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Global Forest Resources Assessment 2020

Report

Georgia

Rome, 2020



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Introduction

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Introductory text

There has not been any national or forest district level inventory since the collapse of the Soviet Union. The inventory materials from the Soviet period are outdated and do not reflect the real condition of forests today (The State Audit Office of Georgia, 2016). As a result, it is not possible to quantify recent trends in forest area and growing stock with any certainty.

Between 2007 and 2012 inventories were carried out only in areas under long-term license contracts (around 166,654 hectares, The State Audit Office of Georgia, 2016). After a long period without proper forest inventories, regular management level inventories were reintroduced in 2013 for the elaboration of 10-year forest management plans. In 2018 a total 367,940 hectares were covered by management plans (13 % of total forest area). The methodology of management level inventory and taxation, which is used in Georgia, provides the necessary information for management planning. Nevertheless, MEPA is reviewing the methodology and considers improving it to ensure getting statistically sound and reliable information in the future.

In addition to this, it is important to underline that Georgia initiated the first National Forest Inventory (NFI) in 2018. The methodology was developed during 2016 – 2017 and is based on systematic sample plot assessments in a grid of 3.6 km, combined with remote sensing data. The NFI will be conducted every ten years. The NFI will provide reliable information about the quantity and quality of Georgian forests and their biodiversity as a basis for political and strategic decision-making processes and national as well as international reporting. The results of the first Georgian NFI are expected to be available in 2020.

The Biodiversity and Forestry Department under the Ministry of Environment Protection and Agriculture is responsible for reporting based on the information provided by the forest management bodies.

1 Forest extent, characteristics and changes

1a Extent of forest and other wooded land

National data

Data sources

1990	References	FRA 2015 report
	Methods used	Other (specify in comments)
	Additional comments	The numbers are the same as in 2015 report until we do not complete National Forest inventory which is proposed to be finalized for 2020. It should be noted that Georgia has no systematic inventory data since 1990.

2000	References	FRA 2015
	Methods used	Other (specify in comments)
	Additional comments	The numbers are the same as in 2015 report until we do not complete National Forest inventory which is proposed to be finalized for 2020. It should be noted that Georgia has no systematic inventory data since 1990.

2005	References	FRA 2015 report
	Methods used	Other (specify in comments)
	Additional comments	The numbers are the same as in 2015 report until we do not complete Natioanal Forest inventory which is proposed to be finalized for 2020. It should be noted that Georgia has no systematic inventory data since 1990.

2010	References	FRA 2015
	Methods used	Other (specify in comments)
	Additional comments	The numbers are the same as in 2015 report until we do not complete National Forest inventory which is proposed to be finalized for 2020. It should be noted that Georgia has no systematic inventory data since 1990.

Classifications and definitions

1990	National class	Definition
	Forest	
	Other wooded land	
	Other land	

2000	National class	Definition
	Forest	Land spanning more than 0.5 hectares with trees higher than 5 meters and a canopy cover of more than 10 percent, or trees able to reach these thresholds in situ. It does not include land that is predominantly under agricultural or urban land use.
	Other wooded land	Land not classified as Forest, spanning more than 0.5 hectares; with trees higher than 5 meters and a canopy cover of 5-10 percent, or trees able to reach these thresholds in situ; or with a combined cover of shrubs, bushes and trees above 10 percent. It does not include land that is predominantly under agricultural or urban land use.
	Other land	All land that is not classified as Forest or Other wooded land.

2005	National class	Definition
	Forest	Land spanning more than 0.5 hectares with trees higher than 5 meters and a canopy cover of more than 10 percent, or trees able to reach these thresholds in situ. It does not include land that is predominantly under agricultural or urban land use.
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	Other land	All land that is not classified as Forest or Other wooded land.

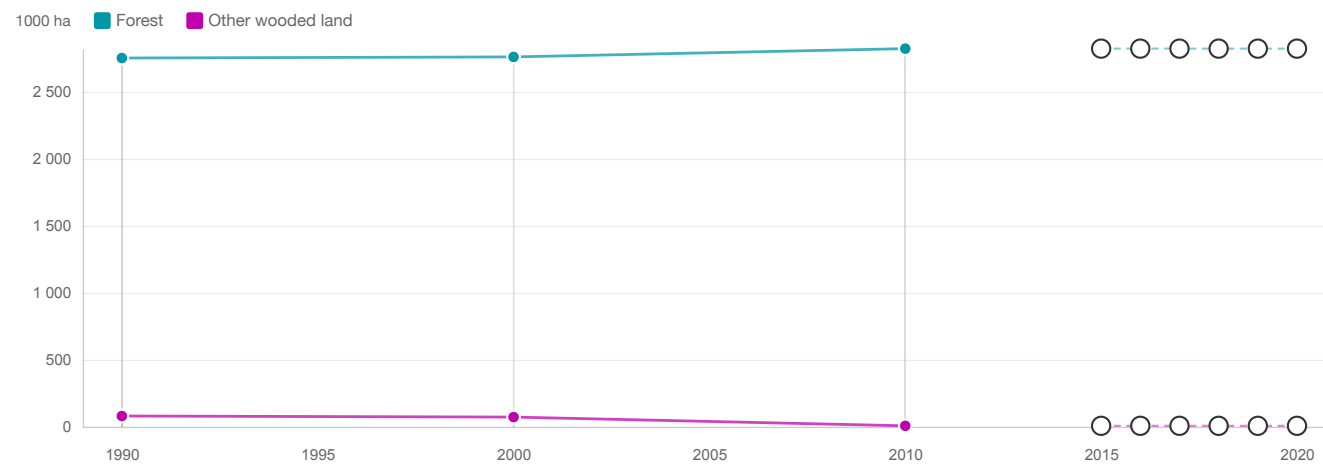
Original data and reclassification

1990	Classifications and definitions		FRA classes		
	Class	Area (1000 ha)	Forest	Other wooded land	Other land
	Forest	2 752.30	100.00 %	0.00 %	0.00 %
	Other wooded land	80.00	0.00 %	100.00 %	0.00 %
	Other land	4 137.70	0.00 %	0.00 %	100.00 %
	Total	6 970.00	2 752.30	80.00	4 137.70

2000	Classifications and definitions		FRA classes		
	Class	Area (1000 ha)	Forest	Other wooded land	Other land
	Forest	2 760.60	100.00 %	%	%
	Other wooded land	72.10	0.00 %	100.00 %	0.00 %
	Other land	4 137.30	0.00 %	0.00 %	100.00 %
	Total	6 970.00	2 760.60	72.10	4 137.30

2005	Classifications and definitions		FRA classes		
	Class	Area (1000 ha)	Forest	Other wooded land	Other land
	Forest	2 772.50	100.00 %	0.00 %	0.00 %
	Other wooded land	25.90	0.00 %	100.00 %	0.00 %
	Other land	4 171.60	0.00 %	0.00 %	100.00 %
	Total	6 970.00	2 772.50	25.90	4 171.60

2010	Classifications and definitions		FRA classes		
	Class	Area (1000 ha)	Forest	Other wooded land	Other land
	Forest	2 822.40	100.00 %	0.00 %	0.00 %
	Other wooded land	6.90	0.00 %	100.00 %	0.00 %
	Other land	4 140.70	0.00 %	0.00 %	100.00 %
	Total	6 970.00	2 822.40	6.90	4 140.70



FRA categories	Area (1000 ha)								
	1990	2000	2010	2015	2016	2017	2018	2019	2020
Forest (a)	2 752.30	2 760.60	2 822.40	2 822.40	2 822.40	2 822.40	2 822.40	2 822.40	2 822.40
Other wooded land (a)	80.00	72.10	6.90	6.90	6.90	6.90	6.90	6.90	6.90
Other land (c-a-b)	4 116.70	4 116.30	4 119.70	4 119.70	4 119.70	4 119.70	4 119.70	4 119.70	4 119.70
Total land area (c)	6 949.00	6 949.00	6 949.00	6 949.00	6 949.00	6 949.00	6 949.00	6 949.00	6 949.00

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	62.00	
Sub-tropical	38.00	
Tropical	0.00	

Comments

- The "total land area" provided by FAOSTAT is wrong. Because of this wrong total land area, the area of "other land" is also wrong.
- The numbers are the same as in 2015 report until we do not complete National Forest inventory which is proposed to be finalized for 2020. It should be noted that Georgia has no systematic inventory data since 1990.
- According to the FRA 2015 and FRA 2010 reports, the differences can be explained because the other wooded land being transferred to the forest.

1b Forest characteristics

National data

Data sources

1990	References	FRA 2015 report
	Methods used	Other (specify in comments)
	Additional comments	The numbers are the same as in 2015 report until we do not complete National Forest inventory which is proposed to be finalized for 2020. It should be noted that Georgia has no systematic inventory data since 1990.

2000	References	FRA 2015
	Methods used	Other (specify in comments)
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Classifications and definitions

1990	National class	Definition
	Forest	
	Other wooded land	
	Other land	

2000	National class	Definition

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	Other land	All land that is not classified as Forest or Other wooded land.

Original data and reclassification

1990	Classifications and definitions		FRA classes		
	Class	Area (1000 ha)	Naturally regenerating forest	Plantation forest	Other planted forest
	Forest	2 752.30	98.04 %	1.96 %	0.00 %
	Total	2 752.30	2 698.35	53.95	0.00

Plantation forest	Area (1000 ha)	...of which introduced
Total	53.95	16.47

Plantation forest	Area (1000 ha)	...of which introduced
Forest	53.95	30.53 %
Total	53.95	16.47

2000	Classifications and definitions		FRA classes		
	Class	Area (1000 ha)	Naturally regenerating forest	Plantation forest	Other planted forest
	Forest	2 760.60	97.83 %	2.17 %	0.00 %
	Total	2 760.60	2 700.69	59.91	0.00

Plantation forest	Area (1000 ha)	...of which introduced
Forest	59.91	27.49 %
Total	59.91	16.47

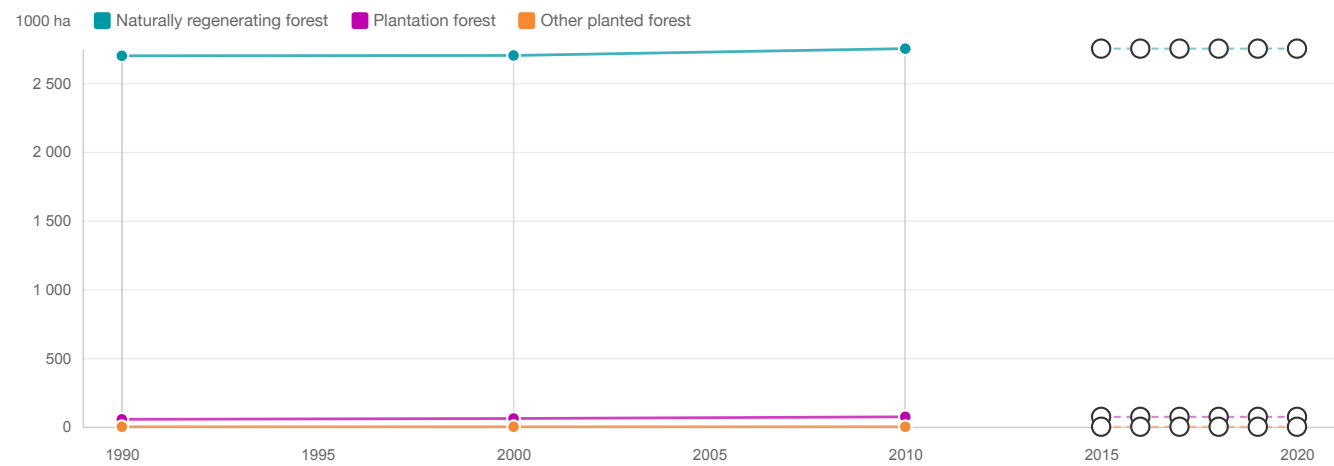
2005	Classifications and definitions		FRA classes		
	Class	Area (1000 ha)	Naturally regenerating forest	Plantation forest	Other planted forest
	Forest	2 772.50	97.82 %	2.18 %	0.00 %
	Total	2 772.50	2 712.06	60.44	0.00

Plantation forest	Area (1000 ha)	...of which introduced
Forest	60.44	27.25 %
Total	60.44	16.47

2010	Classifications and definitions		FRA classes		
	Class	Area (1000 ha)	Naturally regenerating forest	Plantation forest	Other planted forest
	Forest	2 822.40	97.45 %	2.55 %	0.00 %
	Total	2 822.40	2 750.43	71.97	0.00

Plantation forest	Area (1000 ha)	...of which introduced
Total	71.97	16.47

Plantation forest	Area (1000 ha)	...of which introduced
Forest	71.97	22.88 %
Total	71.97	16.47



FRA categories	Forest area (1000 ha)								
	1990	2000	2010	2015	2016	2017	2018	2019	2020
Naturally regenerating forest (a)	2 698.35	2 700.69	2 750.43	2 750.43	2 750.43	2 750.43	2 750.43	2 750.43	2 750.43
Planted forest (b)	53.95	59.91	71.97	71.97	71.97	71.97	71.97	71.97	71.97
Plantation forest	53.95	59.91	71.97	71.97	71.97	71.97	71.97	71.97	71.97
...of which introduced species	16.47	16.47	16.47	16.47	16.47	16.47	16.47	16.47	16.47
Other planted forest	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total (a+b)	2 752.30	2 760.60	2 822.40	2 822.40	2 822.40	2 822.40	2 822.40	2 822.40	2 822.40
Total forest area	2 752.30	2 760.60	2 822.40	2 822.40	2 822.40	2 822.40	2 822.40	2 822.40	2 822.40

Comments

The number of introduced species has not been reported since 1990, but there were figures reported in the SoEF and we considered the 2015 figure here. As we don't have any new reliable data, we used the same figure for the years until 2020. The following tree species were used in forestry practices for afforestation/reforestation in Georgia: *Pinus nigra*, *Pinus pinea*, *Populus pyramidalis*, *Rubia pseudoacacia*, *Eucalyptus*, *Cryptomeria japonica*, *Cupressus pyramidalis*.

Tree species introduced for other purposes that are now naturally spreading such as: *Cedrus*, *Ailanthus*, *Tung oil tree*, *Paulownia*, *Populus canadensis*, *Cupressus*.

1c Primary forest and special forest categories

National Data

Data sources + type of data source eg NFI, etc

As stated in the 2015 report, the area of primary forest was evaluated with the expert assessment and reflected the area of protected forests. However available data are far insufficient for more detailed evaluations, especially to evaluate the trend of this category.

National classification and definitions

Comply with FRA definition

Original data

-

Analysis and processing of national data

Estimation and forecasting

Expert estimation from FRA 2015 from 1990 up to 2015 and for 2020 we repeated the same value.

As stated in the 2015 report, according to expert estimation and available statistical data, the primary forest area remained virtually unchanged in 1990, 2000, 2005, 2010, 2015. The same figure was used for 2020 because no new reliable data were available.

Reclassification into FRA 2020 categories

Not applied

FRA categories	Area (1000 ha)				
	1990	2000	2010	2015	2020
Primary forest	500.00	500.00	500.00	500.00	500.00
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	0.00	0.00	0.00	0.00	0.00
Rubber wood	0.00	0.00	0.00	0.00	0.00

Comments

- The primary forests are estimated to be 17.7 % of the total forest area, this 17.7 % of the forest is located in steep slopes and it was not accessed by people.
- In Georgia, we have some areas covered by bamboos but we don't have any information about the area which they cover.
- Mangroves and Rubberwood - we do not have.

1d Annual forest expansion, deforestation and net change

National Data

Data sources + type of data source eg NFI, etc

SoEF report table 4.2

National classification and definitions

Comply with FRA definition

Original data

-

Analysis and processing of national data

Estimation and forecasting

The data for 1990-2000 and 2000-2010 are the same as in SoEF report table 4.2. The data provided is estimation.

Reclassification into FRA 2020 categories

Yes, we reclassified it according to the reporting periods.

FRA categories	Area (1000 ha/year)			
	1990-2000	2000-2010	2010-2015	2015-2020
Forest expansion (a)	0.83	6.18	0.00	0.00
...of which afforestation	0.60	4.97	0.00	0.00
...of which natural expansion	0.23	1.20	0.00	0.00
Deforestation (b)	0.00	0.00	0.00	0.00
Forest area net change (a-b)	0.83	6.18	0.00	0.00

Comments

Forest cover is increasing in the rural areas with high rate of population migration which cause that former arable lands, heyfields and meadows are occupied by forest. In contrary, areas with high density of population all the forest lands like meadows or grazing areas are withdrawn from State Forest Fund.

But up to now we don't have any reliable data on the respective areas. Based on the statement under 1 a that the forest area did not change, we decided to indicate '0' for the period 2010-2015 and 2015-2020.

Reliable data can only be provided after the first National Forest Inventory, which is expected to be finished in 2020.

1e Annual reforestation

National Data

Data sources + type of data source eg NFI, etc

For 2015-2020 and 2010-2015 National Forestry Agency

For 1990-2000 and 2000-2010 - SoEF.

National classification and definitions

Comply with FRA definition

Original data

-

Analysis and processing of national data

Estimation and forecasting

Repeated/copied for 1990-2000 and 2000-2010 from SoEF with corrections.

Reclassification into FRA 2020 categories

Yes, we reclassified it according to the reporting periods.

FRA categories	Area (1000 ha/year)			
	1990-2000	2000-2010	2010-2015	2015-2020
Reforestation	0.03	0.07	0.02	0.05

Comments

For 1990 -2000 and 2000-2010 the values from SoEF have been corrected based on expert view:

- 1990 -2000: based on the value from SoEF we calculated the annual value for 10 year period;
- 2000-2010: we divided the value from SoEF (269.1) by 1000 ha and calculated the annual value for 10 year period.
- 2010-2015 and 2015-2020: figure based on information from NFA

1f Other land with tree cover

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	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	4 116.70	4 116.30	4 119.70	4 119.70	4 119.70

Comments

- The "total land area" provided by FAOSTAT in Table 1a is wrong. Because of this wrong total land area, the area of "other land" is also wrong.

2 Forest growing stock, biomass and carbon

2a Growing stock

National Data

Data sources + type of data source eg NFI, etc

The values have been copied from FRA 2015 and SoEF.

National classification and definitions

Comply with FRA definition

Original data

-

Analysis and processing of national data

Estimation and forecasting

the figures are expert estimations.

Forest: the values have been copied from FRA 2015 for 1990 up to 2015 and we repeated the value of 2015 for 2016-2020.

Other wooded land - The values have been copied from SoEF for 1990 up to 2015 and we repeated the value of 2015 for 2016-2020.

Reclassification into FRA 2020 categories

Yes, we reclassified it according to FRA 2020 categories

FRA categories	Growing stock m³/ha (over bark)								
	1990	2000	2010	2015	2016	2017	2018	2019	2020
Naturally regenerating forest									
Planted forest									
...of which plantation forest									
...of which other planted forest									
Forest	153.04	161.34	161.00	161.03	161.03	161.03	161.03	161.03	161.03
Other wooded land	22.50	22.19	23.19	23.19	23.19	23.19	23.19	23.19	23.19

FRA categories	Total growing stock (million m³ over bark)								
	1990	2000	2010	2015	2016	2017	2018	2019	2020
Naturally regenerating forest									
Planted forest									
...of which plantation forest									
...of which other planted forest									
Forest	421.20	445.40	454.40	454.50	454.50	454.50	454.50	454.50	454.50
Other wooded land	1.80	1.60	0.16	0.16	0.16	0.16	0.16	0.16	0.16

Comments

The growing stock is refering mainly to 'Naturally regenerating forest' (97.3% of total forest area).

2b Growing stock composition

National Data

Data sources + type of data source eg NFI, etc

The values have been copied from FRA 2015 and SoEF.

National classification and definitions

Comply with FRA definition

Original data

-

Analysis and processing of national data

Estimation and forecasting

The figures are expert estimations.

Reclassification into FRA 2020 categories

Yes, we reclassified it according to the 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	Fagus orientalis	Beech	218.30	224.70	231.30	231.30	231.30
#2 Ranked in terms of volume	Abies nordmanniana	Fir	70.20	74.70	75.90	75.90	75.90
#3 Ranked in terms of volume	Picea sp.p.	Spruce	28.70	32.40	33.70	33.70	33.70
#4 Ranked in terms of volume	Carpinus caucasica	Hornbeam	20.40	24.60	24.60	24.60	24.60
#5 Ranked in terms of volume	Quercus spp.	Oak	21.60	23.60	23.60	23.60	23.60
#6 Ranked in terms of volume	Pinus sp.p.	Pine	12.10	14.60	14.60	14.60	14.60
#7 Ranked in terms of volume	Alnus barbata	Alder	13.80	13.80	13.80	13.80	13.80
#8 Ranked in terms of volume	Castanea sativa	Chestnut	11.80	12.70	12.70	12.70	12.70
#9 Ranked in terms of volume	Acer campestre	Maple	9.20	9.20	9.20	9.20	9.20
#10 Ranked in terms of volume	Betula litwinowii	Birch	3.50	3.50	3.50	3.50	3.50
Remaining native tree species			11.60	11.60	11.60	11.60	11.60
Total volume of native tree species			421.20	445.40	454.50	454.50	454.50
Introduced tree species							
#1 Ranked in terms of volume							
#2 Ranked in terms of volume							
#3 Ranked in terms of volume							
#4 Ranked in terms of volume							
#5 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							
Remaining introduced tree species							
Total volume of introduced tree species			–	–	–	–	–
Total growing stock			421.20	445.40	454.50	454.50	454.50

Comments

It is obvious that we have number of tree species introduced in Georgia since 1930/40 (like Acacia, Eucalyptus, Liriodendron, Cryptomeria, Cedrus, Tree of heaven) but we do not have the information regarding the distribution and growing stock.

2c Biomass stock

National Data

Data sources + type of data source eg NFI, etc

The values are based on SoEF report.

National classification and definitions

Comply with FRA definition

Original data

-

Analysis and processing of national data

Estimation and forecasting

The values are based on SoEF report.

Reclassification into FRA 2020 categories

Yes, we reclassified it according to the FRA 2020 categories.

FRA categories	Forest biomass (tonnes/ha)								
	1990	2000	2010	2015	2016	2017	2018	2019	2020
Above-ground biomass	90.74	116.50	119.34	119.34	119.34	119.34	119.34	119.34	119.34
Below-ground biomass	20.36	30.36	31.10	31.10	31.10	31.10	31.10	31.10	31.10
Dead wood									

Comments

The current calculation was based on the excel file downloaded from the platform. The previous reports are indicating other figures (for the same indicators) which dont understand.

2d Carbon stock

National Data

Data sources + type of data source eg NFI, etc

The values are based on SoEF report.

National classification and definitions

Comply with FRA definition

Original data

-

Analysis and processing of national data

Estimation and forecasting

The values are based on SoEF report.

Reclassification into FRA 2020 categories

Yes, we reclassified it according to the FRA 2020 categories.

FRA categories	Forest carbon (tonnes/ha)								
	1990	2000	2010	2015	2016	2017	2018	2019	2020
Carbon in above-ground biomass	45.37	58.25	59.67	59.67	59.67	59.67	59.67	59.67	59.67
Carbon in below-ground biomass	10.18	15.18	15.55	15.55	15.55	15.55	15.55	15.55	15.55
Carbon in dead wood									
Carbon in litter		19.42	18.99	18.99	18.99	18.99	18.99	18.99	18.99
Soil carbon		69.22	67.71	67.71	67.71	67.71	67.71	67.71	67.71

Soil depth (cm) used for soil carbon estimates	
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Comments

for the years 2000-2020, we calculated forest carbon stock per hectare based on respective values in SoFE 2020. For 1990 we kept the original values.

3 Forest designation and management

3a Designated management objective

National Data

Data sources + type of data source eg NFI, etc

The number for the years 1990, 2000 and 2010 are provided according to the Report FRA 2010.

The number for 2015 we provided from Report FRA 2015.

In the draft Forest Code, which has been handed over to the Georgian Parliament for approval in early 2019, the following forest categories are mention: Protected forest, Protective forest, Resort, and Recreation forest, Production forest. We expect that the Forest Code will be approved by the Georgian Parliament in 2019. Therefore we indicated the figure for Production forests. It refers to the figure for "Forest area available for wood supply" in the SoEF report 2015/2020.

National classification and definitions

In the table "**Primary designated management objective**":

- Production forests we included:
587,500 ha (according to the law this area has also the function of the soil and water protection);
- Conservation of Biodiversity is comprised of:
267,000 ha forests in Protected Areas (*45% of the total protected area*);
334,070 ha Emerald Sites covering forests outside of a protected area (nominated and proposed sites), that will be managed by NFA;
- Social services we included
101,200 ha resort forest from previous FRA 2015 reporting
247,100 ha green zone
- Protection of soil and water:
Total forest area minus (production forest, conservation of biodiversity, social service)

Original data

-

Analysis and processing of national data

Estimation and forecasting

The number for the years 1990, 2000 and 2010 are provided according to the Report FRA 2010.

The number for 2015 we provided from Report FRA 2015.

The number for 2020 is based on actual information of MEPA.

Reclassification into FRA 2020 categories

Yes, we reclassified it according to the FRA 2020 categories.

Primary designated management objective

FRA 2020 categories	Forest area (1000 ha)				
	1990	2000	2010	2015	2020
Production (a)	566.40	566.40	587.50	587.50	587.50
Protection of soil and water (b)	982.87	1 607.85	1 635.42	1 612.90	1 285.53
Conservation of biodiversity (c)	145.32	222.78	227.77	273.70	601.07
Social Services (d)	1 057.71	363.57	371.71	348.30	348.30
Multiple use (e)	0.00	0.00	0.00	0.00	0.00
Other (specify in comments) (f)	0.00	0.00	0.00	0.00	0.00
None/unknown (g)	0.00	0.00	0.00	0.00	0.00
Total forest area	2 752.30	2 760.60	2 822.40	2 822.40	2 822.40

Total area with designated management objective

FRA 2020 categories	Forest area (1000 ha)				
	1990	2000	2010	2015	2020
Production					587.50
Protection of soil and water	2 752.30	2 760.60	2 822.40	2 822.40	2 822.40
Conservation of biodiversity	146.73	223.30	221.46	273.70	601.07
Social Services	1 068.13	364.49	361.25	348.30	348.30
Other (specify in comments)					

Comments

The high figure of the category 'Social Services' in 1990 is including Kolkhoz Forest (kind of community forest under management of municipalities), which were handed over to State Forest Fund after the adoption of the current Forest Code in 1999.

The category "Production" is valid as soon as the new Forest Code will be adopted, which is expected to happen in 2019.

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 Forestry Agency of the Ministry of Environmental Protection and Agriculture of Georgia;
- Agency of Protected Areas of the Ministry of Environmental Protection and Agriculture of Georgia;
- State Audit Report: "Performance Audit of Forest Commercial Resource Management", 16.02.2016.
- FRA 2015

National classification and definitions

Comply with FRA definition

Original data

-

Analysis and processing of national data

Estimation and forecasting

-

Reclassification into FRA 2020 categories

Yes, we reclassified it according to the FRA 2020 categories.

FRA categories	Area (1000 ha)								
	1990	2000	2010	2015	2016	2017	2018	2019	2020
Forest area within protected areas	146.73	223.30	221.46	273.70			267.00		315.86
Forest area with long-term forest management plan			161.00	259.23	259.23	461.24	534.59	620.67	454.02
...of which in protected areas							68.31		

Comments

In 2019 forest area with long-term forest management plans includes 86,080 ha where inventory and management plane is completed but not approved yet, we suppose it will be approved in 2019.

267,000 ha forests in Protected Areas (45% of the total protected area);

We included the area of license holders in table 3b:

- License areas in 2010 had management plans for 161,000 ha;
- In 2015 license areas on 166,654 ha had management plans, those are expiring in 2019, therefore they are deducted for 2020.

4 Forest ownership and management rights

4a Forest ownership

National Data

Data sources + type of data source eg NFI, etc

The Ministry of Environmental Protection and Agriculture of Georgia

National classification and definitions

Comply with FRA definition

Original data

-

Analysis and processing of national data

Estimation and forecasting

-

Reclassification into FRA 2020 categories

N/A

FRA categories	Forest area (1000 ha)			
	1990	2000	2010	2015
Private ownership (a)	0.00	0.00	0.00	0.00
...of which owned by individuals	0.00	0.00	0.00	0.00
...of which owned by private business entities and institutions	0.00	0.00	0.00	0.00
...of which owned by local, tribal and indigenous communities	0.00	0.00	0.00	0.00
Public ownership (b)	2 752.30	2 760.60	2 822.40	2 822.40
Unknown/other (specify in comments) (c)	0.00	0.00	0.00	0.00
Total forest area	2 752.30	2 760.60	2 822.40	2 822.40

Comments

4b Holder of management rights of public forests

National Data

Data sources + type of data source eg NFI, etc

The Ministry of Environmental Protection and Agriculture of Georgia

The State Audit Report

National classification and definitions

Comply with FRA definition

Original data

-

Analysis and processing of national data

Estimation and forecasting

-

Reclassification into FRA 2020 categories

Yes, we reclassified it according to the FRA 2020 categories.

FRA categories	Forest area (1000 ha)			
	1990	2000	2010	2015
Public Administration (a)	2 752.30	2 760.60	2 661.40	2 655.75
Individuals (b)	0.00	0.00	0.00	0.00
Private business entities and institutions (c)	0.00	0.00	161.00	166.65
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	2 752.30	2 760.60	2 822.40	2 822.40

Comments

The figures included under 'Private business entities and institutions' are the figures for licence holders.

5 Forest disturbances

5a Disturbances

National Data

Data sources + type of data source eg NFI, etc

- National Forest Agency, The Ministry of Environmental Protection and Agriculture of Georgia;
- SoE.

National classification and definitions

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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	2 760.60	–	–	–	–	2 772.50	–	–	–	–	2 822.40	–	–	–	–	2 822.40	2 822.40	2 822.40

Comments

The data gathered on the national level is not accurate thus we can not report on this indicator.

In SoEF the following data is reported on damage from insects and diseases:

- 2005 - 5,230 ha
- 2010 - 26,270 ha
- 2015 - 26,400 ha

In SoEF the following data is reported concerning severe weather events:

- 2015 - 220 ha

5b Area affected by fire

National Data

Data sources + type of data source eg NFI, etc

FAR 2015

National Forestry Agency, the Ministry of Environemtal Protection and Agriculture of Gerogia

National classification and definitions

Comply with FRA definition

Original data

-

Analysis and processing of national data

Estimation and forecasting

-

Reclassification into FRA 2020 categories

Yes, we reclassified the data according to the 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	0.09	0.15	0.61	0.05	0.03	0.05	0.77	0.03	1.27	0.06	0.37	0.01	0.20	0.09	0.72	0.21	0.18	1.30

Comments

5c Degraded forest

Does your country monitor area of degraded forest		Yes
If "yes"	What is the national definition of "Degraded forest"?	The changes that have been occurred in the forest and negatively affected forest structure and functions. Degradation can be estimated according to its level of severity
	Describe the monitoring process and results	we start monitoring of forest degradation from 2018 onwards in the framework of National Forest Inventory, (the first NFI in Georgia will be conducted during 2018-2020). the definition given above is not legally approved for this moment.

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

The Ministry of Environmental Protection and agriculture of Georgia

National classification and definitions

Comply with FRA definition

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	Yes	No

Comments

Policies supporting SFM - Policies or strategies that explicitly encourage sustainable forest management:

1. In December 2013 the Parliament of Georgia adopted the National Forest Concept, which was elaborated with strong stakeholder participation. The National Forest Concept defines the State's approach towards the forests of Georgia considering their main functions and values. The goal of the Concept is to establish a system of sustainable forest management that will ensure the improvement of the quantitative and qualitative characteristics of Georgian forests, protection of biological diversity, effective use of the economic potential of forests taking into account their ecological values, and public participation in forest management. The overarching guiding principle is the sustainable management of forests according to the definition adopted by the Ministerial Conference on the Protection of Forests in Europe (Forest Europe). This principle should apply to everybody involved in forest management: state entities, private entities, communities, and others.
2. The Social-Economic Development Strategy of Georgia "Georgia 2020" (2012) is based on three main principles all of which have both direct and indirect implications for forestry sector development. One of those principles emphasizes rational and sustainable use of natural resources. The strategy explicitly refers to the introduction of modern, sustainable models of forest management and protection: "The introduction of modern models of forest management and innovative technologies (taking into consideration the need to preserve forest biodiversity, its recreational, water regulatory and soil protection functions) will reduce the negative consequences of forest degradation and will increase economic benefits through the improvement of forest ecosystem services".
3. The Rural Development Strategy of Georgia 2017-2020 (December 2016), prepared as part of the Association Agreement between Georgia and the EU), has identified development objectives under the following three priorities areas: (i) Economy and competitiveness; (ii) Social conditions and living standards; and (iii) The environmental protection and sustainable management of natural resources. Five out of the nine objectives guide also the forest sector development:
 - Diversification of the rural economy by strengthening the agriculturally related value chain and promoting various sustainable non-agricultural activities;
 - Raising awareness in innovation and entrepreneurship and promotion of cooperation by contributing to the skills development and employment issues;
 - Increasing the involvement of the rural population in the identification of local needs and the determination of solutions to these needs;
 - Improving the management of water, forest and other resources in targeted rural areas;
 - Introducing activities to mitigate the negative impact of climate change.

In 2014 with the purpose of improving the unsustainable, negatively affecting management and for better coordination of ongoing forest reform, the Ministry of Environment and Natural Resources Protection established the Forest Sector Reform Supervisory Board. Based on the recommendations of this board, it was decided to develop a forest reform strategy and an action plan. The main issues of the Forest Sector Reform Strategy and Action Plan have been integrated into the Third National Environmental Action Programme of Georgia (2017-2021) that was adopted by the Government in 2017.

3. Third National Environmental Action Programme of Georgia (2017-2021) that was adopted by the Government in 2017 (NEAP 3), has the following main objectives/elements:

1. Improvement of legal framework and implementation of Sustainable Forest Management system
2. Reduction of pressure on the forest through promoting the use of alternative fuel sources and improvement of qualitative and quantitative characteristics of forests;
3. Strengthening the capacity of forest policy, management and control entities;
4. Promotion of the use of forest ecosystem services;
5. Promotion of forest education and public awareness.

In summary, these key policies, programs, and strategies suggest the simultaneous need for (i) diversifying and enhancing the (rural) economy and employment through entrepreneurial, value-added focused forest management and utilization; (ii) improving the sustainability of forest resource management to deliver also environmental services such as mitigation of climate change and conservation of biodiversity and protection of water resources; strengthening management capacity at all levels, and involving also the local population in resource management and protection.

4. National Principles, Criteria, and Indicators of Sustainable Forest Management - Criteria and indicators have been defined for the ecological, economic and social principle to measure the progress towards sustainable forest management. They provide a framework for reporting the status of forests, for monitoring the impact of forest management and for assessing the achievement towards sustainability. The principles of SFM has been also considered in the Draft Forest Code.

Criteria and indicators under the ecological principle have been elaborated for ecosystem-based forest management considering the protection of biodiversity not only in protected areas (segregation approach) but in the management of all forest categories (inclusive approach). Important aspects under the economic principle are ensuring e.g. the use of wood resources below the increment and the promotion of timber processing in Georgia to gain the added value in the country. The criteria and indicators under the social principle provide a frame for monitoring decent working conditions for forest workers. In addition, income opportunities for the rural population in the forest sector in the frame of forest management and utilization of wood and non-wood forest products as well as the processing of forest resources and also in the frame of tourism development.

Legislations and regulations supporting SFM

Forest Code (1999), some other sublegal documents are regulating forest management in Georgia. New Forest Code is initiated in 2014 to be passed through Georgia Parliament in 2019.

The platform that promotes or allows for stakeholder participation in forest policy development

On September 2013, the Ministry of Environment and Natural Resources Protection of Georgia launched the National Forest Program (NFP), coordinated by the Forest Policy Division. The aim of initiation the National Forest Program was to coordinate and support the forest sector reform process in Georgia based on the new Forest Policy and according to the international standards, providing opportunities to all stakeholders to take an active part in the work and decision-making process.

The National Forest Program is the tool and process for the implementation of National Forest Concept that addresses a wide range of problems mentioned in the document and complies with existing challenges of the forest sector. The mandate of the program is to organize meetings in order to review thematic issues. It supports the elaboration of strategic documents, recommendations, draft laws, regulations etc.

Since launching the National Forest Program of Georgia, nine working groups have been created under the framework of NFP and up to 350 meetings have been held. Up to 270 representatives from 70 governmental and non-governmental organizations, the academic community, the civil society, as well as international donors and their implementing partners operating in Georgia are involved in the process.

Traceability system(s) for wood products

Since 2011 special electronic database was established connecting National Forestry Agency, Department of Environmental Supervision and Ministry of Finance of Georgia in order to insure the timber (including firewood) tracking from the forest to the final destination or processing factories. All the timber designated for industrial purposes is marked with the electronic tags containing information of the provenance, species, sizes, and volumes. Each official sawmills are obliged to register to the system and upload an information when they start processing of newly delivered timber.

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	No					

Comments

7 Employment, education and NWFP

7a Employment in forestry and logging

National Data

Data sources + type of data source eg NFI, etc

SoEF

National classification and definitions

Comply with FRA definition

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				2.12			0.69	0.09	0.60	1.70		
...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

Universities:

- Ilia State University
- Telavi Iakob Gogebashvili State University
- Georgian Agrarian University
- Georgian Technical University

National classification and definitions

Comply with FRA definition

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										2.00	0.00	2.00
Master's degree										34.00	12.00	22.00
Bachelor's degree										0.00		
Technician certificate / diploma										0.00		
Total										36.00		

Comments

The figures provided in the table are based on the information from four different universities in Georgia that have the Faculties of Natural Sciences offering forest-related education. In addition, only 3 male students have obtained Master degree in Forest Sciences from 2011 till 2018. No female students obtained the forest sciences degree during that period.

7c Non wood forest products removals and value 2015

National Data

Data sources + type of data source eg NFI, etc

- The Ministry of Environmental Protection and Agriculture of Georgia;
- National Forestry Agency's expert estimations.

National classification and definitions

The quantity of NTFPs is the quota that are given each year based on licenses, but the market values are estimated by the expert

Original data

-

	Name of NWFP product	Key species	Quantity	Unit	Value (1000 local currency)	NWFP category
#1	Seeds	Abies nordmanniana	30	tons	3 000	6 Ornamental plants
#2	Flowerbulbs	Galanthus woronowii	15	million bulbs	1 350	8 Other plant products
#3	Flowerbulbs	Cyclamen coum	40	thousand bulbs	12	8 Other plant products
#4						
#5						
#6						
#7						
#8						
#9						
#10						
All other plant products						
All other animal products						
Total					4 362	

Name of currency	GEL
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Comments

Significant amount of NWFPs are collected and traded in Georgia with no requirement of license, therefore their value is not officially calculated

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	39.73	40.62	40.62	40.62	40.62	40.62	40.62	40.62

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	0.22	0.00	0.00	0.00	0.00	0.00	0.00

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	116.50	119.34	119.34	119.34	119.34	119.34	119.34	119.34

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	7.91	7.85	9.70	–	–	9.46	–	11.19

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	–	5.70	9.18	9.18	16.34	18.94	21.99	16.09

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	–	–