177.00
Conservation of biodiversity	553.50	556.30	594.40	623.50	663.50
Social Services	1 296.27	1 186.96	1 136.40	1 075.57	1 013.84
Other (specify in comments)					

Comments

3b Forest area within protected areas and forest area with long-term management plans

National Data

Data sources + type of data source eg NFI, etc

Forest cover maps, Gazzette notifications, Conservation forest and forest reserve map layers

National classification and definitions

-

Original data

-

Analysis and processing of national data

Estimation and forecasting

-

Reclassification into FRA 2020 categories

Declared forests under forest ordinance, fauna and flora protection act and other relevent act and ordinances were considered as protected areas.

FRA categories	Area (1000 ha)								
	1990	2000	2010	2015	2016	2017	2018	2019	2020
Forest area within protected areas	548.50	549.26	637.26	1 241.26	1 242.05	1 245.21	1 248.37	1 250.37	1 258.37
Forest area with long-term forest management plan									
…of which in protected areas									

Comments

Forest department is planning to declare 2,000 ha and 8,000 ha of forest lands under the Forest ordinance in 2019 and 2020 receptively. Surveying has already been started to map forest areas

4 Forest ownership and management rights

4a Forest ownership

National Data

Data sources + type of data source eg NFI, etc

Forest cover maps

National classification and definitions

-

Original data

-

Analysis and processing of national data

Estimation and forecasting

-

Reclassification into FRA 2020 categories

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FRA categories	Forest area (1000 ha)			
	1990	2000	2010	2015
Private ownership (a)	183.00	157.00	116.00	181.57
…of which owned by individuals				
…of which owned by private business entities and institutions				
…of which owned by local, tribal and indigenous communities				
Public ownership (b)	1 963.60	1 861.09	1 861.62	1 775.82
Unknown/other (specify in comments) (c)	**203.73**	**148.33**	**126.00**	**171.43**
Total forest area	**2 350.33**	**2 166.42**	**2 103.62**	**2 128.82**

Comments

Extent of private forests was extracted from the Forest cover map prepared in 2015 (Polygons reperesenting private forests were field varified)

4b Holder of management rights of public forests

National Data

Data sources + type of data source eg NFI, etc

-

National classification and definitions

-

Original data

-

Analysis and processing of national data

Estimation and forecasting

-

Reclassification into FRA 2020 categories

-

FRA categories	Forest area (1000 ha)			
	1990	2000	2010	2015
Public Administration (a)	1 963.60	1 861.09	1 861.62	1 775.82
Individuals (b)	0.00	0.00	0.00	0.00
Private business entities and institutions (c)	0.00	0.00	0.00	0.00
Local, tribal and indigenous communities (d)	0.00	0.00	0.00	0.00
Unknown/other (specify in comments) (e)	**0.00**	**0.00**	**0.00**	**0.00**
Total public ownership	**1 963.60**	**1 861.09**	**1 861.62**	**1 775.82**

Comments

All the public forests are maneged by the Forest Department and the Department of Wildlife Conservation at prasent.

5 Forest disturbances

5a Disturbances

National Data

Data sources + type of data source eg NFI, etc

-

National classification and definitions

-

Original data

-

Analysis and processing of national data

Estimation and forecasting

-

Reclassification into FRA 2020 categories

-

FRA categories	Area (1000 ha)																	
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Insects (a)																		
Diseases (b)																		
Severe weather events (c)																		
Other (specify in comments) (d)																		
Total (a+b+c+d)	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Total forest area	**2 166.42**	–	–	–	–	–	–	–	–	–	**2 103.62**	–	–	–	–	**2 128.82**	**2 125.66**	**2 122.50**

Comments

There are no severe insect pest attack on forest species in Sri Lanka. In addition to that damages from the severe weather events also hardly ever recorded.

5b Area affected by fire

National Data

Data sources + type of data source eg NFI, etc

Records of the Siviculture and Forest Management Branch of the Forest department

National classification and definitions

-

Original data

Fire incidebts and damage records and Records on Forest offences

Analysis and processing of national data

Estimation and forecasting

No specific trend observed.

Reclassification into FRA 2020 categories

No reclassification was needed

FRA categories	Area (1000 ha)																	
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Total land area affected by fire																		
…of which on forest				0.01	0.17	0.93	0.23	0.10	0.10	1.07	0.85	0.44	0.90					0.48

Comments

Data for 2013, 2014, 2015 and 2016 are not available

5c Degraded forest

Does your country monitor area of degraded forest		Yes
If "yes"	What is the national definition of "Degraded forest"?	Reduction of the original canopy cover of the forests is consider as Forest Degradation. However, if the canopy cover is reduce below the 10% threshold it is not considered as degradation. and it is considered as a deforestation.
	Describe the monitoring process and results	Canopy cover of the forests is monitor using satellite images, high resolution Google images together with filed verification.

Comments

6 Forest policy and legislation

6a Policies, Legislation and national platform for stakeholder participation in forest policy

National Data

Data sources + type of data source eg NFI, etc

Forestry sector master plan 1996, Forest ordinance, Fauna and flora protection act, World heritage forestry act, National wildernass act

National classification and definitions

-

Original data

-

Indicate the existence of	Boolean (Yes/No)	
	National	Sub-national
Policies supporting SFM	Yes	No
Legislations and regulations supporting SFM	Yes	No
Platform that promotes or allows for stakeholder participation in forest policy development	Yes	No
Traceability system(s) for wood products	No	No

Comments

6b Area of permanent forest estate

National Data

Data sources + type of data source eg NFI, etc

-

National classification and definitions

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Original data

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FRA 2020 categories	Forest area (1000 ha)					
	Applicable?	1990	2000	2010	2015	2020
Area of permanent forest estate	Yes			1 654.50	1 680.00	1 750.00

Comments

7 Employment, education and NWFP

7a Employment in forestry and logging

National Data

Data sources + type of data source eg NFI, etc

Administrative Reports ofForest department nad State Timber Coperation

National classification and definitions

-

Original data

	2015		
Empoly ment in forestry and logging	**No of placess**	**No of Empolys**	**Total empolyments**
Saw miles	298	4	1,192
Timber deport	494	2	988
Carpentry	644	2	1,288
Mobile saw miles	687	1	687
Furniture shop	597	2	1,194
Fire wood stole	170	2	340
Timber seasoning Deport	15	2	30
			5,719
Logging contractors	1155	2	2,310
Drivers (Timber transport vehicle)	81	1	81
Tractor operators	30	1	30
Chain saw operators	73	1	73
			2,494

FRA 2020 categories	Full-time equivalents (1000 FTE)											
	1990			2000			2010			2015		
	Total	Female	Male	Total	Female	Male	Total	Female	Male	Total	Female	Male
Employment in forestry and logging	2.48			4.83			4.70			8.21		
…of which silviculture and other forestry activities												
…of which logging										2.49		
…of which gathering of non wood forest products												
…of which support services to forestry										5.72		

Comments

7b Graduation of students in forest-related education

National Data

Data sources + type of data source eg NFI, etc

-

National classification and definitions

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Original data

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FRA 2020 categories	Number of graduated students											
	1990			2000			2010			2015		
	Total	Female	Male	Total	Female	Male	Total	Female	Male	Total	Female	Male
Doctoral degree	2.00			3.00			2.00			2.00		
Master's degree	20.00			20.00			20.00			20.00		
Bachelor's degree	30.00			30.00			50.00			70.00		
Technician certificate / diploma	80.00			80.00			80.00			80.00		
Total	132.00			133.00			152.00			172.00		

Comments

Only university that produces forestry graduates is University of Sri Jayawardanepura, Nugegoda , Sri Lanka whereas Sri Lanka Forestry Institute in the only Intitution that offers Diploma and Certificates courses in Forestry.

7c Non wood forest products removals and value 2015

National Data

Data sources + type of data source eg NFI, etc

-

National classification and definitions

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Original data

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	Name of NWFP product	Key species	Quantity	Unit	Value (1000 local currency)	NWFP category
#1	Resin	Pinus caribeae				4 Raw material for colorants and dyes
#2	Rattan	Calamus Spp				5 Raw material for utensils handicrafts construction
#3	Bamboo	Bambo Spp				5 Raw material for utensils handicrafts construction
#4	Wild fruits & edible plants					1 Food
#5	Medicinal plants					3 Raw material for medicine and aromatic products
#6	Treacle and juggery	carriota urenes				1 Food
#7	Bee Honey					11 Wild honey and bee wax
#8	Bush meet					12 Wild meat
#9	Ornamantal Plants					
#10						
All other plant products						
All other animal products						
Total					–	

Name of currency	

Comments

8 Sustainable Development Goal 15

8a Sustainable Development Goal 15

SDG Indicator 15.1.1 Forest area as proportion of total land area 2015

Indicator	Percent							
	2000	2010	2015	2016	2017	2018	2019	2020
Forest area as proportion of total land area 2015	34.55	33.55	33.95	33.90	33.85	33.80	33.75	33.70

Name of agency responsible	

SDG Indicator 15.2.1 Progress towards sustainable forest management

Sub-Indicator 1	Percent						
	2000-2010	2010-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020
Forest area annual net change rate	-0.29	0.24	-0.15	-0.15	-0.15	-0.15	-0.15

Name of agency responsible	

Sub-Indicator 2	Forest biomass (tonnes/ha)							
	2000	2010	2015	2016	2017	2018	2019	2020
Above-ground biomass stock in forest	79.23	79.30	79.17	79.17	79.16	79.16	79.16	79.16

Name of agency responsible	

Sub-Indicator 3	Percent (2015 forest area baseline)							
	2000	2010	2015	2016	2017	2018	2019	2020
Proportion of forest area located within legally established protected areas	25.80	29.93	58.31	58.34	58.49	58.64	58.74	59.11

Name of agency responsible	

Sub-Indicator 4	Percent (2015 forest area baseline)							
	2000	2010	2015	2016	2017	2018	2019	2020
Proportion of forest area under long-term forest management plan	–	–	–	–	–	–	–	–

Name of agency responsible	

Sub-Indicator 5	Forest area (1000 ha)							
	2000	2010	2015	2016	2017	2018	2019	2020
Forest area under independently verified forest management certification schemes	17.51	23.17	15.18	14.60	17.52	17.03	–	–