GLOBAL FOREST RESOURCES ASSESSMENT 2015

COUNTRY REPORT

Lithuania

FAO, at the request of its member countries, regularly monitors the world's forests and their management and uses through the Global Forest Resources Assessment (FRA). This country report is prepared as a contribution to the FAO publication, the Global Forest Resources Assessment 2015 (FRA 2015).

The content and the structure are in accordance with the recommendations and guidelines given by FAO in the document Guide for country reporting for FRA 2015 (http://www.fao.org/3/a-au190e.pdf). These reports were submitted to FAO as official government documents.

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Introductory Text

Place an introductory text on the content of this report

FRA -2015 is based on data from the third National forest inventory (NFI) of Lithuania, completed 2008-2012 years, as well as data from forest cadastre, stand level forest inventory, forest management statistics from forest enterprises and private forests. NFI, based on regularly, every 5 years remeasured permanent plots, provides high accuracy data (1-2%) about growing stock volume, increment, its components, volume of felling, dead wood, their structure by species, forest types, size of trees. Data about felling, forest regeneration, damages of forests, economy were received from state forest enterprises and private forests. For FRA-2015 were used data from former assessments, especially FRA-2010. Data of FRA-2010 were updated using the newest NFI and stand level inventory data.

Desk Study?

Check "yes" if this survey is	a Desk Study, "no" otherwise
Desk Study?	no

1. What is the area of forest and other wooded land and how has it changed over time?

Documents for this question:

- Guide for country reporting FRA 2015
- FRA 2015 Terms and Definitions

1.1 Categories and definitions

Category	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; 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".
of which with tree cover (sub-category)	Land considered as "Other land", that is predominantly agricultural or urban lands use and has patches of tree cover that span more than 0.5 hectares with a canopy cover of more than 10 percent of trees able to reach a height of 5 meters at maturity. It includes bothe forest and non-forest tree species.
Inland water bodies	Inland water bodies generally include major rivers, lakes and water reservoirs.
Forest expansion	Expansion of forest on land that, until then, was not defined as forest.
of which afforestation (sub-category)	Establishment of forest through planting and/or deliberate seeding on land that, until then, was not defined as forest.
of which natural expansion of forest (subcategory)	Expansion of forests through natural succession on land that, until then, was under another land use (e.g. forest succession on land previously used for agriculture).
Deforestation	The conversion of forest to other land use or the longterm reduction of the tree canopy cover below the minimum 10 percent threshold.
of which human induced (sub-category)	Human induced conversion of forest to other land use or the permanent reduction of the tree canopy cover below the minimum 10 percent threshold.
Reforestation	Natural regeneration or re-establishment of forest through planting and/or deliberate seeding on land already in forest land use.
of which artificial reforestation (sub-category)	Re-establishment of forest through planting and/or deliberate seeding on land already in forest land use.

1.2 National data

1.2.1 Data sources

	References to sources of information	Variables	Years	Additional comments
1	Лесной Фонд СССР 0 1.01.1998, Москва, 1990, стр. 184, 185 (Forest Fund of USSR 01.01.1988, Moscow, 1990,pp.184, 185	Forest	1987	N/A

2	Lietuvos miškų statistika.1998 m. sausio 1 d. valstybinė apskaita (Lithuanian Forest Statistics 01.01.1998). Kaunas, 1998, 72 p.	Forest	1997	N/A
3	Lietuvos miškų valstybinė apskaita 2001 m. sausio 1d. (Lithuanian Forest Assessment. January 1 2001) Kaunas, 2001, 76 p.	Forest	2000	N/A
4	Valstybinė miškų apskaita.2004 m. sausio 1 d. (State Forest Assessment. January 1 2004). Kaunas, 2004, 95 p. (manuscript)	Forest	2003	N/A
5	Lietuvos Respublikos žemės fondas (Land fund of the Republic of Lithuania) 1998 m. sausio 1d. Vilnius, 1998, 58 p.	OWL, OL with tree	1997	N/A
6	Lietuvos Respublikos žemės fondas (Land fund of the Republic of Lithuania) 2001 m. sausio 1d., Vilnius, 2001, 82 p.	OWL, OL with tree, Official country area, Inland water bodies	2000	N/A
7	Lietuvos Respublikos žemės fondas (Land fund of the Republic of Lithuania) 2004 m. sausio 1d, Vilnius, 2004, 94 p.	OWL, OL with tree	2003	N/A
8	Vakarų Lietuvos parkų dendrofloros būklės įvertinimas. 1999m. darbų ataskaita. Kauno botanikos sodas, 1999, (manuscript)	OL with tree	1997, 2000, 2003	N/A
9	Vidurio Lietuvos parkų dendrofloros būklės įvertinimas. 2000m. darbų ataskaita. Lietuvos dendrologų draugija, 2000, (manuscript)	OL with tree	1997, 2000, 2003	N/A
10	Rytų Lietuvos parkų dendrofloros būklės įvertinimas. 2001m. darbų ataskaita. Lietuvos dendrologų draugija, 2001, (manuscript)	OL with tree	1997, 2000, 2003	N/A
11	Pietų ir pietvakarių Lietuvos parkų dendrofloros būklės įvertinimas. 2002 m. darbų ataskaita. Lietuvos dendrologų draugija, 2002, (manuscript)	OL with tree	1997, 2000, 2003	N/A

12	Valstybinė miškų apskaita.2006 m. sausio 1 d. (State Forest Assessment, January 1,2006). Kaunas, 2006, 110 p. (manuscript)	Forest	2005	N/A
13	Valstybinė miškų apskaita.2008 m. sausio 1 d. (State Forest Assessment, January 1,2008). Kaunas, 2008, 111 p. (manuscript)	Forest	2007	N/A
14	Lietuvos Respublikos žemės fondas (Land fund of the Republic of Lithuania) 2006 m. sausio 1d, Vilnius, 2006, 139 p.	OWL, OL with tree, Official country area, Inland water bodies	2005	N/A
15	Lietuvos Respublikos žemės fondas (Land fund of the Republic of Lithuania) 2008 m. sausio 1d, Vilnius, 2008, 144 p.	OWL, OL with tree, Official country area, Inland water bodies	2007	N/A
16	Lietuvos Respublikos Miškų Įstatymas. Valstybės Žinios, 2001, Nr. 35-1161, 4-13 p(The Law on Forests of Republic of Lithuania)	N/A	1990-2015	Definition of Forest
17	Information on file from Department of Forests	Reforestation by introduced species	1997-2010	N/A
18	Lietuvos nacionalinė miškų inventorizacija 2003-2007. Miškų ištekliai ir jų kaita. (Lithuanian national forest inventory 2003-2007. Forest resources and their dynamic). Kaunas, 2008, 304 p.	Reforestation,Afforestation Natural expansion of forest	2005	N/A
19	Valstybinė miškų apskaita.2011 m. sausio 1 d. (State Forest Assessment, January 1,2011). Kaunas, 2011, 124 p. (manuscript)	Forest	2010	N/A
20	Valstybinė miškų apskaita.2013 m. sausio 1 d. (State Forest Assessment, January 1,2013). Kaunas, 2023, 130 p. (manuscript)	Forest	2012	N/A
21	Lietuvos Respublikos žemės fondas (Land fund of the Republic of Lithuania) 2011 m. sausio 1d, Vilnius, 2011, 144 p.	OWL, OL with tree, Official country area, Inland water bodies	2010	N/A
22	Lietuvos Respublikos žemės fondas (Land fund of the Republic of Lithuania) 2013 m. sausio 1d, Vilnius, 2013, 144 p.	OWL, OL with tree, Official country area, Inland water bodies	2012	N/A

23	Lietuvos nacionalinė miškų inventorizacija 2008-2012. Miškų ištekliai ir jų kaita. (Lithuanian national forest inventory 2008-2012. Forest resources and their dynamic). Kaunas, 2013, 304 p.	Reforestation, Afforestation Natural expansion of forest	2010	N/A
24	National greenhouse gas emission inventory report, 1990-2011, Republic of Lithuania. Vilnius, 2013, p.666	Deforestation	2000,2005,2010	N/A

1.2.2 Classification and definitions

National class	Definition
Forest	A land area not less than 0.1 hectare in size covered with trees, the height of which in a natural site in the maturity age is not less than 5 meters, other forest plants as well as thinned or vegetation-lost forest due to the acts of nature or human activities (cutting areas, burnt areas, clearings) Forest pitches, nursery areas, forest seed orchards, raw-material bushings and plantationsforest roads, forest block, technological and fire break lines, areas covered by timber storage houses and other forest-related equipment, recreation grounds, animal feed grounds, and land assigned for afforestation is ascribed to forest land as well. Tree lines up to 10 meters of width in fields, at roadsides, water bodies, in living areas and cemeteries, single trees and bushes, parks planted and grown by man in urban and rural areas are not defined as forests.
Other wooded land (OWL)	The other bushes and tree groups, growing in fields, wetlands or close to water bodies, which are at variance with "forest "definition requirements, and not included into forest assessment and they cover bigger than 0,1 ha are ascribed to other wooded land.
Other land with trees	Urban parks, squares and gardens
Reforestation	Forest expansion, reforestation According to requirements of FRA_2015 classification
Natural expansion of forest	Forest expansion, reforestation According to requirements of FRA_2015 classification

1.2.3 Original data

Forest area			

FRA	Area (1000 hectares)										
2010 categories	1987	1997	2000	2005	2007	2010	2012				
Forest	1931	1978	2020	2121	2143	2170	2174				
Other wooded land	N/d	82	83	73	77	84	92				
Other land	N/d	4208	4165	4074	4048	4013.5	4001.5				
of which with tree cover	N/d	63	62	63	63	63	63				
Inland water bodies	262	262	262	262	262	262.5	262.5				
TOTAL	6530	6530	6530	6530	6530	6530	6530				

Forest expansion, reforestation

FRA 2010	Annu	al fore	st estab	olishme	ent (hec	tares/ y	year)								
Cate gories	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Affore station	373	495	881	163	967	1194	1136	2177	3338	4246	3257	2643	3082	4747	3614
Refo resta tion			N/ A					17950					15800		
Natural expan sion of forest			6320					5420					6487		
Ave rage	2000					2005							2010		
Affore station			575,8			_	_	2418,2					3469		
Refo resta tion			N/ A					17950					15800		

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SIOII					
of					
forest					

1.3 Analysis and processing of national data

1.3.1 Adjustment

Not applied

1.3.2 Estimation and forecasting

Forest area

"Forest", "other wooded land" and "other land with tree cover" for the 2015 is obtained by extrapolation from data of 2010 and 2012.

Forest expansion, reforestation

Not applied.

1.3.3 Reclassification

Not applied

1.4 Data

Table 1a

	Categories –		Area (000 hectares)					
			2000	2005	2010	2015		
CFRQ	Forest	1945	2020	2121	2170	2180		
CFRQ	Other wooded land	80	83	73	84	104		
CFRQ	Other land	4243	4165	4074	4013.5	3983.5		
CFRQ	of which with tree cover	63	62	63	63	63		

CFRQ	Inland water bodies	262	262	262	262.5	262.5
	TOTAL	6530.00	6530.00	6530.00	6530.00	6530.00

Table 1b

Categories		Annual forest establishment / loss (000 hectares per year)			of which of introduced species (000 hectares per year)				
	J		2000	2005	2010	1990	2000	2005	2010
CFRQ	Forest expansion	N/A	6.896	7.838	9.956	N/A	0	0	0
CFRQ	of which afforestation	N/A	0.576	2.418	3.469	N/A	0	0	0
CFRQ	of which natural expansion of forest	N/A	6.32	5.42	6.487	N/A	0	0	0
CFRQ	Deforestation	N/A	0.048	0.088	0.037	N/A	0	0	0
CFRQ	of which human induced	N/A	0.048	0.088	0.037	N/A	0	0	0
CFRQ	Reforestation	N/A	N/A	17.95	15.8	N/A	0.002	0.001	0
CFRQ	of which artificial	N/A	N/A	8.19	8.7	N/A	0.002	0.001	0

Tiers

Category	Tier for status	Tier for reported trend
Forest	Tier 3	Tier 3
Other wooded land	Tier 3	Tier 3
Forest expansion	Tier 1	Tier 3
Deforestation	Tier 3	Tier 3
Reforestation	Tier 3	Tier 3

Tier criteria

Category Tier for status		Tier for reported trend
• Forest	Tier 3 : Data sources: Either recent	Tier 3 : Estimate based on repeated
Other wooded land	(less than 10 years ago) National Forest	compatible tiers 3 (tier for status) Tier 2 :
Afforestation	Inventory or remote sensing, with ground	Estimate based on repeated compatible tier
Reforestation	truthing, or programme for repeated	2 or combination tier 3 and 2 or 1 (tier for
 Natural expansion of forest 	compatible NFIs Tier 2 : Data sources:	status) Tier 1 : Other
Deforestation	Full cover mapping / remote sensing or	
	old NFI (more than 10 years ago) Tier 1 :	
	Other	

1.5 Comments

Category	Comments related to data definitions etc	Comments on the reported trends
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Forest	Forest areas in size of 0.1 - 0.5 ha comprise approximately 7500 ha.	N/A
Other wooded land	N/A	N/A
Other land	N/A	N/A
Other land with tree cover	N/A	N/A
Inland water bodies	N/A	N/A
Forest expansion	N/A	N/A
Deforestation	N/A	N/A
Reforestation	N/A	N/A

	Other general comments to the table
N/A	

2. What is the area of natural and planted forest and how has it changed over time?

Documents for this question:

- Guide for country reporting FRA 2015
- FRA 2015 Terms and Definitions

2.1 Categories and definitions

Term	Definition
Naturally regenerated forest	Forest predominantly composed of trees established through natural regeneration.
Naturalized introduced species	Other naturally regenerated forest where the tree species are predominantly non-native and do not need human help to reproduce/maintain populations over time.
Introduced species	A species, subspecies or lower taxon occurring <u>outside</u> its natural range (past or present) and dispersal potential (i.e. outside the range it occupies naturally or could occupy without direct or indirect introduction or care by humans).
Category	Definition
Primary forest	Naturally regenerated forest of native species where there are no clearly visible indications of human activities and the ecological processes are not significantly disturbed.
Other naturally regenerated forest	Naturally regenerated forest where there are clearly visible indications of human activities.
of which of introduced species (sub-category)	Other naturally regenerated forest where the trees are predominantly of introduced species.
of which naturalized (sub-sub category)	Other naturally regenerated forest where the trees are predominantly of naturalized introduced species.
Planted forest	Forest predominantly composed of trees established through planting and/or deliberate seeding.
of which of introduced species (sub-category)	Planted forest where the planted/seeded trees are predominantly of introduced species.
Mangroves	Area of forest and other wooded land with mangrove vegetation.
of which planted (sub-category)	Mangroves predominantly composed of trees established through planting.

2.2 National data

2.2.1 Data sources

	References to sources of information	Variables	Years	Additional comments
1	Lietuvos miškų statistika.1998 m. sausio 1 d. valstybinė apskaita (Lithuanian Forest Statistics 1998.01.01). Kaunas, 1998, 72 p.	Forest	1997	N/A

2	Lietuvos miškų valstybinė apskaita 2001 m. sausio 1d. Lithuanian Forest Assessment. January 1 2001 Kaunas, 2001, 76 p.	Forest	2000	N/A
3	Valstybinė miškų apskaita. 2006 m. sausio 1 d. (State Forest Assessment, January 1 2006). Kaunas, 2006, 110 p. (manuscript)	Forest	2005	N/A
4	Valstybinė miškų apskaita.2011 m. sausio 1 d. (State Forest Assessment, January 1 2011). Kaunas, 2011, 124 p. (manuscript)	Forest	2010	N/A
5	Valstybinė miškų apskaita.2013 m. sausio 1 d. (State Forest Assessment, January 1,2013). Kaunas, 2013, 130 p. (manuscript)	Forest	2012	N/A

2.2.2 Classification and definitions

National class	Definition
All categories	According with FRA2015 definitions
N/A	N/A
N/A	N/A
N/A	N/A

2.2.3 Original data

FRA 2015 Categories	,				
Categories	1997	2000	2005	2010	2012
Primary forest	21	21	26	26	26
Other naturally regenerated forest	1517	1538	1604	1614	1602

of which of introduced species	0	0	0	0	0
Planted forest	440	461	491	530	546
of which of introduced species	3	3	3	3	3
TOTAL	1978	2020	2121	2170	2174

2.3 Analysis and processing of national data

2.3.1 Adjustment

Not applied.

2.3.2 Estimation and forecasting

The data for the 1990 were obtained, when extrapolating from data of 1997 and 2000, and data for the 2015, derived by extrapolation from data of 2010 and 2012.

2.3.3 Reclassification

Not applied.

2.4 Data

Table 2a

	Categories -		Forest area (000 hectares)				
			2000	2005	2010	2015	
CFRQ	Primary forest	20	21	26	26	26	
CFRQ	Other naturally regenerated forest	1514	1538	1604	1614	1584	
CFRQ	of which of introduced species	0	0	0	0	0	
CFRQ	of which naturalized	0	0	0	0	0	
CFRQ	Planted forest	411	461	491	530	570	

CFRQ	of which of introduced species	3	3	3	3	3
TOTAL		1945.00	2020.00	2121.00	2170.00	2180.00

Table 2b

	Primary forest converted to (000 ha)							
	1990-2000			2000-2010			2010-2015	
Other natural regeneration	Planted	Other land	Other natural regeneration	Planted	Other land	Other natural regeneration	Planted	Other land
0	0	0	0	0	0	0	0	0

Table 2c

Categories	Area (000 hectares)					
Categories	1990	2000	2005	2010	2015	
Mangroves (forest and OWL)	0	0	0	0	0	
of which planted	0	0	0	0	0	

Tiers

Category	Tier for status	Tier for reported trend
Primary forest	Tier 3	Tier 3
Other naturally regenerated forest	Tier 3	Tier 3
Planted forest	Tier 3	Tier 3
Mangroves	Tier 3	Tier 3

Tier Criteria

	·	
Category	Tier for status	Tier for reported trend
Primary forest/Other naturally regenerated forest/Planted forest	Tier 3: Data sources: Recent (less than 10 years) National Forest Inventory or remote sensing with ground truthing or data provided by official agencies or programme for repeated compatible NFIs Tier 2: Data sources: Full cover mapping/remote sensing or old NFI (more than 10 years) Tier 1: Other	Tier 3: Estimate based on repeated compatible tiers 3 (tier for status) Tier 2: Estimate based on repeated compatible tier 2 or combination tier 3 and 2 or 1 (tier for status) Tier 1: Other

2.5 Comments

Category	Comments related to data definitions etc	Comments on reported trend
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Primary forest	N/A	N/A
Other naturally regenerating forest	N/A	N/A
Planted forest	N/A	N/A
Mangroves	There are no mangroves in Lithuania	N/A

Other general comments to the table

Forests of strict reserves are assigned to primary (virgin/untouched by forest activities) forests, as forest activities are not being carried out there for some decades, except forest assessment and research.

3. What are the stocks and growth rates of the forests and how have they changed?

Documents for this question:

- Guide for country reporting FRA 2015
- FRA 2015 Terms and Definitions

3.1 Categories and definitions

Category	Definition
Growing stock	Volume over bark of all living trees with a minimum diameter of 10 cm at breast height (or above buttress if these are higher). Includes the stem from ground level up to a top diameter of 0 cm, excluding branches.
Net Annual Increment (NAI)	Average annual volume of gross increment over the given reference period less that of natural losses on all trees, measured to minimum diameters as defined for "Growing stock".
Above-ground biomass	All living biomass above the soil including stem stump branches bark seeds and foliage.
Below-ground biomass	All biomass of live roots. Fine roots of less than 2 mm diameter are excluded because these often cannot be distinguished empirically from soil organic matter or litter.
Dead wood	All non-living woody biomass not contained in the litter either standing lying on the ground or in the soil. Dead wood includes wood lying on the surface dead roots and stumps larger than or equal to 10 cm in diameter or any other diameter used by the country.
Carbon in above-ground biomass	Carbon in all living biomass above the soil including stem stump branches bark seeds and foliage.
Carbon in below-ground biomass	Carbon in all biomass of live roots. Fine roots of less than 2 mm diameter are excluded because these often cannot be distinguished empirically from soil organic matter or litter.
Carbon in dead wood	Carbon in all non-living woody biomass not contained in the litter, either standing, lying on the ground, or in the soil. Dead wood includes wood lying on the surface, dead roots and stumps larger than or equal to 10 cm in diameter or any other diameter used by the country.
Carbon in litter	Carbon in all non-living biomass with a diameter less than the minimum diameter for dead wood (e.g. 10 cm) lying dead in various states of decomposition above the mineral or organic soil.
Soil carbon	Organic carbon in mineral and organic soils (including peat) to a soil depth of 30 cm.

3.2 National data

3.2.1 Data sources

	References to sources of information	Variables	Years	Additional comments	
1	N/A	Forest, Growing stock	1987-2003	OWL established by expert	
2	Valstybės Žinios (State News) Nr.27, 2003m. kovo 19d. Lietuvos miškotvarkos taisyklės (Instructions on Lithuanian Forest management), 9 priedas	Forest	N/A	Site index classes	

3	Lietuvos miškų ištekliai (Lietuvos miškų apskaitos duomenys), (Forest recourses of Lithuania (Data on Lithuanian forest assessment) 1993 m. sausio 1 d. Vilnius, 1994. 27 p.	Forest, Growing stock	1992	N/A
4	Lietuvos miškų statistika. NMI 2000. Nacionalinų miškų inventorizacija atrankiniu metodu, III metai. Ataskaita. (Forest statistics of Lithuania. NFI 2000. National forest inventory by sampling method, III year. REPORT) Kaunas, 2001, 128 p.(Manuscript)	Growing stock, forest	2000	N/A
5	Lietuvos miškų statistika. NMI 2005. Nacionalinė miškų inventorizacija atrankiniu metodu, VIII metai. Ataskaita. (Forest statistics of Lithuania. NFI 2000. National forest inventory by sampling method, VIII year. REPORT) Kaunas, 2006, 212p.(Manuscript)	Growing stock, forest	2005	N/A
6	Lietuvos miškų statistika. NMI 2007. Nacionalinė miškų inventorizacija atrankiniu metodu, X metai. Ataskaita. (Forest statistics of Lithuania. NFI 2007. National forest inventory by sampling method, X year. REPORT) Kaunas, 2008, 219 p.(Manuscript)	Growing stock, forest	2007	Branch volume %
7	Усольцев В.А. Фитомасса лесов Северной Евразии. База данных и география. 707с., Якатеринбург, 2001 (V.A. Usoltsev. Forest biomass of Northern Eurasia. Database and geography. p. 707, Yakaterinburg, 2001.)	N/A	1990-2015	Mensuration standards for calculation of biomass
8	Усольцев В.А. Фитомасса лесов Северной Евразии. Нормативы и элементы географии. 762с. Якатеринбург, 2002 (V.A. Usoltsev. Forest biomass of Northern Eurasia. Standards of mensuration and geography. p. 762, Yakaterinburg, 2002.)	N/A	1990-2015	N/A

9	3. Усольцев В.А. Фитомасса лесов Северной Евразии. Предельная продуктивность и география. 405 с., Якатеринбург, 2003 (V.A. Usoltsev. Forest biomass of Northern Eurasia. The limits of productivity and their geography. P. 405, Yakaterinburg, 2003)		1990-2015	N/A
10	Lietuvos miškų valstybinė apskaita 2001 m. sausio 1d. (Lithuanian Forest Assessment. January, 1 2001, Kaunas, 2001)	Forest	1900,2000,2005,2010,2012	Forest distribution according to site index (for the estimations of carbon in the litter and soil layers).
11	Lietuvos nacionalinė miškų inventorizacija 2008-2012. Miškų ištekliai ir jų kaita. (Lithuanian national forest inventory 2008-2012. Forest resources and their dynamic). Kaunas, 2013, 304 p.	Growing stock, forest, increment	2010	N/A

3.2.2 Classification and definitions

National class	Definition
Growing stock	Volume over bark of all living trees more than 2 cm in diameter at breast height (or above buttress if these are higher). Includes the stem from ground level. Branches are not included.
Soil carbon	Organic carbon in mineral and organic soils (including peat) to a specified depth chosen by the country and applied consistently through the time series.
N/A	N/A
N/A	N/A

3.2.3 Original data

Growing	stock

Growing stock

FRA 2015	Volume	(million cu	bic meters	over bark	<u>.</u>)				
category	Forest					Other wo	ooded land	I	
	1990	2000	2005	2007	2010	1990	2000	2005	2010

Total growing stock	n.a.	449,5	464,6	466,7	489,8	2,4	2,5	2,2	2,5
of which coniferous	n.a.	255,0	262,7	268,8	281,9	0	0	0	0
of which broadleaved	n.a.	194,5	201,9	197,7	207,9	2,4	2,5	2,2	2,5.
Growing stock of commercial species	n.a.	449,5	464,6	466,7	489,8	2,4	2,5	2,2	2,5

Growing stock of the 10 most common species

FRA 2010	category / Specie	es name		Growing stock in forest (million cubic meters)				
Rank	Rank Scientific Common name			2000	2005	2010		
1 st	Pinus sylvestris L.	Pine	n.a.	162,9	168,1	182,8		
2 nd	Picea abies (L.) H. Karst.	Spruce	n.a.	92,0	94,5	99,0		
3 rd	Betula pubescens Ehrh.	Birch	n.a.	75,2	78,2	81,8		
4 th	Alnus glutinosa (L.) Gaertn	Alder black	n.a.	33,2	36,5	40,7		
5 th	Populus tremula L.	Aspen	n.a.	31,2	30,2	31,0		
6 th	Alnus incana (L.) Moench	Alder grey	n.a.	19,8	21,8	20,8		

7 th	Quercus robur L.	Oak	n.a.	13,4	13,6	13,3
8 th	Fraxinus excelsior L.	Ash	n.a.	11,3	10,5	8,5
9 th	Tilia cordata Mill.	Lime	n.a.	3,5	3,9	4,2
10 th	Salix caprea L.	Willow	n.a.	1,8	2,1	2,1
Remaining			n.a.	5,2	5,2	5,6
TOTAL			n.a.	449,5	464,6	489,8

Biomass stock

The Biomass stock was estimated using growing stock data compiled in the tables here below.

Carbon stock

The Carbon stock of living biomass and dead wood was estimated using biomass data compiled in table 3d. The Carbon in litter and soil was estimated using forest and OWL area compiled in Question 1.

3.3 Analysis and processing of national data

3.3.1 Adjustment

Not applied.

3.3.2 Estimation and forecasting

Biomasss stock

The Basic Wood Density of Stem wood (=0,438) for 2000 was estimated using the species composition, presented in the Table T6b. The data on growing stock were used for the estimation of biomass for 1990, 2005 and 2010 as well.

The biomass of foliage, needle and root was estimated as percentage from the total stem volume using the models, designed by V.Usolcev for separate tree species and adopted to Lithuanian stands. The biomass of branches was estimated, using native tables and data of NFI. Weighted percentages of over ground biomass were estimated as weighted percentages of stem volume of separate tree species (2000).

Tree species	Needle and foliage biomass from the stem biomass	Branch biomass from the stem biomass	Stump and root biomass from the above ground biomass	Stem volume	
	%	%	%	mill.m ³	
Pine	5	12	26	162.9	
Spruce	11	20	26	92.0	
Birch	3	16	18	75.2	
Aspen	3	13	24	31.2	
Black Alder	2	13	18	33.2	
Grey Alder	3	13	17	19.8	
Oak	3	15	25	13.4	
Ash	3	20	20	11.3	
Total:					
coniferous	22	2.1	26.0		
broadleaves	17	7.8	19.0		

For estimation of above-ground biomass, were used such factors: for coniferous -1.221, for broadleaves -1,178 from the stem biomass. It was drawn mean weighted factor for all tree species (1.202) what was applied also in calculations for 1990, 2005 and 2010 year.

For estimation of below-ground biomass were used such factors: for coniferous -0.26, for broadleaves -0.19 from the above-ground biomass. The calculated below-ground mean factor for all tree species for 2000 was 0.23 from the above-ground biomass. The same factor was used for below-ground biomass calculations for 1990, 2005 and 2010.

The volume of dead wood was estimated, using the data of national forest inventory. It was estimated that every year in coniferous stands due to self-thinning in the forest remains and are not consumed 0.6 m ³

of stems, 0.24 m ³ roots and branches ,what decay during 25-35 years. The estimated average volume of dead wood per ha is 25 m ³. In the broad-leaved stands in average 1.2 m ³ of stems and 0.4 m ³ of branches and roots remains in forests every year due to self-thinning. This volume decays during 10-15 years. The estimated average volume of dead wood per ha in broad-leaved stands is 20 m ³/ha.

The same methodical principles and average factors were used for estimation of biomass in "Other wooded lands" as well as for calculations of biomass in "Forest".

Carbon stock

- 1. The calculations of carbon in biomass were carried out, according FRA 2010 methods (Appendix 5.2). It was accepted that carbon for coniferous makes 51 % of biomass, for broadleaves -48%. Total -49.7% (rate 0.50).
- 2. The amount of carbon in litter was estimated according to standard presented in appendix 5.9 of FRA 2010 and actual distribution of Lithuanian forest sites by their humidity. There were estimated that in 2000 62.05 % of all Lithuanian coniferous forests grow in dry soils and 37.95 % in moist soils.

According to that, carbon amount in litter is:

$$((27*62.05)+(26*37.95))/100=26.62 \text{ t/ha}$$

25.22 % of broadleaved forests grow in dry and 74.78 % - in moist soils.

Carbon amount in the broadleaved forests is:

$$((28*25.22)+(16*74.78))/100=19.03 t/ha$$

Coniferous forests cover 61.16 % of total forest area of Lithuania and broadleaved forests cover the rest 38.84 %. According to that, the average carbon amount in all Lithuanian forest is:

$$((26.62*61.16)+(19.03*38.84))/100=24 t/ha$$

The estimated amount of carbon (24 t/ha) was used for calculations of carbon amount stored in "Forests" and "Other wooded land" for the year of 1990, 2005 and 2010.

3. The calculations of carbon storage in the soil was done according to standard presented in appendix 5.10 of FRA 2010 and actual distribution of Lithuanian forest by humidity and fertility. According to experts, the distribution of soils in Lithuania is:

dry HAC soils -21.9 %

dry sandy soils - 24.5 %

moist HAC soils - 26.2 %

moist spondic soils - 13.3 %

wetlands soils - 14.1 %

Applying the carbon amount for "Cold temperate" conditions, the amount of carbon, stored in 1 ha of soils in Lithuania is:

$$((21.9*50)+24.5*34)+(26.5*95)+(13.3*115)+(14.1*87))/100=72 \text{ t/ha}$$

The following amount of carbon (72 t/ha) was used in calculations for carbon amount in soils for both "Forest" and "Other wooded land" for the year of 1990, 2005 and 2010.

Growing stock

The data for "Forest" for 1990 were obtained, when extrapolating from data of 2000 and 2005, and data for the 2010, derived by extrapolation from data of 2005 and 2007.

Growing stock of "Other wooded land" for 2005 and 2010 was obtained when multiplying the adequate area of this category land (Question 1.4) by volume per ha. According to expert evaluation volume per ha of "Other wooded land" is 30 m³/ha.

Biomasss stock

The biomass of separate tree species was estimated using the Basic Wood Density of Stem wood, presented in FRA 2010, appendix 5.7. The Basic Wood Density of Stem wood (=0,438) for 2000 was estimated using the species composition, presented in the Table T6b. The data on growing stock were used for the estimation of biomass for 1990, 2005 and 2010 as well.

The biomass of foliage, needle and root was estimated as percentage from the total stem volume using the models, designed by V.Usolcev for separate tree species and adopted to Lithuanian stands. The biomass of branches was estimated, using native tables and data of NFI. Weighted percentages of over ground biomass were estimated as weighted percentages of stem volume of separate tree species (2000).

Tree species	Tree species Needle and foliage biomass from the steam biomass		Stump and root biomass from the above ground biomass	Stem volume	
	%	%	%	mill.m ³	
Pine	5	12	26	162.9	
Spruce	11	20	26	92.0	
Birch	3	16	18	75.2 31.2	
Aspen	3	13	24		
Black Alder	2	13	18	33.2	
Grey Alder	3	13	17	19.8	
Oak	3	15	25	13.4	
Ash	3	20	20	11.3	
Total:					
coniferous	coniferous 22		26.0		
broadleaves	17	7.8	19.0		

For estimation of above-ground biomass, were used such factors: for coniferous -1.221, for broadleaves -1.178 from the stem biomass. It was drawn mean weighted factor for all tree species (1.202) what was applied also in calculations for 1990, 2005 and 2010 year.

For estimation of below-ground biomass were used such factors: for coniferous -0.26, for broadleaves -0.19 from the above-ground biomass. The calculated below-ground mean factor for all tree species for 2000 was 0.23 from the above-ground biomass. The same factor was used for below-ground biomass calculations for 1990, 2005 and 2010.

The volume of dead wood was estimated, using the data of national forest inventory. It was estimated that every year in coniferous stands due to self-thinning in the forest remains and are not consumed 0.6 m^3 of stems, 0.24

m 3 roots and branches ,what decay during 25-35 years. The estimated average volume of dead wood per ha is 25 m 3 . In the broad-leaved stands in average 1.2 m 3 of stems and 0.4 m 3 of branches and roots remains in forests every year due to self-thinning. This volume decays during 10-15 years. The estimated average volume of dead wood per ha in broad-leaved stands is 20 m 3 /ha.

The same methodical principles and average factors were used for estimation of biomass in "Other wooded lands" as well as for calculations of biomass in "Forest".

Carbon stock

- 1. The calculations of carbon in biomass were carried out, according FRA 2010 methods (Appendix 5.2). It was accepted that carbon for coniferous makes 51 % of biomass, for broadleaves 48%. Total 49.7% (rate 0.50).
- 2. The amount of carbon in litter was estimated according to standard presented in appendix 5.9 of FRA 2010 and actual distribution of Lithuanian forest sites by their humidity. There were estimated that in 2000 62.05 % of all Lithuanian coniferous forests grow in dry soils and 37.95 % in moist soils.

According to that, carbon amount in litter is:

$$((27*62.05)+(26*37.95))/100=26.62 \text{ t/ha}$$

25.22 % of broadleaved forests grow in dry and 74.78 % - in moist soils.

Carbon amount in the broadleaved forests is:

$$((28*25.22)+(16*74.78))/100=19.03 \text{ t/ha}$$

Coniferous forests cover 61.16 % of total forest area of Lithuania and broadleaved forests cover the rest 38.84 %. According to that, the average carbon amount in all Lithuanian forest is:

$$((26.62*61.16)+(19.03*38.84))/100=$$
 24 t/ha

The estimated amount of carbon (24 t/ha) was used for calculations of carbon amount stored in "Forests" and "Other wooded land" for the year of 1990, 2005 and 2010.

3. The calculations of carbon storage in the soil was done according to standard presented in appendix 5.10 of FRA 2010 and actual distribution of Lithuanian forest by humidity and fertility. According to experts, the distribution of soils in Lithuania is:

dry HAC soils -21.9 %

dry sandy soils - 24.5 %

moist HAC soils - 26.2 %

moist spondic soils – 13.3 %

wetlands soils - 14.1 %

Applying the carbon amount for "Cold temperate" conditions, the amount of carbon, stored in 1 ha of soils in Lithuania is:

$$((21.9*50)+24.5*34)+(26.5*95)+(13.3*115)+(14.1*87))/100=72 t/ha$$

The following amount of carbon (72 t/ha) was used in calculations for carbon amount in soils for both "Forest" and "Other wooded land" for the year of 1990, 2005 and 2010.

Biomass and carbon stock

Not applied.

3.3.3 Reclassification

Not applied.

3.4 Data

Table 3a

			G	ck volume	e (million m ³ over bark)					
Category	Category Forest					Other wooded land				
	1990	2000	2005	2010	2015	1990	2000	2005	2010	2015

CFRQ	Total growing stock	413	449.5	464.6	489.8	515	2.4	2.5	2.2	2.5	3.1
CFRQ	of which coniferous	234.8	255	262.7	281.9	301.1	0	0	0	0	0
CFRQ	of which broadleave	178.2 ed	194.5	201.9	207.9	213.9	2.4	2.5	2.2	2.5	3.1

Table 3b

	Category/Species na	me	Growing stock in forest (million cubic meters)					
Rank	Scientific name	Common name	1990	2000	2005	2010		
1 st	Pinus sylvestris L.	Pine	150.1	162.9	168.1	182.8		
2 nd	Picea abies (L.) H. Karst.	Spruce	84.7	92	94.5	99		
3 rd	Betula pubescens Ehrh.	Birch	69.1	75.2	78.2	81.8		
4 th	Alnus glutinosa (L.) Gaertn	Alder black	28.9	33.2	36.5	40.7		
5 th	Populus tremula L.	Aspen	32.3	31.2	30.2	31		
6 th	Alnus incana (L.) Moench	Alder grey	16	19.8	21.8	20.8		
7 th	Quercus robur L.	Oak	12.8	13.4	13.6	13.3		
8 th	Fraxinus excelsior L.	Ash	10.3	11.3	10.5	8.5		
9 th	Tilia cordata Mill.	Lime	2.6	3.5	3.9	4.2		
10 th	Salix caprea L.	Willow	1.3	1.8	2.1	2.1		
Remaining			4.9	5.2	5.2	5.6		
TOTAL			413.00	449.50	464.60	489.80		

THE PRE-FILLED VALUES FOR GROWING STOCK REFER TO THE FOLLOWING THRESHOLD VALUES (SEE TABLE BELOW)

Item	Value	Complementary information
Minimum diameter (cm) at breast height of trees included in growing stock (X)	2	Minimum diameter for young planted trees with height less 1,3 m is 0 cm
Minimum diameter (cm) at the top end of stem for calculation of growing stock (Y)	0	N/A

Minimum diameter (cm) of branches included in growing stock (W)	N/A	Branches are not included in growing stock.
Volume refers to above ground (AG) or above stump (AS)	AG	N/A

PLEASE NOTE THAT THE DEFINITION OF GROWING STOCK HAS CHANGED AND SHOULD BE REPORTED AS GROWING STOCK DBH 10 CM INCLUDING THE STEM FROM GROUND LEVEL UP TO A DIAMETER OF 0 CM, EXCLUDING BRANCHES.

Table 3c

	Category		Net annual increment (m ³ per hectare and year)							
Ca			Forest							
		1990	2000	2005	2010	2015				
CFRQ	Net annual increment	N/A	N/A	5.8	5.8	6.4				
CFRQ	of which coniferous	N/A	N/A	6.6	7.2	7.3				
of which broadleaved		N/A	N/A	5	4.4	5.5				

Table 3d

Biomass (million							on metric tonnes oven-dry weight)					
Category		Forest				Other wooded land						
		1990	2000	2005	2010	2015	1990	2000	2005	2010	2015	
CFRQ	Above ground biomass	217.9	237.1	245.2	257.9	271.1	1.3	1.3	1.2	1.3	1.6	
CFRQ	Below ground biomass	50.1	54	56.4	59.3	62.4	0.3	0.3	0.3	0.3	0.4	
CFRQ	Dead wood	19.5	20.3	21.2	21.7	21.8	0.1	0.1	0.1	0.1	0.1	
TOTAL		287.50	311.40	322.80	338.90	355.30	1.70	1.70	1.60	1.70	2.10	

Table 3e

		Carbon (Million metric tonnes)									
Category		Forest					Other wooded land				
		1990	2000	2005	2010	2015	1990	2000	2005	2010	2015
CFQ	Carbon in above ground biomass	109	118.6	122.6	129	135.6	0.65	0.65	0.6	0.65	0.8

CFRQ	Carbon in below ground biomass	25.1	27	28.2	29.7	31.2	0.15	0.15	0.15	0.15	0.2
CFRQ	Subtotal Living biomass	134.1	145.6	150.8	158.7	166.8	0.8	0.8	0.75	0.8	1
CFRQ	Carbon in dead wood	9.8	10.2	10.6	10.9	10.9	0.05	0.05	0.05	0.05	0.05
CFRQ	Carbon in litter	46.7	48.5	50.9	52.1	52.2	1.9	2	1.8	2.05	2.5
CFRQ	Subtotal Dead wood and litter	56.5	58.7	61.5	63	63.1	2	2.1	1.9	2.1	2.55
CFRQ	Soil carbon	140	145.4	152.7	156.2	157	5.8	6.4	5.3	6	7.5
TOTAL		330.60	349.70	365.00	377.90	386.90	8.55	9.25	7.90	8.90	11.05

Tiers

Variable/category	Tier for status	Tier for trend		
Total growing stock	Tier 3	Tier 3		
Net annual increment	Tier 3	Tier 3		
Above ground biomass	Tier 3	Tier 3		
Below ground biomass	Tier 2	Tier 2		
Dead wood	Tier 3	Tier 3		
Carbon in above-ground biomass	Tier 3	Tier 3		
Carbon in below ground biomass	Tier 2	Tier 2		
Carbon in dead wood and litter	Tier 3	Tier 3		
Soil carbon	Tier 1	Tier 1		

Tier criteria

Category	Tier for status	Tier for reported trend	

Total growing stock	Tier 3: Data sources Recent 10 years National Forest Inventory or remote sensing with ground truthing or programme for repeated compatible NFI 10 years Domestic volume functions Tier 2: Data sources/registers and statistics modelling or old NFI 10 years or partial field inventory Tier 1: Other data sources	Tier 3: Estimate based on repeated compatible tiers 3 (tier for status) Domestic growth functions Tier 2: Estimate based on repeated compatible tier 2 or combination tier 3 and 2 or 1 tier for status Tier 1: Other
Net annual increment	Tier 3: Scientifically tested national volume and growth functions Tier 2: Selection of volume and growth functions as relevant as possible Tier 1: Other	Tier 3: Confirmation/adjustment of functions used through scientific work Tier 2: Review work done to seek alternative functions Tier: 1 Other
Biomass	Tier 3: Country-specific national or subnational biomass conversion expansion factors applied or other domestic or otherwise nationally relevant biomass studies Tier 2: Application of country specific national or sub-national biomass conversion factors from other country with similar climatic conditions and forest types Tier 1: International/regional default biomass expansion factors applied	Tier 3: Estimate based on repeated compatible tiers 3 (tier for status) Tier 2: Estimate based on repeated compatible tier 2 or combination tier 3 and 2 or 1 (tier for status) Tier 1: Other
 Carbon in above ground biomass Carbon in below ground biomass Carbon in dead wood and litter Soil carbon 	Tier 3: Country-specific national or subnational biomass conversion expansion factors applied Tier 2: Application of country specific national or subnational biomass conversion factors form from other country with similar climatic conditions and forest types Tier 1: International/regional default biomass expansion factors applied	Tier 3: Estimate based on repeated compatible tiers 3 (tier for status) Tier 2: Estimate based on repeated compatible tier 2 or combination tier 3 and 2 or 1 (tier for status) Tier 1: Other

3.5 Comments on growing stock biomass and carbon

Category	Comments related to data definitions etc	Comments on the reported trend		
Total growing stock	Reported values differs from values reported during 2005 assessment due to changes of source of data. For FRA 2005 were used stand-wise forest inventory data, for FRA 2010 - national forest inventory by sampling method data.	N/A		
Growing stock of broadleaved coniferous	N/A	N/A		
Growing stock composition	N/A	N/A		
Net annual increment	N/A	N/A		
Above-ground biomass	N/A	N/A		
Below-ground biomass	N/A	N/A		
Dead wood	N/A	N/A		

Carbon in above-ground biomass	The estimation of the Carbon stock of living biomass was based on the biomass data compiled in table T7 in the country report.	N/A
Carbon in below-ground biomass	The estimation of the Carbon stock of living biomass was based on the biomass data compiled in table T7 in the country report.	N/A
Carbon in dead wood	The estimation of the Carbon stock of dead wood was based on the biomass data compiled in table T7 in the country report. Reported Carbon volumes are not equal to reported volumes of biomass due to rounding of results.	N/A
Carbon in litter	The estimation of the Carbon in litter was based on the forest and OWL area compiled in table T1 in the country report.	N/A
Soil carbon	The estimation of the Carbon in soil was based on the forest and OWL area compiled in table T1 in the country report.	N/A

Other general comments to the table

Growing stock volume of stems up to 10 cm, contains 4 % of all growing stock volume (For. Sci. Vol.58, No 3, p.233)

4. What is the status of forest production and how has it changed over time?

Documents for this question:

- Guide for country reporting FRA 2015
- FRA 2015 Terms and Definitions

4.1 Categories and definitions

Term	Definition
Primary designated function	The primary function or management objective assigned to a management unit either by legal prescription documented decision of the landowner/manager or evidence provided by documented studies of forest management practices and customary use.
Non wood forest product (NWFP)	Goods derived from forests that are tangible and physical objects of biological origin other than wood.
Commercial value of NWFP	For the purpose of this table, value is defined as the commercial market value at the forest gate.
Category	Definition
Production forest	Forest area designated primarily for production of wood, fibre, bio-energy and/or non-wood forest products.
Multiple use forest	Forest area designated for more than one purpose and where none of these alone is considered as the predominant designated function.
Total wood removals	The total of industrial round wood removals and woodfuel removals.
of which woodfuel	The wood removed for energy production purposes, regardless whether for industrial, commercial or domestic use.

4.2 National data

4.2.1 Data sources

	References to sources of information	Variables	Years	Additional comments
1	Lietuvos miškų statistika. 1998m. sausio 1 d. (Lithuanian Forest Statistics 1998.01.01). Kaunas, 1998	Forest	1997	N/A
2	Lietuvos miškų valstybinė apskaita 2001 m. sausio 1d. (Lithuanian Forest Assessment. January 1 2001). Kaunas, 2001	Forest	2000	N/A
3	Valstybinė miškų apskaita 2006 m. sausio 1 d. (State Forest Assessment, January 1 2006). Kaunas, 2006	Forest	2005	N/A
4	Valstybinė miškų apskaita 2008 m. sausio 1 d. (State Forest Assessment, January 1 2008). Kaunas, 2008.	Forest	2007	N/A

5	Valstybinė miškų apskaita.2011 m. sausio 1 d. (State Forest Assessment, January 1,2011). Kaunas, 2011, 124 p. (manuscript)	Forest, NWFP	2010	N/A
6	Valstybinė miškų apskaita.2013 m. sausio 1 d. (State Forest Assessment, January 1,2013). Kaunas, 2013, 130 p. (manuscript)	Forest	2012	N/A

4.2.2 Classification and definitions

National class	Definition
Distribution of forest by groups and subgroups I group. Reserved forests 10 strict reserves II group. Special—purpose forests A) forests for protection of ecosystems 21 reserves 22 forests with protected nature monuments 23 forests for the Baltic Sea and Curonian Lagoon protection (1 km) 24 soil protecting (antierosion) forests B) recreational forests 25 forest parks 26 resort forest 27 city forests 28 forest of recreational sites III group. Protective forests 31 reserves 32 forests of protective zones in State parks 33 forests of buffer zones around State parks 34 forest around factories 35 forests of protective and aesthetic	N/A
value near roads 36 forests for field protection 37 forests of seed stands 38 forests of protective zones for water bodies IV group. Exploitable forests 40 exploitable forests	
N/A	N/A
N/A	N/A
N/A	N/A

4.2.3 Original data

Distribution of forest by groups and subgroups							
Name of forest by groups and subgroups	Year 1997	Year 2000	Year 2005	Year 2007	2010	2012	Comments
	ha	ha	ha	ha	ha	ha	

I'group. Reserved forests	21166	21298	25691,2	25931,0	26263,6	26292,8
strict reserves	13000	13413	25691,2	25931,0	26263,6	26292,8
strict reserves in state parks	8040	7796				
small strict reserves	126	89				
II group . Special- purpose forests	241012	243248	260617,8	261973,2	264734,6	266754,5
A) forests for protection of ecosystems						
reserves	129524	136679	161227,2	163548,1	169979,6	171553,1
forests with protected nature monuments	2329	2634	5466,1	5553,1	4671,4	4649,7
forests for the Baltic Sea and Curonian Lagoon protection (1 km)	7593	66	531,3	526,7	524,6	524,6
soil protecting (anti- erosion) forests	18038	19381	27079,3	26461,2	24661,2	24392,0
genetic reserves	2878	3234				

experimental plots	214	214					
forest stands of high productivity	616	672					
protected areas of natural resources	1200	2122					
B) recreational forests							
forest parks	44768	40234	38321,0	38402,9	31414,8	32460,5	
resort forest	3513	3513	4048,6	4049,9	4049,1	3993,4	
city forests	9669	15312	13874,4	13672,0	13069,7	12895,2	
forest of recreational sites	12091	11649	10069,9	9759,3	9987,2	10419,9	
recreational zones in state parks	8579	7538			6377,0	5866,1	
III'group. Protective forests	276576	306660	340609,8	344045,2	330258,7	331352,5	
reserves	47847	58051	83030,8	85548,7	84554,2	83836,8	
forests of protective zones in State parks	55338	57992	52081,7	54018,9	52126.3	51470,1	

forests of buffer zones around State parks	9516	10799	16699,4	17288,7	19722,7	19301,8
forest around factories	3400	1475	1756,1	1770,1	1934,8	1942,6
forests of protective and aesthetic value near roads	606	998	3046,8	3001,1	2488,9	2421,9
forests for field protection	11287	14888	21307,9	21222,1	22233,3	22586,8
forests of seed stands	150	153	1467,8	1579,3	1701,9	1670,1
forests of protective zones for water bodies	130466	144326	161219,3	159616,3	145496,6	148122,4
resort forests (zones of 3 regime)	17929	17931				
forests for science and training	37	49				
IV'group. Exploitable forests	1439681	1449127	1494033,6	1510932,4	1548515,3	1549170,5
exploitable forests in state parks	83321	88261				

commercial	1356360	1360866			
forests					

Primary designated function

FRA 2015 Categories	Forest area (1000 hectares)							
	1990	2000	2005	2007	2010	2012		
Production	1412	1466	1494	1511	1549	1549		
Protection of soil and water	171	178	210	207	192	195		
Conservation of biodiversity	160	166	193	196	201	203		
Social services	75	78	66	66	65	66		
Multiple use	127	132	158	163	163	161		
Other (please specify in comments below the table)	0	0	0	0	0	0		
No / unknown	0	0	0	0	0	0		
TOTAL	1945	2020	2121	2143	2170	2174		

4.3 Analysis and processing of national data

4.3.1 Adjustment

Not applied			

4.3.2 Estimation and forecasting

The data for the 2015 derived by extrapolation from data of 2010 and 2012

4.3.3 Reclassification

Every forest stand by its primary function is designated to 4 forest groups and 18 subgroups.

Adequacy of forests with national primary function to FRA classes is presented in below table.

National class	Definition
Production	40 Exploitable forests
Protection of soil and water	24 Soil protecting (anti-erosion) forests
	36 Forests for field protection
	38 Forests of protective zones for water bodies
Conservation of biodiversity	10 Forests of strict reserves
	21 Forests of II-d forest group reserves
	22 Forests with protected nature monuments
	23 Forests for the Baltic Sea and Curonian Lagoon protection (1 km)
Social services	25 Forest parks
	26 Resort forest
	27 City forests
	28 Forest of recreational sites
	29 R ecreational zones in state parks

31 Forests of III-d forest group reserves
32 Forests of protective zones in State parks
33 Forests of buffer zones around State parks
34 Forest around factories
35 Forests of protective and aesthetic value near roads
37 Forests of seed stands

4.4 Data

Table 4a

Categories		Forest area (000 hectares)					
Cate	gories	1990	2000	2005	2010	2015	
CFRQ	Production forest	1412	1466	1494	1549	1550	
CFRQ	Multiple use forest	127	132	158	163	163	

Table 4b

Rank	Name of product	Key species	Commercial value of NWFP removals 2010 (value 1000 local currency)	NWFP category
1 st	Mushrooms	Cantarellus cibarius Boletus edulis	29399	1
2 nd	Beries	Vaccinium myrtllus Vaccinium oxycoccus Vaccinium vitis-idaea	10892	1
3 rd	Bush meat	Alces alces Cervus elaphus Capreolus capreolus Sus ccrofa	12346	12
4 th	Cristmas trees	Picea abies	3750	6
5 th	Skins	Lepus europaeus Vulpes vulpes Nyctareutes procyonoides Castor fiber Martes martes Ondatra ziberthica Mustela vison	1354	10

6 th	Raw material for medicine	n.d.	508	13
7 th	N/A	N/A	N/A	N/A
8 th	N/A	N/A	N/A	N/A
9 th	N/A	N/A	N/A	N/A
10 th	N/A	N/A	N/A	N/A
TOTAL	-		58249.00	

2010	
Name of local currency	LITAS (LT)
	Category
Plant products / raw material	
1 Food	
2 Fodder	
3 Raw material for medicine and aromatic products	
4 Raw material for colorants and dyes	
5 Raw material for utensils handicrafts construction	
6 Ornamental plants	
7 Exudates	
8 Other plant products	
Animal products / raw material	
9 Living animals	
10 Hides skins and trophies	
11 Wild honey and beewax	
12 Wild meat	
13 Raw material for medicine	
14 Raw material for colorants	
15 Other edible animal products	

16 Other non-edible animal products

Table 4c Pre-filled data from FAOSTAT

Vaar	FRA 2015 ca	FRA 2015 category (1000 m ³ u.b.)				
Year	Total wood removals	of which woodfuel				
1990	8052.6	1808.52				
1991	0	0				
1992	3160	1376				
1993	4508	1780				
1994	3992	1736				
1995	5960	1090				
1996	5540	1230				
1997	5149	1149				
1998	4879	1170				
1999	4924	1124				
2000	5500	1450				
2001	5700	1480				
2002	6115	1295				
2003	6275	1320				
2004	6120	1260				
2005	6045	1130				
2006	5870	1230				
2007	6195	1305				
2008	5594.4	1381.81				
2009	5459.5	1782.81				
2010	7096.9	1943				
2011	8052.6	1808.52				

Tiers

Category	Tier for status	Tier for reported trend
Production forest	Tier 3	Tier 3
Multiple use forest	Tier 3	Tier 3

Tier Criteria

Category	Tier for status	Tier for reported trend
	Tier 3: Updated including field verifications national forest maps including functions Tier 2: Forest maps older than 6 years including forest functions Tier 1: Other	Tier 3: Estimate based on repeated compatible tiers 3 (tier for status) Tier 2: Estimate based on repeated compatible tier 2 or combination tier 3 and 2 or 1 (tier for status) Tier 1: Other

4.5 Comments

Category	Comments related to data definitions etc	Comments on the reported trend
Production forest	N/A	N/A
Multiple use forest	Forests of protective and aesthetic value near roads are considered as multiple purpose, but not social services forest.	N/A
Total wood removals	N/A	N/A
Commercial value of NWFP	N/A	N/A

Other general comments to the table

Different system of forest classification into groups and categories was applied in 1990, comparing to classifications, which is used now. Since 1990 were not essential changes in requirements to functional forest classification. We have accepted the same proportions of forest land classification by functions in 1990 as well as in 2000.

5. How much forest area is managed for protection of soil and water and ecosystem services?

Documents for this question:

- Guide for country reporting FRA 2015
- FRA 2015 Terms and Definitions

5.1 Categories and definitions

Category	Definition
Protection of soil and water	Forest area designated or managed for protection of soil and water
of which production of clean water (sub-category)	Forest area primarily designated or managed for water production, where most human uses are excluded or heavily modified to protect water quality.
of which coastal stabilization (sub- category)	Forest area primarily designated or managed for coastal stabilization.
of which desertification control (sub-category)	Forest area primarily designated or managed for desertification control.
of which avalanche control (sub-category)	Forest area primarily designated or managed to prevent the development or impact of avalanches on human life assets or infrastructure.
of which erosion, flood protection or reducing flood risk (sub-category)	Forest area primarily designated or managed for protecting communities or assets from the impacts of erosion riparian floods and landslides or for providing flood plain services.
of which other (sub-category)	Forest area primarily designated or managed for other protective functions.
Ecosystem services, cultural or spiritual values	Forest area primarily designated or managed for selected ecosystem services or cultural or spiritual values.
of which public recreation (sub-category)	Forest area designated or managed for public recreation.
of which carbon storage or sequestration (sub- category)	Forest area designated or managed for carbon storage or sequestration.
of which spiritual or cultural services (subcategory)	Forest area designated or managed for spiritual or cultural services.
of which other (sub-category)	Forest area designated or managed for other ecosystem services.

5.2 National data

5.2.1 Data sources

	References to source of information	Variables	Years	Additional comments
1	Lithuania FRA_2010 co report	untry Protection of soil and water ,Ecosystem services, cultural or spiritual values	1990-2005	N/A

2	Valstybinė miškų apskaita.2011 m. sausio 1 d. (State Forest Assessment, January 1,2011). Kaunas, 2011, 124 p. (manuscript)	Protection of soil and water ,Ecosystem services, cultural or spiritual values	2010	N/A
3	Valstybinė miškų apskaita.2013 m. sausio 1 d. (State Forest Assessment, January 1,2013). Kaunas, 2013, 130 p. (manuscript)	Protection of soil and water ,Ecosystem services, cultural or spiritual values	2012	N/A
4	N/A	N/A	N/A	N/A

5.2.2 Classification and definitions

National class	Definition
According 4.2.2 table	N/A
N/A	N/A
N/A	N/A
N/A	N/A

5.2.3 Original data

According to table 4.2.3

5.3 Analysis and processing of national data

5.3.1 Adjustment

5.3.2 Estimation and forecasting

Data for 2015 are extrapolated from 2010 and 2012

5.3.3 Reclassification

5.4 Data

Table 5a

Categories	Forest area (1000 hectares)
------------	-----------------------------

		1990	2000	2005	2010	2015
CFRQ	Protection of soil and water	171	178	210	192	199
CFRQ	of which production of clean water	0	0	0	0	0
CFRQ	of which coastal stabilization	155	159	183	167	174
CFRQ	of which desertification control	0	0	0	0	0
CFRQ	of which avalanche control	0	0	0	0	0
CRG	of which erosion, flood protection or reducing flood risk	16	19	27	25	25
CRQ	of which other (please specify in comments below the table)	0	0	0	0	0

	Other
N/A	

Table 5b

Cotogowies	Forest area (1000 hectares)				
Categories	1990	2000	2005	2010	2015
Ecosystem services, cultural or spiritual values	75	78	66	65	63
of which public recreation	75	78	66	65	63
of which carbon storage or sequestration	0	0	0	0	0
of which spiritual or cultural services	0	0	0	0	0
of which other (please specify in comments below the table)	0	0	0	0	0

Tiers

Category	Tier for reported trend	Tier for status
Protection of soil and water	Tier 3	Tier 3
Ecosystem services, cultural or spiritual values	Tier 3	Tier 3

Tier criteria

Category	Tier for status	Tier for reported trend
Protection of soil and water	Tier 3: High reliability data derived either from high intensity sample survey or data obtained from national or state agencies responsible for regulations or legislation relating to soil and water protection. Tier 2: Approaches based on low intensity or incomplete sample-based surveys or studies that provide data for specific areas that is extrapolated through statistical analysis to national level estimates. Tier 1: Other	Tier 3: Estimate based on repeated compatible tiers 3 (tier for status) Tier 2: Estimate based on repeated compatible tier 2 or combination tier 3 and 2 or 1 (tier for status) Tier 1: Other
 Cultural or spiritual values Public recreation Spiritual or cultural services Other 	Tier 3: High reliability data derived either from high intensity sample survey or data obtained from national or state agencies responsible for regulations. Tier 2: Approaches based on low intensity or incomplete sample-based surveys or studies that provide data for specific areas that is extrapolated through statistical analysis to national level estimates. Tier 1: Other	Tier 3: Estimate based on repeated compatible tiers 3 (tier for status) Tier 2: Estimate based on repeated compatible tier 2 or combination tier 3 and 2 or 1 (tier for status) Tier 1: Other

5.5 Comments

Category	Comments related to data definitions etc	Comments on the reported trend
Protection of soil and water	Forest subgroups 23,24,38 (t 4.2.2)	N/A
Production of clean water	N/A	N/A
Coastal stabilization	Forest subgroups 23,38	N/A
Desertification control	N/A	N/A
Avalanche control	N/A	N/A
Erosion, flood protection or reducing flood risk	Forest subgroup 24	N/A
Other protective functions	N/A	N/A
Ecosystem services, cultural or spiritual values	Forest of II b group (t 4.2.2)	N/A
Public recreation	Forest of II b group (t 4.2.2)	N/A

Carbon storage or sequestration	N/A	N/A
Spiritual or cultural services	N/A	N/A
Other ecosystem services	N/A	N/A

Other general comments to the table

T5b ...of which other - ecosystem services (Forest of II a group (t 4.2.2))

6. How much forest area is protected and designated for the conservation of biodiversity and how has it changed over time?

Documents for this question:

- Guide for country reporting FRA 2015
- FRA 2015 Terms and Definitions

6.1 Categories and definitions

Category	Definition
Conservation of biodiversity	Forest area designated primarily for conservation of biological diversity. Includes but is not limited to areas designated for biodiversity conservation within the protected areas.
Forest area within protected areas	Forest area within formally established protected areas independently of the purpose for which the protected areas were established.

6.2 National data

6.2.1 Data sources

	References to sources of information	Variables	Years	Additional comments
1	Lithuania FRA_2010 country report	N/A	1990-2005	N/A
2	Lietuvos miškų ūkio statistika 2011. Kaunas, 2011, 184 p. (Lithuanian statistical Yearbook of forestry 2011. Kaunas, 2011, p.184)	Protected areas	2010	N/A
3	Lietuvos miškų ūkio statistika 2013. Kaunas, 2013, 184 p. (Lithuanian statistical Yearbook of forestry 2013. Kaunas, 2013, p.184)	Protected areas	2012	N/A
4	Valstybinė miškų apskaita.2011 m. sausio 1 d. (State Forest Assessment, January 1,2011). Kaunas, 2011, 124 p. (manuscript)	Forest	2010	N/A
5	Valstybinė miškų apskaita.2013 m. sausio 1 d. (State Forest Assessment, January 1,2013). Kaunas, 2013, 130 p. (manuscript)	Forest	2012	N/A

6.2.2 Classification and definitions

National class	Definition
See 4.2.2.	N/A

N/A	N/A
N/A	N/A
N/A	N/A

6.2.3 Original data

See 4.2.3.

Special designation and management categories

FRA 2015 Categories	Forest area (1000 hectares)					
Categories	1990	2000	2005	2007	2010	2012
Area of permanent forest estate	1945	2020	2121	2160	2170	2174
Forest area within protected areas	n.a.	395	424	433	454	460
Forest area under sustainable forest management	1945	2020	2121	2160	2170	2174
Forest area with management plan	1945	2020	2121	2160	2170	2174

6.3 Analysis and processing of national data

6.3.1 Adjustment

Not	app	lied	
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6.3.2 Estimation and forecasting

See 4.3.2.

6.3.3 Reclassification

See 4.3.3.

6.4 Data

Table 6

Categories		Forest area (000 hectares)				
Cate	gories	1990	2000	2005	2010	2015
CFRQ	Conservation of biodiversity	160	166	193	201	205
CFRQ	Forest area within protected areas	N/A	395	424	454	460

Tiers

Category	Tier for status	Tier for reported trend
Conservation of biodiversity	Tier 3	Tier 3
Forest area within protected areas	Tier 3	Tier 3

Tier criteria

Category	Tier for status	Tier for reported trend
Conservation of biodiversity Forests within protected areas	Tier 3: Data obtained from national or state agencies responsible for conservation and protected area or legislation relating to area protection. Tier 2: Studies that provide data for specific areas that is extrapolated through statistical analysis to national level estimates Tier 1 Other	Tier 3: Estimate based on repeated compatible tiers 3 (tier for status) Tier 2: Estimate based on repeated compatible tier 2 or combination tier 3 and 2 or 1 (tier for status) Tier 1: Other

6.5 Comments

Category	Comments related to data definitions etc	Comments on the reported trend
Conservation of biodiversity	Forest subgroups 10,21,22,23	N/A
Forest area within protected areas	Include forests in: 1. Strict nature reserves, 2. Nature reserves, 3. National parks, 4. Regional parks	N/A

Other general comments to the table

Different system of forest classification into groups and categories was applied in 1990, comparing to classifications, which is used now. Since 1990 were not essential changes in requirements to functional forest classification. We have accepted the same proportions of forest land classification by functions in 1990 as well as in 2000.

7. What is the area of forest affected by woody invasive species?

Documents for this question:

- Guide for country reporting FRA 2015
- FRA 2015 Terms and Definitions

7.1 Categories and definitions

Category	Definition
-	Species that are non-native to a particular ecosystem and whose introduction and spread cause, or are likely to cause, socio-cultural, economic or environmental harm or harm to human health.

7.2 National data

7.2.1 Data sources

	References to sources of information	Variables	Years	Additional comments
1	N/A	N/A	N/A	N/A
2	N/A	N/A	N/A	N/A
3	N/A	N/A	N/A	N/A
4	N/A	N/A	N/A	N/A

7.2.2 Classification and definitions

National class	Definition
N/A	N/A

7.2.3 Original data

7.3 Analysis and processing of national data

7.3.1 Adjustment

7.3.2 Estimation and forecasting

7.3.3 Reclassification

7.4 Data

Table 7

Scientific name of	Fores	Forest area affected (000 ha)		
woody invasive species	2005	2010		
N/A	N/A	N/A		
N/A	N/A	N/A		
N/A	N/A	N/A		
N/A	N/A	N/A		
N/A	N/A	N/A		
N/A	N/A	N/A		
N/A	N/A	N/A		
N/A	N/A	N/A		
N/A	N/A	N/A		
N/A	N/A	N/A		
Total	0	0		

Tiers

Category	Tier for status	Tier for reported trend
Invasive species	Tier 3	Tier 3

Tier Criteria

Category	Tier for status	Tier for reported trend
----------	-----------------	-------------------------

	inventory or other survey (e.g. by conservation department) within the last	Tier 3: Estimate based on repeated compatible tiers 3 (tier for status) Tier 2: Estimate based on repeated compatible tier 2 or combination tier 3 and 2 or 1 (tier for status) Tier 1: Other
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7.5 Comments

Category	Comments related to data definitions etc	Comments on the reported trend	
Invasive species	There is no area of forest affected by woody invasive species in Lithuania	N/A	

	Other general comments to the table
N/A	

8. How much forest area is damaged each year?

Documents for this question:

- Guide for country reporting FRA 2015
- FRA 2015 Terms and Definitions

8.1 Categories and definitions

Category	Definition
Number of fires	Number of fires per year
Burned area	Area burned per year
Outbreaks of insects	A detectable reduction in forest health caused by a sudden increase in numbers of harmful insects.
Outbreaks of diseases	A detectable reduction in forest health caused by a sudden increase in numbers of harmful pathogens, such as bacteria, fungi, phytoplasma or virus.
Severe weather events	Damage caused severe weather events, such as snow, storm, drought, etc.

8.2 National data

8.2.1 Data sources

	References to sources of information	Variables	Years	Additional comments
1	Information from Fire and Rescue Departament	Total area of fires	2003-2012	N/A
2	Lietuvos miškų ūkio statistika 2013. Kaunas, 20, 184 p. (Lithuanian statistical Yearbook of forestry 20. Kaunas, 20, p.184)	Disturbance by Forest fires	2003-2012	N/A
3	Lietuvos miškų ūkio statistika 2013. Kaunas, 20, 184 p. (Lithuanian statistical Yearbook of forestry 20. Kaunas, 20, p.184)	Disturbance by insects, diseases, snow-wind	2007-2012	N/A
4	N/A	N/A	N/A	N/A

8.2.2 Classification and definitions

National class	Definition
All are according to FRA-2015 definitions	N/A
N/A	N/A
N/A	N/A

N/A	N/A

8.2.3 Original data

8.3 Analysis and processing of national data

8.3.1 Adjustment

8.3.2 Estimation and forecasting

8.3.3 Reclassification

8.4 Data

Table 8a

					0	000 ha, nun	aber of fire	es			
Category		20	03	2004		2005		2006		2007	
		000 ha	#	000 ha	#	000 ha	#	000 ha	#	000 ha	#
CFRQ	Total land area burned	N/A	N/A	13.301	3740	4.063	2587	33.798	8584	3.294	2465
CFRQ	of which forest area burned	0.436	885	0.253	468	0.051	301	1.199	1545	0.038	251
Category		20	08	20	09	20	10	20	11	20	12
		000 ha	#	000 ha	#	000 ha	#	000 ha	#	000 ha	#
CFRQ	Total land area burned	5	5553	13	7233	5.878	4346	5	4443	5	3856
CFRQ	of which forest area burned	0.112	301	0.315	507	0.022	110	0.293	142	0.02	81

Table 8b

Outbreak category	Description/name	Year(s) of latest outbreak	Area damaged (000 hectares)
1	Ips typographus	2007-2012	31.7
1	Diprion pini	2011	2.1
1	Dendrolimus pini	2008-2010,2012	5.6
1	Lymantria dispar	2012-2011	0.1
1	Panolis flammea	2008	0.2
1	Physocermes piceae	2009-2011	8.8
2	Ash dieback	2007-2012	24
2	Oak dieback	2007-2012	17
3	Snow,Wind	2008-2011	65
N/A	N/A	N/A	N/A

Outbreak category
1 Insects
2 Diseases
3 Severe weather events

Tiers

Category	Tier for status	Tier for trend
Area affected by fire	Tier 3	Tier 3
 Insects Diseases Severe weather events	Tier 3	Tier 3

Tier criteria

Category	Tier for status	Tier for reported trend
Burned area	Tier 3: National fire monitoring routines Tier 2: Remote sensing surveys Tier 1: Other	Tier 3: Estimate based on repeated compatible tiers 3 (tier for status) Tier 2: Estimate based on repeated compatible tier 2 or combination tier 3 and 2 or 1 (tier for status) Tier 1: Other

inventory or aerial damage assessment) Tier 2 : Management records Tier 1 :	Tier 3 : Estimate based on repeated compatible tiers 3 (tier for status) Tier 2 : Estimate based on repeated compatible tier 2 or combination tier 3 and 2 or 1 (tier for
	status) Tier 1 : Other

8.5 Comments

Category	Comments related to data definitions etc	Comments on the reported trend
Burned area	N/A	N/A
Insects	N/A	N/A
Diseases	N/A	N/A
Severe weather events	N/A	N/A

Other	general comments to the table
N/A	

9. What is the forest area with reduced canopy cover?

Documents for this question:

- Guide for country reporting FRA 2015
- FRA 2015 Terms and Definitions

Category	Definition
1.5	Forest that has undergone a reduction of canopy cover of more than 20% between the years 2000 and 2010 within the forest canopy cover range of 30-80% as detected by the MODIS VCF sensor.

Table 9

	Category	Area of forest with reduced canopy cover (000 ha)
- 1	Reduction in canopy cover	N/A

Tiers

Category	Tier for reported trend
Reduction in canopy cover	N/A

Tier criteria

Category	Tier for reported trend	
Reduction in canopy cover	Tier 3 : Remote sensing with ground truthing and/or Landsat imagery Tier 2 : Remote sensing using Modis (using pre-filled data provided by FAO) Tier 1 : Expert opinion	

Comments

Category	Comments related to data definitions etc
Reduction in canopy cover	N/A

Other general comments

10. What forest policy and regulatory framework exists to support implementation of sustainable forest management SFM?

Documents for this question:

- Guide for country reporting FRA 2015
- FRA 2015 Terms and Definitions

10.1 Categories and definitions

Category	Definition
Policies supporting sustainable forest management	Policies or strategies that explicitly encourage sustainable forest management.
Legislation and regulations supporting sustainable forest management	Legislation and regulations that govern and guide sustainable forest management, operations and use.

10.2 National data

10.2.1 Data sources

	References to sources of information	Variables	Years	Additional comments
1	Lietuvos Respublikos aplinkos ministerijos Valstybinės miškų tarnybos 2010 m. sausio 14 d. įsakymas Nr. 11-10-V "Dėl Miškotvarkos darbų vykdymo instrukcijos patvirtinimo" / Valstybės Žinios, 2010, Nr. 45-2182 (Stand Forest inventry instruction)	N/A	N/A	N/A
2	Lietuvos Respublikos miškų įstatymas (Valstybės Žinios, 1994, Nr. 96-1872; Valstybės Žinios, 2001, Nr. 35-1161) (The Republic of Lithuania Forestry Law)	legislative act	1994	N/A
3	NACIONALINĖ MIŠKŲ ŪKIO SEKTORIAUS PLĖTROS 2012–2020 METŲ PROGRAMA Patvirtinta Lietuvos Respublikos Vyriausybės 2012 m. gegužės 23 d. nutarimu Nr. 569 (National strategy of Forestry)	N/A	N/A	N/A
4	N/A	N/A	N/A	N/A

10.2.2 Classification and definitions

National class	Definition
N/A	N/A

10.2.3 Original data

10.3 Data

Table 10

Category	National	Sub-national			
		Regional	Provincial/State	Local	
Policies supporting sustainable forest management	yes	no	no	no	
of which, in <u>publicly</u> owned forests	yes	no	no	no	
of which, in <u>privately</u> owned forests	yes	no	no	no	
Legislation and regulations supporting sustainable forest management	yes	no	no	no	
of which, in <u>publicly</u> owned forests	yes	no	no	no	
of which, in <u>privately</u> owned forests	yes	no	no	no	

10.4 Comments

Variable / category	Comments related to data definitions etc
Policies supporting sustainable forest management	Legislation and regulation of sustainable forest management, requirements for forestry, forest cuttings and regeneration in state and private forests in most cases are the same.

Legislation and regulations supporting sustainable forest management	N/A
Other general comments	

11. Is there a national platform that promotes stakeholder participation in forest policy development?

Documents for this question:

- Guide for country reporting FRA 2015
- FRA 2015 Terms and Definitions

11.1 Categories and definitions

Category	Definition
National stakeholder platform	A recognized procedure that a broad range of stakeholders can use to provide opinions, suggestions, analysis, recommendations and other input into the development of national forest policy.

11.2 National data

11.2.1 Data sources

	References to sources of information	Years	Additional comments
1	APLINKOS MINISTRO ĮSAKYMAS "DĖL MIŠKŲ ŪKIO KONSULTACINĖS TARYBOS PRIE APLINKOS MINISTERIJOS SUDARYMO" 2003 m. kovo 31 d. Nr. 151 Vilnius (Advicing counsil of forestry)	2003	N/A
2	N/A	N/A	N/A
3	N/A	N/A	N/A
4	N/A	N/A	N/A

Table 11

Is there a national platform that promotes or allows for	yes
stakeholder participation in forest policy development?	

11.3 Comments

Category	Comments related to data definitions etc
National stakeholder platform	Advising council of forestry is established in the Environment Ministry. Consist from representatives of main institutions related to forestry, nongovernmental institutions, Nature organizations, private and state foresters,

Other general comments

12. What is the forest area intended to be in permanent forest land use and how has it changed over time?

Documents for this question:

- Guide for country reporting FRA 2015
- FRA 2015 Terms and Definitions

12.1 Categories and definitions

Category	Definition
Forest area intended to be in permanent forest land use	Forest area that is designated or expected to be retained as forest and is highly unlikely to be converted to other land use.
of which permanent forest estate (sub-category)	Forest area that is designated by law or regulation to be retained as forest and may not be converted to other land use.

12.2 National data

12.2.1 Data sources

	References to sources of information	Variables	Years	Additional comments
1	FRA 2010 country report	Forest	1990-2005	N/A
2	Valstybinė miškų apskaita.2011 m. sausio 1 d. (State Forest Assessment, January 1,2011). Kaunas, 2011, 124 p. (manuscript)	Forest	2010	N/A
3	Lietuvos miškų ūkio statistika 2011. Kaunas, 2011, 184 p. (Lithuanian statistical Yearbook of forestry 2011. Kaunas, 2011, p.184)	Forest area within protected areas	2010	N/A
4	N/A	N/A	N/A	N/A

12.2.2 Classification and definitions

National class	Definition
N/A	N/A

12.2.3 Original data

See 4.2.3.

Special designation and management categories

FRA 2015	Forest area (1000 hectares)				
Categories	1990	2000	2005	2007	2010
Area of permanent forest estate	1945	2020	2121	2160	2170
Forest area within protected areas	n.a.	395	424	433	454
Forest area under sustainable forest management	1945	2020	2121	2160	2170
Forest area with management plan	1945	2020	2121	2160	2170

12.3 Analysis and processing of national data

12.3.1 Adjustment

12.3.2 Estimation and forecasting

12.3.3 Reclassification

12.4 Data

Table 12

Cate	Forest area 2010 (000 ha)	
CRG	Forest area intended to be in permanent forest land use	2170
CRO	of which permanent forest estate	2170

Tiers

Category	Tier for status
Forest area intended to be in permanent forest land use	Tier 3
Permanent forest estate	Tier 3

Tier Criteria

Category	Tier for status
Forest area intended to be in permanent forest land use	Tier 3: National or sub-national land use plans strategy documents or other reports within the past 10 years Tier 2: National or sub-national land use plans strategy documents or other reports within the past 20 years Tier 1: Other
Permanent forest estate	Tier 3: National or sub-national land use plans strategy documents or other reports within the past 10 years Tier 2: National or sub-national land use plans strategy documents or other reports within the past 20 years Tier 1: Other

12.5 Comments

Category	Comments related to data definitions etc
Forest area intended to be in permanent forest land use	N/A
Permanent forest estate	N/A

Other general comments

13. How does your country measure and report progress towards SFM at the national level?

Documents for this question:

- Guide for country reporting FRA 2015
- FRA 2015 Terms and Definitions

13.1 Categories and definitions

Category	Definition
Forest area monitored under a national forest monitoring framework	Forest area monitored by a national monitoring framework or systems that provide measurement based periodic monitoring of forest extent and quality.
Forest reporting at national scale	National reporting of forest extent and characteristics that includes some measure of progress toward sustainable forest management.

13.2 National data

13.2.1 Data sources

	References to sources of information	Variables	Years	Additional comments
1	Lietuvos Respublikos Miškų Įstatymas. (The Republic of Lithuania Forestry Law)Valstybės Žinios, 2001, Nr. 35-1161, 4-13 p	Forest inventory, reports	N/A	N/A
2	Valstybinės miškų inventorizacijos atrankos metodų nuostatai, patvirtinti Aplinkos ministro 2004 m. lapkričio 8 d. įsakymu Nr. D1-570 (engl. The regulations of National Forest Inventory by sampling method approved by order No D1-570 of 8 November 2004 of the Minister of Environment of the Republic of Lithuania) (Žin., 2004, 17-6343; 2012, Nr. 16-694).	National Forest Inventory (NFI)	N/A	N/A
3	Lietuvos Respublikos aplinkos ministerijos Valstybinės miškų tarnybos 2010 m. sausio 14 d. įsakymas Nr. 11-10-V "Dėl Miškotvarkos darbų vykdymo instrukcijos patvirtinimo" / Valstybės Žinios, 2010, Nr. 45-2182	Stand Forest inventory (SFI)	N/A	N/A
4	N/A	N/A	N/A	N/A

13.2.2 Classification and definitions

National class	Definition
Forest inventory	National Forest inventory(NFI), Stand Forest inventory (SFI)
N/A	N/A
N/A	N/A
N/A	N/A

13.3 Data

Table 13a

			Check all boxes that apply					
Category	% of total forest area	Most recent year	Continuous	Periodic	Permanent ground plots	Temporary ground plots	Aerial/ remote sensing sample based	Aerial/ remote sensing full coverage
Forest inventory	100	2013	yes	yes	yes	yes	no	yes
Other field assessments	N/A	N/A						
Updates to other sources	N/A	N/A						
Expert estimate	N/A	N/A						

Table 13b

Type of forest reporting used at national scale	Check boxes that apply
1 Criteria and Indicators reporting	yes
2 Periodic national state of the forest report	yes
3 Other (please document)	no
4 None	no

	Other type of forest reporting
N/A	

13.4 Comments

Category	Comments
Periodic national state of the forest report	Annual State Forest Assessment 2. Edition "Lithuanian statistical Yearbook of forestry "
N/A	N/A
N/A	N/A

Other general comments				

14. What is the area of forest under a forest management plan and how is this monitored? Documents for this question:

- Guide for country reporting FRA 2015
- FRA 2015 Terms and Definitions

14.1 Categories and definitions

Category Definition	
Forest area with management plan	Forest area that has a long-term documented management plan, aiming at defined management goals which is periodically revised
of which for production (sub-category)	Forest management plan mainly focused on production
of which for conservation (sub-category)	Forest management plan mainly focused on conservation
Monitoring of forest management plans	Government monitoring of forest management plan implementation conducted through field visits or audits of forest management plan performance

14.2 National data

14.2.1 Data sources

	References to sources of information	Variables	Years	Additional comments
1	Lietuvos miškų statistika. 1998m. sausio 1 d. (Lithuanian Forest Statistics 1998.01.01). Kaunas, 1998	Forest	1997	N/A
2	Lietuvos miškų valstybinė apskaita 2001 m. sausio 1d. (Lithuanian Forest Assessment. January 1 2001). Kaunas, 2001	Forest	2000	N/A
3	Valstybinė miškų apskaita 2006 m. sausio 1 d. (State Forest Assessment, January 1 2006). Kaunas, 2006	Forest	2005	N/A
4	Valstybinė miškų apskaita 2011 m. sausio 1 d. (State Forest Assessment, January 1 2011). Kaunas, 2011.	Forest	2010	N/A

14.3 Data

Table 14a

Forest plan type	Forest area 2010 (000 ha)
Forest area with management plan	2170
of which for production	1879

of which for conservation	291

Table 14b

Indicate which (if any) of the following are required in forest management plans in your country	
1 Soil and water management	yes
2 High conservation value forest delineation	yes
3 Social considerations community involvement	yes

Table 14c

Percent of area under forest management plan that is monitored annually	20
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Tiers

Category	Tier for status
Forest area with management plan	Tier 3
Percent of area under forest management plan that is monitored annually	Tier 3

Tier criteria

Category	Tier for status
Forest area with management plan	Tier 3 : Reports that describe national records 5 years old or less that contain long-term forest monitoring plans Tier 2 : Industry or other records indicating the presence of a long-term forest management plan Tier 1 : Other
Percent of area under forest management plan that is monitored annually	Tier 3 : Government documentation of monitoring extent Tier 2 : Reports from forest managers or other documental sources Tier 1 : Other

14.4 Comments

Category	Comments
Forest area with management plan	N/A
N/A	N/A
N/A	N/A

15. How are stakeholders involved in the management decision making for publicly owned forests?

Documents for this question:

- Guide for country reporting FRA 2015
- FRA 2015 Terms and Definitions

15.1 Categories and definitions

Category	Definition
Stakeholder involvement	Stakeholder involvement is defined as significant inputs into at least one aspect of forest management at the operational scale

Table 15

Please indicate the type of stakeholder involvement in forest management decision making required in your country	
1. Planning phase	yes
2. Operations phase	no
3. Review of operations	no

Tiers

Category	Tier for status
Type of stakeholder inputs	Tier 3

Tier criteria

Category	Tier for status
Type of stakeholder inputs	Tier 3 : Government (national or sub-national) documentation of stakeholder inputs Tier 2 : Government (national or subnational) requirement but stakeholder inputs not documented Tier 1 : Other

15.2 Comments

Category	Comments
N/A	Forest management plans for forest enterprises and forest management schemes for county as well as general plans for country are discussed publicly with participation of representatives of society, scientists nongovernmental itstitutions
N/A	N/A
N/A	N/A

16. What is the area of forest under an independently verified forest certification scheme? Documents for this question:

- Guide for country reporting FRA 2015
- FRA 2015 Terms and Definitions

16.1 Categories and definitions

Category	Definition
FSC certification	Forest area certified under the Forest Stewardship Council certification scheme
PEFC certification	Forest area certified under the Programme for the Endorsement of Forest Certification scheme
Other international forest management certification	Forest area certified under an international forest management certification scheme with published standards and is independently verified by a third-party, excluding FSC and PEFC certification.
Certified forest area using a domestic forest management certification scheme	Area certified under a forest management certification scheme with published standards that are nationally recognized and independently verified by a thirdparty

16.2 Data

Table 16a

International forest management certification		Forest area (000 ha)						
		2000	2001	2002	2003	2004	2005	2006
CFRQ	FSC	0	0	66.14	448.57	644.8	1005.53	1007.34
CFRQ	PEFC	0	0	0	0	0	0	0
CFRQ	Other	0	0	0	0	0	0	0
		2007	2008	2009	2010	2011	2012	
CFRQ	FSC	1044.32	677.09	976.94	1033.2	1049.41	1055.35	
CFRQ	PEFC	0	0	0	0	0	0	
CFRQ	Other	0	0	0	0	0	0	

Table 16b

Domestic forest		Forest area (000 ha)						
management	t certification	2000	2001	2002	2003	2004	2005	2006
CFRQ	Not applied	0	0	0	0	0	0	0
CFRQ	N/A	0	0	0	0	0	0	0
CFRQ	N/A	0	0	0	0	0	0	0

		2007	2008	2009	2010	2011	2012	
CFRQ	Not applied	0	0	0	0	0	0	
CFRQ		0	0	0	0	0	0	
CFRQ		0	0	0	0	0	0	

Tier criteria

Category	Tier for status
International forest management certification	Tier 3: International forest management scheme records maintained by the certifying organization for the reporting year Tier 2: International forest management scheme records reported by the certifying organization for a period 2 years prior to the reporting year Tier: 1 Other
Domestic forest management certification	Tier 3: National registry reports for domestic forest management certification maintained by the certifying organization for the reporting year Tier 2: Domestic forest management scheme records reported by the certifying organization for a period 2 years prior to the reporting year Tier: 1 Other

Tiers

Category	Tier for status
International forest management certification	Tier 3
Domestic forest management certification	Tier 3

16.3 Comments

Category	Comments related to data definitions etc
Certified forest area using an international forest management certification scheme	N/A
Domestic forest management certification	Not applied

17. How much money do governments collect from and spend on forests?

Documents for this question:

- Guide for country reporting FRA 2015FRA 2015 Terms and Definitions

17.1 Categories and definitions

Category	Definition
Forest revenue	 All government revenue collected from the domestic production and trade of forest products and services. For this purpose revenue include: Goods: roundwood; sawnwood; biomass; woodbased panels; pulp and paper and non-wood forest products. Services: including concession fees and royalties, stumpage payments, public timber sales revenue taxes and charges based on forest area or yield, taxes on domestic trade and export of forest products, special levies on forestry activities and payments into forest related funds, other miscellaneous inspection, licence and administrative fees levied by forest administrations, permit and licence fees for recreation and other forest related activities.
Public expenditure on forestry	All government expenditure on forest related activities.

17.2 National data

17.2.1 Data sources

	References to sources of information	Variables	Years	Additional comments
1	Miškų urėdijų 2007 m. veiklos rodikliai. Vilnius, 2008, 64p.	Revenue	2005	N/A
2	Miško įmonių 2000m. gamybinės veiklos rodikliai. Vilnius, 2000, 58p.	Revenue, Operational expenditure	2000	N/A
3	Lietuvos Respublikos vyriausybės nutarimas Nr. 216, 2005.02.24	Operational expenditure	2005	N/A
4	Miškų urėdijų 2010 m. veiklos rodikliai. Vilnius, 2011, 19p.	Operational expenditure	2010	N/A
5	Lietuvos Respublikos vyriausybės nutarimas Nr. 103, 2010.06.07	Revenue	2010	N/A

17.3 Data

Table 17

Category	Revenues / expenditures (000 local currency)			
Category	2000	2005	2010	
Forest revenue	64033	89384	135500	

Public expenditure on forestry	12385	13000	25400
	2000	2005	2010
Name of Local Currency	LITAS (LTL)	LITAS (LTL)	LITAS (LTL)

17.4 Comments

Category	Comments related to data definitions etc
Forest revenue	Forest revenue consist of personal income tax and VAT
Public expenditure on forestry	N/A
Other general comments	N/A

Other general comments		

18. Who owns and manages the forests and how has this changed?

Documents for this question:

- Guide for country reporting FRA 2015
- FRA 2015 Terms and Definitions

18.1 Categories and definitions

Category	Definition
Public ownership	Forest owned by the State or administrative units of the public administration or by institutions or corporations owned by the public administration.
of which owned by the state at national scale (sub-category)	Forest owned by the State at the national scale or administrative units of the public administration or by institutions or corporations owned by the public administration.
of which owned by the state at the sub-national government scale (sub-category)	Forest owned by the State at the sub-national government scale or administrative units of the public administration or by institutions or corporations owned by the public administration.
Private ownership	Forest owned by individuals, families, communities, private cooperatives corporations and other business entities, private, religious and educational institutions, pension or investment funds, NGOs, nature conservation associations and other private institutions.
of which individuals (sub-category)	Forest owned by individuals and families.
of which private business entities and institutions (sub-category)	Forest owned by private corporations cooperatives companies and other business entities as well as private nonprofit organizations such as NGOs nature conservation associations, and private religious and educational institutions etc.
of which local tribal and indigenous communities (sub-category)	Forest owned by a group of individuals belonging to the same community residing within or in the vicinity of a forest area or forest owned by communities of indigenous or tribal people The community members are coowners that share exclusive rights and duties and benefits contribute to the community development.
Unknown ownership	Forest area where ownership is unknown includes areas where ownership is unclear or disputed.
Categories related to management rights of public forests	Definition
Public Administration	The Public Administration (or institutions or corporations owned by the Public Administration) retains management rights and responsibilities within the limits specified by the legislation.
Individuals households	Forest management rights and responsibilities are transferred from the Public Administration to individuals or households through long-term leases or management agreements.
Private companies Forest management rights and responsibilities are transferred from the Public Administration corporations, other business entities private cooperatives, private nonprofit institutions and as etc., through long-term leases or management agreements.	
Communities	Forest management rights and responsibilities are transferred from the Public Administration to local communities (including indigenous and tribal communities) through long-term leases or management agreements.
Other form of management rights	Forests for which the transfer of management rights does not belong to any of the categories mentioned above.

18.2 National data

18.2.1 Data sources

	References to sources of information	Variables	Years	Additional comments
1	Lietuvos privatūs miškai ir ūkininkavimas juose. (Private forests of Lithuania and their management), VMI, Kaunas, 2001, 62 p.	Forest	2000	N/A
2	Lietuvos Respublikos žemės fondas (Land fund of the Republic of Lithuania) 2006m. sausio 1d. Vilnius, 2006, 144 p.	owned by private business entities and institutions	2005	N/A
3	Valstybinė miškų apskaita.2006 m. sausio 1 d. (State Forest Assessment, January 1 2006). Kaunas, 2006, 110 p. (manuscript)	Forest	2005	N/A
4	Valstybinė miškų apskaita.2011 m. sausio 1 d. (State Forest Assessment, January 1,2011). Kaunas, 2011, 124 p. (manuscript)	Forest	2010	N/A
5	Lietuvos Respublikos žemės fondas (Land fund of the Republic of Lithuania) 2011 m. sausio 1d, Vilnius, 2011, 144 p.	owned by private business entities and institutions	2010	N/A

18.2.2 Classification and definitions

National class	Definition
1)Indigenous / tribal communities (sub-category of Private ownership)	Forest owned by communities of indigenous or tribal people.
2)Other types of ownership	Other kind of ownership arrangements not covered by the categories above. Also includes areas where ownership is unclear or disputed.
N/A	N/A
N/A	N/A

18.2.3 Original data

FRA 2015	Forest area (
Categories	1990	2000	2005	2010	
Public ownership	1945	1562	1404	1333	
Private ownership	0	458	717	837	
of which owned by individuals	0	458	705	792	
of which owned by private business entities and institutions	0	0	12	45	
of which owned by local communities	0	0	0	0	
of which owned by indigenous / tribal communities	0	0	0	0	
Other types of ownership	0	0	0	0	
TOTAL	1945	2020	2121	2170	

18.3 Analysis and processing of national data

18.3.1 Adjustment

Not applied.		

18.3.2 Estimation and forecasting

Not applied.	

18.3.3 Reclassification

Not applied.		
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18.4 Data

Table 18a

Categories		Forest area (1000 hectares)			
		1990	2000	2005	2010
CRQ	Public ownership	1945	1562	1404	1333
CFRQ	of which owned by the state at national scale	1945	1562	1404	1333
CFRQ	of which owned by the state at the sub-national government scale	0	0	0	0
CFRQ	Private ownership	0	458	717	837
CFQ	of which owned by individuals	0	458	705	792
CFRQ	of which owned by private business entities and institutions	0	0	12	45
CRQ	of which owned by local, tribal and indigenous communities	0	0	0	0
CFRQ	Unknown ownership	0	0	0	0
TOTAL		1945.00	2020.00	2121.00	2170.00

Tiers

Category	Tier for status	Tier for reported trend
Public ownership	Tier 3	Tier 3
Private ownership	Tier 3	Tier 3
Unknown ownership	Tier 3	Tier 3

Tier criteria

Category	Tier for status	Tier for reported trend	

Tier 3: National forestry statistics registers of land titles or maps on land ownership or all forest area under one ownership category that is five years old or less. Tier 2:National forestry statistics registers of land titles or maps on land ownership or questionnaires that are more than five	Tier 3: Estimate based on repeated compatible tiers 3 (tier for status) Tier 2: Estimate based on repeated compatible tier 2 or combination tier 3 and 2 or 1 (tier for status) Tier 1: Other
questionnaires that are more than five years old. Tier 1: Other	

Table 18b - Holder of management rights of public forests

Catagorias	Forest area (000 hectares)				
Categories	1990	2000	2005	2010	
Public Administration	1945	1562	1404	1333	
Individuals	0	0	0	0	
Private companies	0	0	0	0	
Communities	0	0	0	0	
Other	0	0	0	0	
TOTAL	1945.00	1562.00	1404.00	1333.00	

Category	Tier for reported trend	Tier for status
Public Administration	Tier 3	Tier 3
Individuals	Tier 3	Tier 3
Private companies	Tier 1	Tier 3
Communities	Tier 3	Tier 3
Other	Tier 3	Tier 3

18.5 Comments

Category	Comments related to data definitions etc	Comments on the reported trend
Public ownership	N/A	N/A
Private ownership	N/A	N/A
Unknown ownership	N/A	N/A
Management rights	N/A	N/A

Other general comments to the table

N/A			
1 1/1 1			

19. How many people are directly employed in forestry?

Documents for this question:

- Guide for country reporting FRA 2015
- FRA 2015 Terms and Definitions

19.1 Categories and definitions

Category	Definition
Full-time equivalents (FTE)	A measurement equal to one person working full-time during a specified reference period.
Employment in forestry	Employment in activities related to production of goods derived from forests. This category corresponds to the ISIC/NACE Rev. 4 activity A02 (Forestry and logging).

19.2 National data

19.2.1 Data sources

	References to sources of information	Variables	Years	Additional comments
1	Lietuvos Miškų ūkio statistika 2003. Kaunas, 2003, 112 p. (Lithuanian statistical yearbook of Forestry 2003. Kaunas, 2003, p.112)	N/A	1990, 2000	N/A
2	Lietuvos miškų ūkio statistika 2008. Kaunas, 2008, 152 p. (Lithuanian statistical Yearbook of forestry 2008. Kaunas, 2008, p.152)	N/A	2005	N/A
3	Information from State Service of Protected Areas	N/A	2005	N/A
4	Lietuvos miškų ūkio statistika 2011. Kaunas, 2011, 184 p. (Lithuanian statistical Yearbook of forestry 2011. Kaunas, 2011, p.184)	N/A	2010	N/A

19.2.2 Classification and definitions

National class	Definition
N/A	N/A

19.2.3 Original data

FRA 2005 Categories	Employment (1000 person-years)			
Categories	1990	2000	2005	2010
Employment in forestry activities	14,6	13,7	9,8	9,0

19.3 Data

Table 19

Category		Employment (000 years FTE)			
Category		1990	2000	2005	2010
CFRQ	Employment in forestry	14.6	13.7	9.8	9
CFRQ	of which female	N/A	N/A	N/A	N/A

19.4 Comments

Category	Comments related to data definitions etc	Comments on the reported trend
Employment in forestry	Only includes paid employment in forestry activities	N/A

Other general con	aments to the table
N/A	

20. What is the contribution of forestry to Gross Domestic Product (GDP)?

Documents for this question:

- Guide for country reporting FRA 2015
- FRA 2015 Terms and Definitions

20.1 Categories and definitions

Category	Definition
Gross value added from forestry (at basic prices)	This category corresponds to the ISIC/NACE Rev. 4 activity A02 (Forestry and logging).

20.2 Data

Table 20 (Pre-filled data from UNdata/EUROSTAT)

Category	Million	Currency	Year for latest available information
Gross value added from forestry (at basic prices)	479.7	litas	2010

20.3 Comments

Category	Comments
N/A	N/A

21. What is forest area likely to be in the future

Documents for this question:

- Guide for country reporting FRA 2015
- FRA 2015 Terms and Definitions

21.1 Categories and definitions

Category	Definition
Government target/ aspiration for forest area	Government target/aspiration for forest area for a specific year.
Forests earmarked for conversion	Forest area that is allocated/classified or scheduled to be converted into non-forest uses.

21.2 National data

21.2.1 Data sources

	References to sources of information	Variables	Years	Additional comments
1	NACIONALINĖ MIŠKŲ ŪKIO SEKTORIAUS PLĖTROS 2012–2020 METŲ PROGRAMA Patvirtinta Lietuvos Respublikos Vyriausybės 2012 m. gegužės 23 d. nutarimu Nr. 569	N/A	2012	N/A
2	N/A	N/A	N/A	N/A
3	N/A	N/A	N/A	N/A
4	N/A	N/A	N/A	N/A

21.3 Data

Table 21a

Category	Forest area (000 ha)		
Category	2020	2030	
Government target/aspiration for forest area	2233.0	N/A	

Table 21b

Category	Forest area (000 ha)	
Category	2013	
Forests earmarked for conversion	0	

21.4 Comments

Category	Comments
Government target/aspiration for forest area	N/A
Forests earmarked for conversion	N/A

Other genera	l comments
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