



Food and Agriculture
Organization of the
United Nations

Global Forest Resources Assessment 2020

Report

Ethiopia

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

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Introductory text

Ethiopia is located in the horn of Africa covers about 1.01 million square km area. According to the National forest inventory report (2018) the forest cover is estimated 15.7%. It is a country of about 100+ million populations over 80% of its population resides in rural area depending on economic activities of agriculture and natural resources. Agriculture (mixed crops and livestock) and forest based activities is the main livelihood portfolio. Ethiopia has diverse vegetation resources that range from lowland scrubs to tropical rainforest. The forest resources comprised both natural and planted forest. The natural forests are also different types: moist and dry tropical Afromontane forests, woodlands and shrub lands. Planted forests comprised industrial plantation and small scale woodlots.

The there is significant deforestation and forest degradation in Ethiopia. The main drivers include small and large-scale agricultural land conversion, increased wood extraction for fuel and construction, and pressure caused by increased livestock grazing (REED+ strategy, 2005). The indirect threats comprise gaps in the application of forest policy and regulations; tenure/unclear forest user rights; lack of private investment in forestry development; population growth; inadequate land use planning and participatory forest management (PFM) related implementation gaps. As a result, the forestry sector is the second largest contributor of GHG emissions in the country after agriculture (CRGE, 2011). Recent study and assessment of the forest resources indicated that the current forestry contribution to national GDP has grown from 8% to 12% which draws the attention of policy makers to give a due concern to the development of the forestry sector.

The implementation of feasible policy and strategy that would really contribute towards the achievements targeted economic contribution in realization of green economic development. The revised proclamation of the 2018 ensures sustainable development, conservation and utilization of forest resources in small holders, community, association and state owned forests. However, the government of Ethiopia is making utmost effort to reverse deforestation on the one hand while rehabilitating the degraded forest land on the other. Among the measures taken the most prominent include: creation of new forest through afforestation and reforestation and conservation of the existing natural forest through participatory forest management approach. The REED+ and forest sector development programs are working on both in afforestation and reforestation and conservation of natural forest. In order to counteract and overcome these greater human challenges, the nation is implementing restoration of degraded land under the international framework of the United Nations convention for combating desertification. The nation also actively participating in African 100 initiative to restore 15 million degraded lands with additional restoration commitment to restore 7 million degraded forest and wood land which collectively targets on the rehabilitation of Of 22 million degraded land by 2030. These all changes are improving and expected boost the forest development sector outcome in Ethiopia.

1 Forest extent, characteristics and changes

1a Extent of forest and other wooded land

National data

Data sources

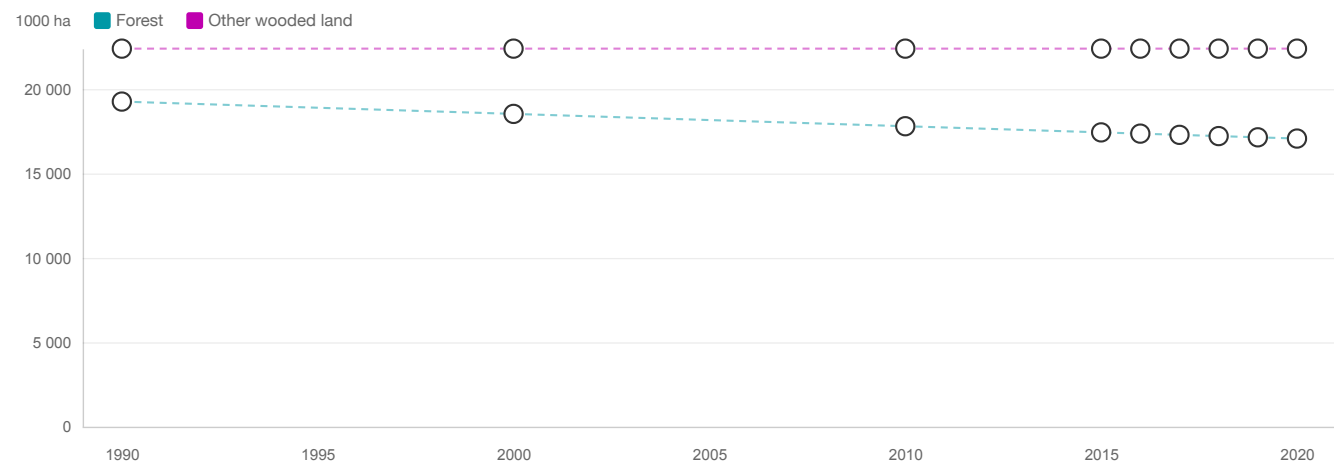
2013	References	Land use / land cover map 2013, Ministry of Environment, Forestry and Climate Change (MEFCC) Ethiopia's Forest Reference Level Submission to the UNFCCC, March 2017
	Methods used	Full-cover forest/vegetation maps
	Additional comments	

Classifications and definitions

2013	National class	Definition
	Forest	Land spanning more than 0.5 ha covered by trees (including bamboo) (with a minimum width of 20m or not more than two-thirds of its length) attaining a height of more than 2m and a canopy cover of more than 20% or trees with the potential to reach these thresholds in situ in due course. (New definition adopted February 2015)
	Shrubland	Land with shrubs/bushes canopy cover ≤ 10% or combined cover of bush, and shrubs ≤10%. Shrubs and bushes are woody perennial plants, 2 m in height at maturity in situ.

Original data and reclassification

2013	Classifications and definitions		FRA classes		
	Class	Area (1000 ha)	Forest	Other wooded land	Other land
	Forest	17 579.50	100.00 %	0.00 %	0.00 %
	Shrubland	22 394.30	0.00 %	100.00 %	0.00 %
	Total	39 973.80	17 579.50	22 394.30	0.00



FRA categories	Area (1000 ha)								
	1990	2000	2010	2015	2016	2017	2018	2019	2020
Forest (a)	19 258.50	18 528.50	17 798.50	17 433.50	17 360.50	17 287.50	17 214.50	17 141.50	17 068.50
Other wooded land (a)	22 394.30	22 394.30	22 394.30	22 394.30	22 394.30	22 394.30	22 394.30	22 394.30	22 394.30
Other land (c-a-b)	70 318.75	71 048.75	71 778.75	72 143.75	72 216.75	72 289.75	72 362.75	72 435.75	72 508.75
Total land area (c)	111 971.55	111 971.55	111 971.55	111 971.55	111 971.55	111 971.55	111 971.55	111 971.55	111 971.55

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 area and area change estimation:

The reason to why the data reported to FRA 2020 is different from what was reported to FRA 2015 is that new data has become available. For FRA 2015 two old Woody Biomass Inventories using remote sensing were used. For the FRA 2020 reporting a forest, non-forest vegetation map from 2013 was used and the new estimates are believed to be better. Also a new definition of forest has been applied, where the height threshold now is 2m, which also has resulted in including more areas as forest.

According to official data **forest area cover 15.7% of the total land area**. This percentage was applied to the official land area. The forest area change estimates comes from Ethiopia's Forest Reference Level (FREL) submission to the UNFCCC (March 2017). The average annual net loss of 73 thousand ha per year (92,000 ha of losses and 18,000 ha of gains) over the period 2000-2013 was applied to the 2013 forest area and data for the FRA reference years were calculated.

Other wooded land area and change estimation:

Other wooded land was calculated using two data sources, the 2013 national land cover map produced by MEFC with the support of FAO and the 2016 Africa regional land cover map produced by the European Space Agency (ESA). Shrubland was translated as Other wooded land and both maps show approximately 20% (~22 million hectares) land coverage. No data for determining the change rate of Other wooded land is available so the area is kept constant.

1b Forest characteristics

National data

Data sources

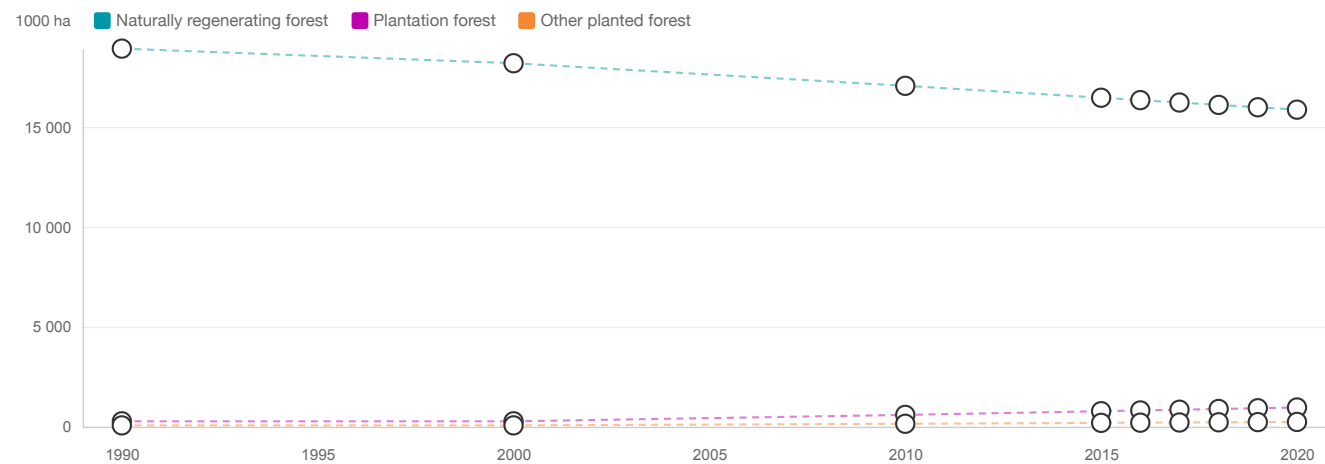
2013	References	Land use / land cover map 2013, Ministry of Environment, Forestry and Climate Change (MEFCC) Ethiopia's Forest Reference Level Submission to the UNFCCC, March 2017
	Methods used	Full-cover forest/vegetation maps
	Additional comments	

Classifications and definitions

2013	National class	Definition
	Forest	Land spanning more than 0.5 ha covered by trees (including bamboo) (with a minimum width of 20m or not more than two-thirds of its length) attaining a height of more than 2m and a canopy cover of more than 20% or trees with the potential to reach these thresholds in situ in due course. (New definition adopted February 2015)
	Shrubland	Land with shrubs/bushes canopy cover ≤ 10% or combined cover of bush, and shrubs ≤10%. Shrubs and bushes are woody perennial plants, 2 m in height at maturity in situ.

Original data and reclassification

2013	Classifications and definitions		FRA classes		
	Class	Area (1000 ha)	Naturally regenerating forest	Plantation forest	Other planted forest
	Forest	17 579.50	%	%	%
	Total	17 579.50	—	—	—



FRA categories	Forest area (1000 ha)								
	1990	2000	2010	2015	2016	2017	2018	2019	2020
Naturally regenerating forest (a)	18 918.89	18 188.89	17 057.79	16 461.50	16 342.24	16 222.98	16 103.72	15 984.46	15 865.20
Planted forest (b)	339.61	339.61	740.71	972.00	1 018.26	1 064.52	1 110.78	1 157.04	1 203.30
Plantation forest	271.69	271.69	592.57	777.60	814.61	851.62	888.63	925.64	962.65
...of which introduced species	217.35	217.35	454.61	583.20	608.92	634.64	660.36	686.08	711.80
Other planted forest	67.92	67.92	148.14	194.40	203.65	212.90	222.15	231.40	240.65
Total (a+b)	19 258.50	18 528.50	17 798.50	17 433.50	17 360.50	17 287.50	17 214.50	17 141.50	17 068.50
Total forest area	19 258.50	18 528.50	17 798.50	17 433.50	17 360.50	17 287.50	17 214.50	17 141.50	17 068.50

Comments

1c Primary forest and special forest categories

National Data

Data sources + type of data source eg NFI, etc

Remote sensing-Based Regional Bamboo Resource Assessment Report of Ethiopia, Kenya and Uganda. Tsinghua University, Beijing, China and International Bamboo and Rattan Organisation (INBAR), 2018.

National classification and definitions

-

Original data

The bamboo assessment report is based on Landsat 8 images acquired between 2013 and 2017 with most images acquired in 2016, which is considered to be the data year for the study. The remote sensing was complemented by a set of ground truth samples.

The total area of bamboo in Ethiopia was estimated at 14,744.63 km², that is 1,474,463 hectares. This value has been reported for years 2015 and 2020. The report says further that bamboo areas are decreasing in the region due to land conversion and population pressure, and that previously reported data on bamboo resources cannot be compared to these new data.

Analysis and processing of national data

Estimation and forecasting

-

Reclassification into FRA 2020 categories

-

FRA categories	Area (1000 ha)				
	1990	2000	2010	2015	2020
Primary forest					
Temporarily unstocked and/or recently regenerated					
Bamboos				1 474.46	1 474.46
Mangroves	0.00	0.00	0.00	0.00	0.00
Rubber wood					

Comments

1d Annual forest expansion, deforestation and net change

National Data

Data sources + type of data source eg NFI, etc

Ethiopia's Forest Reference Level Submission to the UNFCCC, March 2017

National classification and definitions

-

Original data

The FREL submission indicates the following data on forest loss and gain, from which the net loss and annual changes was calculated.

	1000 ha	1000 ha/year
Forest loss	1193	92
Forest gain	246	19
Net forest loss	947	73

Analysis and processing of national data

Estimation and forecasting

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Reclassification into FRA 2020 categories

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FRA categories	Area (1000 ha/year)			
	1990-2000	2000-2010	2010-2015	2015-2020
Forest expansion (a)	19.00	19.00	19.00	19.00
...of which afforestation				
...of which natural expansion				
Deforestation (b)	92.00	92.00	92.00	92.00
Forest area net change (a-b)	-73.00	-73.00	-73.00	-73.00

Comments

1e Annual reforestation

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/year)			
	1990-2000	2000-2010	2010-2015	2015-2020
Reforestation				

Comments

1f Other land with tree cover

National Data

Data sources + type of data source eg NFI, etc

-

National classification and definitions

-

Original data

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Analysis and processing of national data

Estimation and forecasting

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Reclassification into FRA 2020 categories

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FRA categories	Area (1000 ha)				
	1990	2000	2010	2015	2020
Palms (a)					
Tree orchards (b)					
Agroforestry (c)					
Trees in urban settings (d)					
Other (specify in comments) (e)					
Total (a+b+c+d+e)	–	–	–	–	–
Other land area	70 318.75	71 048.75	71 778.75	72 143.75	72 508.75

Comments

2 Forest growing stock, biomass and carbon

2a Growing stock

National Data

Data sources + type of data source eg NFI, etc

Ethiopia's National Forest Inventory. Final Report, Ministry of Environment, Forest and Climate Change, 2018.

National classification and definitions

-

Original data

NFI field data was collected during the period March 2014 to November 2016.

The NFI report indicates the following growing stock expressed as m³/hectare:

Naturally regenerating forest	131.7
Planted forest	72.4
Other wooded land	7.4

The growing stock for forest was then calculated as the area weighted average of naturally regenerating forest and planted forest.

Analysis and processing of national data

Estimation and forecasting

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Reclassification into FRA 2020 categories

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FRA categories	Growing stock m³/ha (over bark)								
	1990	2000	2010	2015	2016	2017	2018	2019	2020
Naturally regenerating forest	131.70	131.70	131.70	131.70	131.70	131.70	131.70	131.70	131.70
Planted forest	72.40	72.40	72.40	72.40	72.40	72.40	72.40	72.40	72.40
...of which plantation forest	72.40	72.40	72.40	72.40	72.40	72.40	72.40	72.40	72.40
...of which other planted forest	72.40	72.40	72.40	72.40	72.40	72.40	72.40	72.40	72.40
Forest	130.65	130.61	129.23	128.39	128.22	128.05	127.87	127.70	127.52
Other wooded land	7.40	7.40	7.40	7.40	7.40	7.40	7.40	7.40	7.40

FRA categories	Total growing stock (million m³ over bark)								
	1990	2000	2010	2015	2016	2017	2018	2019	2020
Naturally regenerating forest	2 491.62	2 395.48	2 246.51	2 167.98	2 152.27	2 136.57	2 120.86	2 105.15	2 089.45
Planted forest	24.59	24.59	53.63	70.37	73.72	77.07	80.42	83.77	87.12
...of which plantation forest	19.67	19.67	42.90	56.30	58.98	61.66	64.34	67.02	69.70
...of which other planted forest	4.92	4.92	10.73	14.07	14.74	15.41	16.08	16.75	17.42
Forest	2 516.21	2 420.06	2 300.14	2 238.35	2 226.00	2 213.64	2 201.28	2 188.92	2 176.57
Other wooded land	165.72	165.72	165.72	165.72	165.72	165.72	165.72	165.72	165.72

Comments

2b Growing stock composition

National Data

Data sources + type of data source eg NFI, etc

Ethiopia's National Forest Inventory. Final Report, Ministry of Environment, Forest and Climate Change, 2018.

National classification and definitions

-

Original data

The 30 most abundant species in terms of stem volume

Pouteria adolfi-friedericii	19.1%
Syzygium guineense	12.1%
Juniperus procera	11.1%
Schefflera abyssinica	6.8%
Croton macrostachys	6.0%
Ficus sur	5.4%
Ekebergia capensis	3.7%
Combretum molle	3.2%
Albizia gummifera	2.4%
Ficus vasta	2.3%
Prunus africana	2.1%
Olea capensis	2.0%
Allophylus abyssinicus	1.9%
Manilkara butugi	1.9%
Millettia ferruginea	1.8%
<i>Eucalyptus globulus</i>	<i>1.7%</i>
Apodytes dimidiata	1.6%
Pouteria altissima	1.6%
Ficus ovata	1.5%
Maesa lanceolata	1.4%
Cordia africana	1.4%
Ficus thonningii	1.3%
Sapium ellipticum	1.1%
<i>Cupressus lusitanica</i>	<i>1.0%</i>
Podocarpus falcaus	1.0%

Polyscias fulva	1.0%
Acokanthera schimperii	0.9%
Ficus sycomorus	0.9%
Ilex mitis	0.9%
Dombeya torrida	0.8%

Two species, Eucalyptus globulus and Cupressus lusitanica are introduced.

Analysis and processing of national data

Estimation and forecasting

The percentages were multiplied by the total volume 2015.

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	Pouteria adolfi-friedericii					427.53	
#2 Ranked in terms of volume	Syzygium guineense					270.84	
#3 Ranked in terms of volume	Juniperus procera					248.46	
#4 Ranked in terms of volume	Schefflera abyssinica					152.21	
#5 Ranked in terms of volume	Croton macrostachys					134.30	
#6 Ranked in terms of volume	Ficus sur					120.87	
#7 Ranked in terms of volume	Ekebergia capensis					82.82	
#8 Ranked in terms of volume	Combretum molle					71.63	
#9 Ranked in terms of volume	Albizia gummifera					53.72	
#10 Ranked in terms of volume	Ficus vasta					51.48	
Remaining native tree species						564.06	
Total volume of native tree species			–	–	–	2 177.92	–
Introduced tree species							
#1 Ranked in terms of volume	Eucalyptus globulus					38.05	
#2 Ranked in terms of volume	Cupressus lusitanica					22.38	
#3 Ranked in terms of volume							
#4 Ranked in terms of volume							

FRA categories	Scientific name	Common name	Growing stock in forest (million m³ over bark)				
			1990	2000	2010	2015	2020
Native tree species							
#5 Ranked in terms of volume							
Remaining introduced tree species							
Total volume of introduced tree species			–	–	–	60.43	–
Total growing stock			–	–	–	2 238.35	–

Comments

2c Biomass stock

National Data

Data sources + type of data source eg NFI, etc

Ethiopia's National Forest Inventory. Final Report, Ministry of Environment, Forest and Climate Change, 2018.

National classification and definitions

-

Original data

NFI field data was collected during the period March 2014 to November 2016.

The NFI report indicates the following stocks expressed as tonnes per hectare:

	Total biomass	Above-ground biomass	C in dead wood
Naturally regenerating forest	155.4	125.1	15.8
Planted forest	90.5	71.3	0.5

Below-ground biomass was calculated as Total biomass - Above-ground biomass, and Dead wood was calculated by taking dividing C in dead wood by 0.47 (Carbon fraction)

Then the average per hectare for Forest was calculated as the area weighted average, resulting in the data presented in the reporting table

Analysis and processing of national data

Estimation and forecasting

-

Reclassification into FRA 2020 categories

-

FRA categories	Forest biomass (tonnes/ha)								
	1990	2000	2010	2015	2016	2017	2018	2019	2020
Above-ground biomass	124.15	124.11	122.86	122.10	121.94	121.79	121.63	121.47	121.31
Below-ground biomass	30.10	30.10	29.84	29.68	29.65	29.62	29.58	29.55	29.52
Dead wood	33.04	33.02	32.26	31.80	31.71	31.61	31.52	31.42	31.32

Comments

2d Carbon stock

National Data

Data sources + type of data source eg NFI, etc

Ethiopia's National Forest Inventory. Final Report, Ministry of Environment, Forest and Climate Change, 2018.

National classification and definitions

-

Original data

See table 2c.

A carbon fraction of 0.47 was used.

Analysis and processing of national data

Estimation and forecasting

-

Reclassification into FRA 2020 categories

-

FRA categories	Forest carbon (tonnes/ha)								
	1990	2000	2010	2015	2016	2017	2018	2019	2020
Carbon in above-ground biomass	58.35	58.33	57.74	57.39	57.31	57.24	57.17	57.09	57.01
Carbon in below-ground biomass	14.15	14.15	14.02	13.95	13.94	13.92	13.90	13.89	13.87
Carbon in dead wood	15.53	15.52	15.16	14.95	14.90	14.86	14.81	14.77	14.72
Carbon in litter									
Soil carbon									

Soil depth (cm) used for soil carbon estimates	
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Comments

3 Forest designation and management

3a Designated management objective

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

-

Primary designated management objective

FRA 2020 categories	Forest area (1000 ha)				
	1990	2000	2010	2015	2020
Production (a)					
Protection of soil and water (b)				12 000.00	
Conservation of biodiversity (c)					
Social Services (d)					
Multiple use (e)					
Other (specify in comments) (f)					
None/unknown (g)	19 258.50	18 528.50	17 798.50	5 433.50	17 068.50
Total forest area	19 258.50	18 528.50	17 798.50	17 433.50	17 068.50

Total area with designated management objective

FRA 2020 categories	Forest area (1000 ha)				
	1990	2000	2010	2015	2020
Production					
Protection of soil and water					
Conservation of biodiversity					
Social Services					
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

-

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)								
	1990	2000	2010	2015	2016	2017	2018	2019	2020
Forest area within protected areas							6 147.50		
Forest area with long-term forest management plan							900.00		
...of which in protected areas									

Comments

4 Forest ownership and management rights

4a Forest ownership

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
Private ownership (a)				
...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)				6 147.50
Unknown/other (specify in comments) (c)	–	–	–	–
Total forest area	19 258.50	18 528.50	17 798.50	17 433.50

Comments

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)				
Individuals (b)				
Private business entities and institutions (c)				
Local, tribal and indigenous communities (d)				
Unknown/other (specify in comments) (e)	–	–	–	6 147.50
Total public ownership	–	–	–	6 147.50

Comments

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	18 528.50	-	-	-	-	-	-	-	-	-	17 798.50	-	-	17 579.50	-	17 433.50	17 360.50	17 287.50

Comments

5b Area affected by fire

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
Total land area affected by fire																		
...of which on forest																		

Comments

5c Degraded forest

Does your country monitor area of degraded forest		No
If "yes"	What is the national definition of "Degraded forest"?	we don have the national methodology of estimation of degraded forest because of lack of the satellite technology
	Describe the monitoring process and results	At national level we have only monitored deforestation using satellite imagery but not forest degradation

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

REED+ Starategy

National classification and definitions

-

Original data

-

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

Comments

The Revised Forest proclamation of Ethiopia 2017

REED+ Strategy

Forest sector developmet program

6b Area of permanent forest estate

National Data

Data sources + type of data source eg NFI, etc

-

National classification and definitions

-

Original data

-

FRA 2020 categories	Forest area (1000 ha)					
	Applicable?	1990	2000	2010	2015	2020
Area of permanent forest estate				6 147.50		

Comments

7 Employment, education and NWFP

7a Employment in forestry and logging

National Data

Data sources + type of data source eg NFI, etc

-

National classification and definitions

-

Original data

-

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												
...of which silviculture and other forestry activities												
...of which logging												
...of which gathering of non wood forest products												
...of which support services to forestry												

Comments

7b Graduation of students in forest-related education

National Data

Data sources + type of data source eg NFI, etc

-

National classification and definitions

-

Original data

-

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												
Master's degree												
Bachelor's degree												
Technician certificate / diploma												
Total												

Comments

7c Non wood forest products removals and value 2015

National Data

Data sources + type of data source eg NFI, etc

-

National classification and definitions

-

Original data

-

	Name of NWFP product	Key species	Quantity	Unit	Value (1000 local currency)	NWFP category
#1	gumand resin	Boswellia papyrifera		ETB	10 268 259	7 Exudates
#2	Gum and resin	Accacia senegal				7 Exudates
#3	Gumand resin	commophora				7 Exudates
#4						
#5						
#6						
#7						
#8						
#9						
#10						
All other plant products						
All other animal products						
Total					10 268 259	

Name of currency	birr
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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	16.55	15.90	15.57	15.50	15.44	15.37	15.31	15.24

Name of agency responsible	
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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	-0.40	-0.41	-0.42	-0.42	-0.42	-0.43	-0.43

Name of agency responsible	
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Sub-Indicator 2	Forest biomass (tonnes/ha)							
	2000	2010	2015	2016	2017	2018	2019	2020
Above-ground biomass stock in forest	124.11	122.86	122.10	121.94	121.79	121.63	121.47	121.31

Name of agency responsible	
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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	–	–	–	–	–	35.26	–	–

Name of agency responsible	
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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	–	–	–	–	–	5.16	–	–

Name of agency responsible	
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Sub-Indicator 5	Forest area (1000 ha)							
	2000	2010	2015	2016	2017	2018	2019	2020
Forest area under independently verified forest management certification schemes	0.00	0.00	0.00	0.00	0.00	0.00	–	–