GLOBAL FOREST RESOURCES ASSESSMENT 2015

COUNTRY REPORT

Albania

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

Introductory Text

Place an introductory text on the content of this report

No report has been received from the country. This report is the result of a desk study prepared by the FRA secretariat in Rome, which is based on the existing available information using the established format for FRA 2015/CFRQ format

Forests are crucial for the well-being of humanity. They provide foundations for life on earth through ecological functions, by regulating the climate and water resources and by serving as habitats for plants and animals. Forests also furnish a wide range of essential goods such as wood, food, fodder and medicines, in addition to opportunities for recreation, spiritual renewal and other services.

At present, the forests are under pressure from increasing demands of land-based products and services, which frequently lead to the conversion or degradation of forests into unsustainable forms of land use. When forests are lost or severely degraded, their capacity to function as regulators of the environment is also lost, increasing flood and erosion hazards, reducing soil fertility and contributing to the loss of plant and animal life. As a result, the sustainable provision of goods and services from forests is jeopardized.

At the present days of the global changes due of Green House Gases increasing mainly of the carbon in atmosphere, forest play an important role for its sequestration and therefore, abatement of global change effect which are its increasing after-effect.

Also, the forests play the main role of water regulator on the earth and for drinking water security, to produce electric energy and to control the land by water erosion. Disappearance of the forest induce with itself land poverty and human spirit, its consequences are disability to get the sustainable development, poverty and human emigration.

In these conditions mankind is trying to be in consensus without the forest is impossible to protect the life on our planet.

Sustainably managed forests have multiple environmental and socio-economic functions important at the global, national and local scales, and play a vital part in sustainable development. Reliable and up-to-date information on the state of forest resources - not only on area and area change, but also on such variables as growing stock,

wood and non-wood products, carbon, protected areas, use of forests for recreation and other services, biological diversity and forests' contribution to national economies - is crucial to support decision-making for policies and programmes in forestry and sustainable development at all levels.

FAO, at the request of its member countries, regularly monitors the world's forests and their management and uses through the Forest Resources Assessment Programme. This country report forms part of the Global Forest Resources Assessment 2010 (FRA 2010).

The reporting framework for FRA 2010 is based on the thematic elements of sustainable forest management acknowledged in intergovernmental forest-related fora and includes variables related to the extent, condition, uses and values of forest resources, as well as the policy, legal and institutional framework related to forests. More information on the FRA 2010 process and the results - including all the country reports - is available on the FRA Web site (www.fao.org/forestry/fra).

The Global Forest Resources Assessment process is coordinated by the Forestry Department at FAO headquarters in Rome.

Descriptions on forests and their harvests have been written from the ancient times, from native and foreign authors, but the figures on forest situation of Albania begun to keep during the 1912-18 years and during the first world war years by Austrians and during the 30-th years and the second world war years of last century by Italians, but not totally for all country, based to topographical maps prepared by them and no to an inventory of our forests.

More exact figures on forest situation have begun to have after the first forest inventory carried out during the years 1947-1953 based to topographical maps and collected informations by the forestry specialist teams during the surveyings and samplings in the forest areas.

Other inventories are carried out during the years 1967-1969 and 1984-1985 also, was carried out a landcovery with contemporaneous remote sensing method during the 1997 and 2003 years. Also starting from the year 1972 and at present by the forestry cadastre is made annual update of the forest situation figures. Unfortunately the figures of both remote sensing landcovery have remained unused, yet, because the forest area resulted the largest (less more than 1500000 hectare while after the forest inventory of 1984-1985 years and annual updating resulted less more than 1000000 hectare) and therefore, annual updating started from 1972 year and is continuing basing to the figures of forest inventory carried out during the years 1984-1985.

During the forest inventories of the 1967-1969 and 1984-1965 years were prepared the inventory plans (second level of forest assessment plans). These inventory plans hold all figures and all ideas on management of the forest like assessment plans, but there are not any action plans and costs, too, to fill up it.

Also, assessment plans to manage the forests started to prepare from the 50-th years for each one state high stem forest units (3000-5000 hectares), after the natural boundaries. These last years has started to prepare the forest management plans for each one commune and village forest unit, after their administrative boundaries.

International and European Organisms as Food and Agriculture Organization (FAO), Wood Section of United Nation Economic Commission for Europe-Geneva (UNECE/FAO), Ministerial Conference for Forest Protection in Europe (MCPFE) etc for each alternate changed 5 years after the methodologies discussed and approved by all participator countries, monitor sustainable forestry development in the European and World scales.

Without information have not the development.

The figures on forest situation are necessary to monitor and to verify their sustainable development and, to correct sustainable development strategies and programmes when result is endangered to get not and when must be improved.

Also, the figures on forest situation are very necessary to make the studies and to calculate on biomass, carbon, bioenergy production, wood and non-wood productions and services that they have to improve quality of life, to fight against global changes and poverty and emigration in the limited land area conditions to live.

We are not the land owners but its users, only and like the best paterfamilias must to let improved to future generations.

Desk Study?

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

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 *(sub-category)*	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	ARFCSCFF. 1991-1998. Annual Reports of Forest Cadastre on Situation of Country Forest Fund. 1991-1999. Institute of Forest and Pasture Researches	-Forest area -High stem forest -Coppice -Other forest area -Brushes Afforestation Reforestation Natural expansion of forest	1990-1998	N/A
2	ARFCSCFF. 1999-2005. Annual Reports of Forest Cadastre on Situation of Country Forest Fund. 2000-2004. General Directory of Forest and Pastures.	-Forest area -High stem forest -Coppice -Other forest area -Brushes Afforestation Reforestation Natural expansion of forest	1999-2005	N/A
3	ARFCSCFF. 2006-2007. Annual Reports of Forest Cadastre on Situation of Country Forest Fund. 2006-2007. Directory of Forest Development Policies	-Forest area -High stem forest -Coppice -Other forest area -Brushes Afforestation Reforestation Natural expansion of forest	2006-2007	N/A
4	N/A	N/A	N/A	N/A

1.2.2 Classification and definitions

National class	Definition
Forest area	Item 2/21.
High stem forest area	Area covered by seed regenerated forest
Coppice area	Area covered by sprouts regenerated forest
Bushes area	Item 2/26.
Other forest area	Item 2/7.
N/A	*Our definitions on Forest area and Other forest area were approved by the law no.9385, date 04.05.2005 (items 2/7, 21, 26, 28) on forest and policy of forest service and it amended no.9791, date 23.07.2007. **High stem forest and Coppice forest areas are subclasses of forest area also, bushes area were included in Other wooded land area.
N/A	FRA definitions to form the classes from national data were used.
Afforestation	Establishment of forest through planting and/or deliberate seeding on land that, until then, was not classified as forest.
Reforestation	Re-establishment of forest through planting and/or deliberate seeding on land classified as forest.
Natural expansion of forest	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).

1.2.3 Original data

Forest area

	Forest Cover in "000" ha		
	1990	2000	2005
Forest	788.8	769.3	782.4
-High stem	486.5	459.6	458.3
-Coppice	302.3	3097	324.1
Other forest area	NDA	23.9	23.8
Brushes	255.9	254.5	257.8
Other	1695	1692	1676
Inland water bodies	135	135	135
Total Area of Country	2875	2875	2875

Forest expansion, reforestation

	Forest Area in "000" ha		
	1990	2000	2005
Afforestation			
Reforestation	3.15	0.11	0.23
Natural expansion of forest	NDA	NDA	NDA
TOTAL	3.15	0.11	0.23

1.3 Analysis and processing of national data

1.3.1 Adjustment

Forest area

The areas were checked with total area of land according to United Nations Organization Statistics.

Forest expansion, reforestation

Need not

1.3.2 Estimation and forecasting

Forest area

Estimation and forecasting

1990-2007 reported

2010 and 2015   evaluated by mean of regression:

Category	Area in 000 ha forecasted for 2010
Forest	**776.3**
Bushes	**255.2**

Estimation and forecasting

1990-2007 reported

2010 and 2015 evaluated by mean of regression.

Forecasting for the years 2010 by mean of the found regression amongst the figures for each one-year with number of year was made.

After replacing for X=5 corresponds for the year 2010 the respectively prognosed figures, was found.

The found regressions are following:

Forest $\qquad y = 0.0014x3 + 0.2366x2 - 4.7567x + 793.99 \qquad R^2 = 0.9171$

$\qquad$ High stem $\qquad y = 0.001x3 + 0.0772x2 - 3.5148x + 489.35 \qquad R^2 = 0.9825$

forests

$\qquad$ Coppice forests $\ y = 0.0005x3 + 0.1594x2 - 1.2419x + 304.64 \qquad R^2 = 0.9467$

Bushes $\qquad y = -0.0021x3 + 0.0831x2 - 0.6731x + 256.71 \qquad R^2 = 0.7073$

$\qquad$ Other forest $\qquad y = -0.006x3 - 0.0224x2 + 3.7064x - 7.1113 \qquad R^2 = 0.9164$

$\qquad$ Área

For forecasting of figures of the years 2010 and 2015 in table 1a, x=5 and x=10 were respectively employed.

Forest expansion, reforestation

Not needed.

1.3.3 Reclassification

Forest area

Reclassification				
National classes	Percentage of national classes belong to FRA classes			
Classes	Forest	Other wooded land	Other land with forest tree	Other land
Forest				
-High stem	100			
-Coppice	100			
Other forest area				100
Shrubs		100		
Other				100

Forest expansion, reforestation

Need not

1.4 Data

Table 1a

	Categories	Area (000 hectares)				
		1990	**2000**	**2005**	**2010**	**2015**
CFRQ	Forest	788.8	769.3	782.4	776.3	771.5
CFRQ	Other wooded land	256	255	258	255.2	256.2
CFRQ	Other land	1695	1716	1700	1708.5	1712.3
CFRQ	... of which with tree cover	N/A	N/A	N/A	N/A	N/A
CFRQ	Inland water bodies	135	135	135	135	135
	TOTAL	2874.80	2875.30	2875.40	2875.00	2875.00

Table 1b

	Categories	Annual forest establishment / loss (000 hectares per year)				...of which of introduced species (000 hectares per year)			
		1990	**2000**	**2005**	**2010**	**1990**	**2000**	**2005**	**2010**

CFRQ	Forest expansion	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
CFRQ	... of which afforestation	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
CFRQ	... of which natural expansion of forest	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
CFRQ	Deforestation	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
CFRQ	... of which human induced	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
CFRQ	Reforestation	2.89	0.09	0.22	N/A	N/A	N/A	N/A	N/A
CFRQ	... of which artificial	2.89	0.09	0.22	N/A	0.01	0.08	0.12	N/A

Tiers

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

Tier criteria

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

1.5 Comments

Category	Comments related to data definitions etc	Comments on the reported trends
Forest	Our definition is some different but processing were made adaptable.	Forest area for the 2010 year prognoses to be less than it of the 1990 year but larger than it of the 2000 year and less than it of 2005 year.

Other wooded land	Our definition is some different but adaptable. Except it, in agree with the definition, in this area was included also the forest area treated with clearing cutting but that was not regenerated naturally and by reforestations, too, but prognosed to remain the forest.	Other wood land area for the 2010 year prognoses to be less than it of the 1990 year but larger than it of the 2000 year and less than it of the 2005 year.
Other land	There were included all other areas that are not included in the forests, Other wooded lands and Inland water bodies.	Other land area for the 2010 year prognoses to be more than it of the 1990 year but less than it of the 2000 year and more than it of the 2005 year.
Other land with tree cover	N/A	N/A
Inland water bodies	There was used the same FAO's definition and figures.	Inland water bodies prognoses to remain unchanged.
Forest expansion	N/A	N/A
Deforestation	N/A	N/A
Reforestation	The figures of annual forest establishment hectares/year show the planted area every year during the respective years of the 1990-2005 years period.	Last years reforestation area was increased but the lowest than those before and during the first years of ninety years, yet.

Other general comments to the table
To introduced species were included the reforestations established with Black locust (Robinia pseudoacacia L.) specie and Poplar hybrids (Populus x euroamericana (Dode) Guinnier I 214).

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 outside 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	ARFCSCFF. 1991-1998.Annual Report of Forest Cadastre on Situation of Country Forest Fund. 1991-1999. Institute of Forest and Pasture Researches	Primary forest Other naturally regenerated forests Other naturally regenerated forest of introduced species Planted forest Planted forest of introduced species	1990-1998	N/A

2	ARFCSCFF. 1999-2005. Annual Report of Forest Cadastre on Situation of Country Forest Fund. 2000-2005. General Directory of Forest and Pastures.	Primary forest Other naturally regenerated forests Other naturally regenerated forest of introduced species Planted forest Planted forest of introduced species	1999-2005	N/A
3	ARFCSCFF. 2006-2007. Annual Reports of Forest Cadastre on Situation of Country Forest Fund. 2006-2007. Directory of Forest Development Policies	Primary forest Other naturally regenerated forests Other naturally regenerated forest of introduced species Planted forest Planted forest of introduced species	2006-2007	N/A
4	N/A	N/A	N/A	N/A

2.2.2 Classification and definitions

National class	Definition
Primary forest	Virgin forests or undisturbed by man activity
Other naturally regenerated forests	Naturally regenerated forests by seed or sprouts after the applied cutting systems in the native specie forests.
Other naturally regenerated forest of introduced species	Naturally regenerated forests by seed or sprouts after the applied cutting systems in the introduced specie forests.
Planted forest	Man-made forests by native and introduced species
Planted forest of introduced species	Man-made forests by introduced species
Mangroves	There are not in ALBANIA

2.2.3 Original data

Forest Area in "000" ha			
	1990	2000	2005
Primary	84.8	84.8	84.8
Other naturally regenerated forest	600.7	588	599.4
Planted forest	103.3	96.4	98.2
...of which of introduced species	12.98	4.85	5.47
TOTAL	788.8	769.2	782.4

Other wooded land Area in "000" ha			
	1990	2000	2005
Primary			
Other naturally regenerated other wooded land	254.2	253.7	257.3
Planted other wooded land	1.7	0.77	0.47
...of which of introduced species	1.05	0.18	0.15
TOTAL	255.9	254.5	257.8

2.3 Analysis and processing of national data

2.3.1 Adjustment

Need not

2.3.2 Estimation and forecasting

Estimation and forecasting

1990-2005 reported

2010 evaluated by mean of regression.

Forecasting for the years 2010 and 2015 by mean of the found regression amongst the figures for each one-year with number of year was made.

After replacing for X=5 corresponds for the year 2010 (and for 2015, x=10) the respectively prognosed figure, was found.

The found regressions are following:

Forest $y = 0.0014x^3 + 0.2356x^2 - 4.7385x + 793.96$ $R^2 = 0.9177$

Primary $y = 5E\text{-}15x + 84.8$ $R^2 = \#N/A$

Other naturally regenerated $y = 0.0027x^3 + 0.0097x^2 - 0.7825x + 600.85$ $R^2 = 0.1563$

Other naturally regenerated

of introduced species

Planted forest

Planted forest of

introduced species

Rubber plantations

Mangroves

Bamboo

Other wooded land $y = -0.002x3 + 0.0822x2 - 0.6688x + 256.72$ $R2 = 0.6964$

Primary

Other naturally regenerated $y = -0.0136x3 + 0.3969x2 - 2.8394x + 257.19$ $R2 = 0.6292$

Other naturally regenerated

of introduced species

Planted other wooded land $y = 0.0116x3 - 0.3147x2 + 2.1708x - 0.4721$ $R2 = 0.4134$

Planted other wooded land of $y = -0.0001x3 + 0.0097x2 - 0.2008x + 1.4126$ $R2 = 0.9087$

introduced species

Rubber plantations

Mangroves

Bamboo

For forecasting of figures of the years 2010 and 2015 in table 1a, x=5 and x=10 were respectively employed.

2.3.3 Reclassification

Need not

2.4 Data
Table 2a

Categories	Forest area (000 hectares)				
	1990	2000	2005	2010	2015

CFRQ	Primary forest	84.8	84.8	84.8	84.8	84.8
CFRQ	Other naturally regenerated forest	600.7	588	599.4	597.5	596.7
CFRQ	... of which of introduced species	0	0	0	0	0
CFRQ	... of which naturalized	N/A	N/A	N/A	N/A	N/A
CFRQ	Planted forest	103.3	96.4	98.2	94	90
CFRQ	... of which of introduced species	13	4.9	5.5	7.4	N/A
TOTAL		788.80	769.20	782.40	776.30	771.50

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

Table 2c

Categories	Area (000 hectares)				
	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 1	Tier 1
Other naturally regenerated forest	Tier 1	Tier 1
Planted forest	Tier 1	Tier 1
Mangroves	Tier 1	Tier 1

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
Primary forest	The figures were based to a study carried out at during the 1996-1997 by financial supporting of World Bank in the framework of the project on Forestry Development in ALBANIA.	Will remain unchanged.
Other naturally regenerating forest	The figures represent all forest area regenerated by seeds and sprouts without changed the naturally forest species composition.	Prognosed to change with up and down fluctuations values.
Planted forest	The figures were taken by the annual updated report on forest situation from Forest Cadastre (that has remained to found the forest, after planted).	Prognosed to change with up and down fluctuations values.
Mangroves	N/A	N/A

Other general comments to the table
N/A

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	ARFCSCFF. 1991-1998. Annual Report of Forest Cadastre on Situation of Country Forest Fund. 1991-1999. Former Institute of Forest and Pasture Researches	Growing stock Growing stock of commercial species	1990-1998	N/A

2	ARFCSCFF. 1999-2005. Annual Report of Forest Cadastre on Situation of Country Forest Fund. 2000-2005. General Directory of Forest and Pastures.	Growing stock Growing stock of commercial species	1999-2005	N/A
3	ARFCSCFF. 2006-2007. Annual Reports of Forest Cadastre on Situation of Country Forest Fund. 2006-2007. Directory of Forest Development Policies	Growing stock Growing stock of commercial species	2006-2007	N/A
4	N/A	Biomass calculation was made basing to the figures of growing stock. Carbon calculation was made basing to the figures of biomass.	N/A	N/A

3.2.2 Classification and definitions

National class	Definition
Growing stock	Volume over bark of all living trees more than X cm in diameter at breast height (or above buttress if these are higher). Includes the stem from ground level or stump height up to a top diameter of Y cm, and may also include branches to a minimum diameter of W cm.
Above-ground biomass	Same as FRA2015
Below-ground biomass	Same as FRA2015
Dead wood	Same as FRA2015
Carbon in above-ground biomass	Same as FRA2015
Carbon in below-ground biomass	Same as FRA2015
Carbon in dead wood	Same as FRA2015
Carbon in litter	Same as FRA2015
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.

3.2.3 Original data

	Forest (million cubic meters over bark)		
	1990	2000	2005

Growing stock	75.2	75.8	74.4
Commercial growing stock	75.2	75.8	74.4
TOTAL	75.2	75.8	74.4

	OWL Volume (million cubic meters over bark)		
	1990	2000	2005
Growing stock	6.9	8	7.9
Commercial growing stock	6.9	8	7.9
TOTAL	6.9	8	7.9

	1990	2000	2005
1.Fagus silvatica	37.8	37.9	37.2
2.Quercus sp.	15.1	14.3	14.5
3. Pinus nigra Arn	10.4	11.4	10.6
4.Other broadleaves	4.6	4.4	4.5
5.Abies alba L.- Silver fir	3.9	4	3.8
6.Other coniferous	3.5	3.8	3.7
TOTAL	75.2	75.8	74.4

	GS OWL (Million cubic meters)		
	1990	2000	2005
7.Carpinus orientalis	2.9	3.2	2.9
8.Arbutus unedo	2.1	2.5	2.6
9.Other shrubs	1.9	2.3	2.4
TOTAL	6.9	8	7.9

Forest Biomass (million metric tones oven-dry weight)			
	1990	2000	2005
Above-ground biomass	74.6	74.8	73.2
Below-ground biomass	23.8	23.8	23.4
Dead wood biomass	28.9	28.2	28.6
TOTAL	127.3	126.8	125.2

OWL Biomass (million metric tones oven-dry weight)			
	1990	2000	2005
Above-ground biomass	7.5	8.7	6.1
Below-ground biomass	21.3	24.7	17.3
Dead wood biomass	9.6	9.6	10.3
TOTAL	38.4	43	33.7

Thresholds used by the country are the following:

Biomass was calculated after the Guidelines for Country Reporting to FRA 2010 and Methodologies of International Panel of Climate Change, 1996 and 2003 years. Above-ground biomass was calculated multiplying the growing stock of each one specie with their dry matter gravity weight getting from regional study (Published to Arboricoltura da legno,Pioppicoltura No.8.Agosto,1973,P.192-Itali/Arboriculture of wood, Poplar Cultivation no.8. August, 1973, P.192-Italy) and with biomass expansion factor (over bark) (after Table 5.8) as follow, were used:

	Gravity weight	Biomass
	Ton dry matter/m^3	expansion factor
Fresh volume	(over bark)	

Coniferous	0.60	1.3
Pinus nigra Arn.-Black pine	0.65	
Abies alba Mill.-Silver fir	0.47	
Other coniferous	0.65	
Broadleaves	0.75	1.4
Fagus silvatica L.-Beech	0.74	
Quercus sp.L.-Oaks	0.82	
Quercus vallonea L.	0.93	
Other broadleaves	0.62	
Bushes		1.0
Carpinus orientalis L.-Hornbeam	0.85	
Arbutus unedo L.-Strawberry	0.70	
Other bushes	0.77	

Below-ground biomass was calculated using reports with above-ground biomass (after Table 5.3), as follow:

Coniferous

Pinus nigra Arn.-Black pine	0.32
Abies alba Mill.-Silver fir	0.32
Other coniferous	0.32
Broadleaves	
Fagus silvatica L.-Beech	0.26
Quercus sp.L.-Oaks	0.43
Quercus vallonea L.	0.43
Other broadleaves	0.43
Bushes	2.83
Carpinus orientalis L.-Hornbeam	2.83

Arbutus unedo L.-Strawberry	2.83
Other bushes	2.83

The report 0.43 instead of 0.35 for oak forests selected because our oak forest have the average above ground biomass more less 75 t/ha $^{-1}$ therefore, we have selected the value of other broadleaf forest with average above ground biomass more less 75 t/ha $^{-1}$ (Appendix 5-Table 5.3).For bushes value 2.83 was taken to the Table 5.5 of FRA 2005 Guide.

Carbon stock

Carbon in above-ground, in below-ground and in dead wood after the Guidelines for Country Reporting to FRA 2010 and Methodology of International Panel of Climate Change, multiplying the calculated biomass with carbon factor 0.50, was calculated.

Carbon in litter multiplying the forest area after specie groups with their carbon density of forest floor litter (after Table 5.9), was calculated.

	Carbon density of forest floor litter
	Mg C ha $^{-1}$
Broadleaf	
Deciduous	13
Needle leaf	
Evergreen	22

Soil carbon to a depth of 0-30 Cm passing the steps as follow, was calculated.

-Identification of Albania after the climate region.

According to average annual growing season temperature with 10-20 ^{0} C and with annual precipitation near or exceeding potential evapotranspiration the Albanian territory in the Region Warm Temperate, Moist (after Table 5.1),was included.

-The figures of forest land area after USDA land classification from Pandi ZDRULI (March 1995)-Benchmark Soils of ALBANIA Volume I: Soils and agro-ecosystem assessment were taken. After it the forest land area in Inceptisols, Entisols, Mollisols and Sandy soils (Entisols-Ustipsamments, Xeropsamments) land orders, were included.

According to APPENDIX 5-Table 5.10 of the Guidelines for Country Reporting to FRA 2010 these land orders over in high clay activity soils, were included while Entisols-Ustipsamments, Xeropsamments in Sandy soils, were included.

-According to this classification of soil, their activity depending from clay content resulted:

	Soil organic C stock Ton C/ha^{-1}
Forest area	
High clay activity soils	88
Sandy soils	34
Other wooded land area	
High clay activity soils	63

-Multiplying the soil areas after activities with their soil carbon stock in Ton C/ha^{-1}

the soil carbon in a depth 0-30 Cm, we have won. Results are in the second table 's no.8.2.4 in FRA2010 (see above, second table of carbon stock under original data) and in the Figures no.13 and 14.

Forest and Other wooded Soil area in million hectares after activity clay.

Litter, Dead wood and Litter, Soil in depth 0-30 cm and Total

	Forest area in million hectares		
	1990	2000	2005
HAC soil	0.782	0.762	0.782
Sandy Soils	0.007	0.007	0.002

OWL million tonnes			
HAC soil	0.256	0.278	0.251
Sandy Soils	0	0	0.005
Total	1.045	1.048	1.04

Forest Carbon (Million metric tones)			
	1990	2000	2005
Carbon in above-ground biomass	37.3	37.4	36.6
Carbon in below-ground biomass	11.9	11.9	11.7
Sub-total: Carbon in living biomass	49.2	49.3	48.3
Carbon in dead wood	14.5	14.1	14.3
Carbon in litter	11.9	11.5	11.7
Sub-total: Carbon in dead wood and litter	26.4	25.6	26
Soil carbon to a depth of 0-30 cm	69	67.3	68.9
TOTAL CARBON	144.6	142.2	143.2

OWL million tonnes			
	1990	2000	2005
Carbon in above-ground biomass	3.8	4.4	3
Carbon in below-ground biomass	10.7	12.3	8.6
Sub-total: Carbon in living biomass	14.5	16.7	11.6
Carbon in dead wood	4.8	4.8	5.1
Carbon in litter	4.1	4.1	4.7
Sub-total: Carbon in dead wood and litter	8.9	8.9	9.8

Soil carbon to a depth of 0-30 cm	22.5	24.5	22.3
TOTAL CARBON	45.9	50.1	43.7

3.3 Analysis and processing of national data

3.3.1 Adjustment

Need not

3.3.2 Estimation and forecasting

Growing stock

Estimation and forecasting

1990-2005 reported

2010 evaluated by mean of regression.

Forecasting for the year 2010 and 2015 by mean of the found regression amongst the figures for each one-year with number of year was made.

After replacing for X=5 corresponds for the year 2010 (for 2015, x=10) the respectively prognosed figure, was found.

The found regressions are following:

Forest

Growing Stock $\quad$ y = -0.004x3 + 0.0707x2 - 0.0868x + 74.705 $\qquad$ $R^2 = 0.2621$

Commercial $\quad$ y = -0.004x3 + 0.0707x2 - 0.0868x + 74.705 $\qquad$ $R^2 = 0.2621$

Growing Stock

For X=5 the forecasting figures of the years 2010 in the table 3a, were taken place.

Estimation and forecasting

1990-2005 reported

2010 evaluated by mean of regression.

Forecasting for the year 2010 and 2015 by mean of the found regression amongst the figures for each one-year with number of year was made.

After replacing for X=5 corresponds for the years 2010 (for 2015, x=10) the respectively prognosed figure, was found.

The found regressions are following:

Forests

Fagus silvatica L.-Beech $\quad y = -0.0016x3 + 0.0301x2 - 0.0868x + 37.76 \quad R^2 = 0.3695$

Quercus sp.L.-Oaks $\quad y = -0.0006x3 + 0.0219x2 - 0.2416x + 15.137 \quad R^2 = 0.3004$

Pinus nigra Arn.-Black pine $\quad y = -0.0015x3 + 0.0239x2 + 0.0138x + 10.478 \quad R^2 = 0.6422$

Abies alba L.-Silver fir $\quad y = -0.0003x3 + 0.0053x2 - 0.0116x + 3.908 \quad R^2 = 0.5605$

Other broadleaves $\quad y = -0.001x3 + 0.0282x2 - 0.2215x + 4.7629 \quad R^2 = 0.8824$

Other coniferous $\quad y = -0.0005x3 + 0.0111x2 - 0.0351x + 3.5299 \quad R^2 = 0.8353$

For X=5 the forecasting figure of the year 2010 in the table table 3b, was taken place

Growing stock composition

FRA 2005 Categories / Species name (Scientific name and common name)	Growing Stock in Forests (Million cubic meters)			
	1990	2000	2010	2015
Forest				
1. -Fagus silvatica L.-Beech	37.774	37.928	37.8785	38.302
2. -Quercus sp. L.-Oaks	15.067	14.346	14.4015	14.311
3. -Pinus nigra Arn. -Black pine	10.370	11.370	10.957	11.506

4. -Abies alba L.-Silver fir	3.928	3.956	3.945	4.022
Other broadleaves	4.566	4.415	4.2354	4.3979
Other coniferous	3.543	3.807	3.5694	3.7889
TOTAL	**75.248**	**75.822**	**74.9868**	**76.3278**

Biomass stock

Estimation and forecasting

1990-2005 calculated

2010 evaluated by mean of regression.

Forecasting for the year 2010 and 2015 by mean of the found regression amongst the figures for each one-year with number of year was made.

After replacing for X=5 corresponds for the year 2010 (for 2015, x=10) the respectively prognosed figure, was found.

The found regressions are following:

Forest

Above-ground biomass $\quad y = -0.0057x3 + 0.1289x2 - 0.6908x + 74.994 \quad R^2 = 0.3422$ $\qquad$ Below-ground biomass $\quad y = -0.0017x3 + 0.0395x2 - 0.2254x + 23.942 \quad R^2 = 0.2795$

Dead wood biomass $\quad y = 4E\text{-}05x3 + 0.0081x2 - 0.165x + 29.083 \quad R^2 = 0.9221$

Other wooded land

Above-ground biomass $\quad y = -0.0053x3 + 0.1025x2 - 0.3994x + 7.9016 \quad R^2 = 0.8202$

Below-ground biomass $\quad y = -0.0153x3 + 0.2955x2 - 1.177x + 22.457 \quad R^2 = 0.8186$

Dead wood biomass $\quad y = 0.0009x3 - 0.0169x2 + 0.0873x + 9.4868 \quad R^2 = 0.8857$

For X=5 the forecasting figure of the year 2010 in the table 3d, was taken place.

National Data

FRA 2010 Categories	Biomass (million metric tones oven-dry weight)															
	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	**2000**	2001	2002	2003	2004	**2005**
Other wooded land																
Above-ground biomass	**7.5**	7.5	7.5	7.7	7.9	8.1	8.3	8.4	8.6	8.7	**8.7**	8.6	8.5	8.7	6.0	**6.1**
Below-ground biomass	**21.3**	21.1	21.3	21.9	22.4	22.9	23.3	23.8	24.2	24.7	**24.7**	24.4	24.1	24.7	17.1	**17.3**
Dead wood biomass	**9.6**	9.6	9.5	9.7	9.6	9.6	9.6	9.6	9.6	9.6	**9.6**	9.8	9.7	9.8	10.3	**10.3**
TOTAL	**38.4**	38.2	38.3	39.3	39.9	40.6	41.2	41.8	42.4	43.0	**43.0**	42.8	42.3	43.2	33.4	**33.7**

Carbon stock

Estimation and forecasting

1990-2005 calculated

2010 evaluated by mean of regression.

Forecasting for the year 2010 and 2015 by mean of the found regression amongst the figures for each one-year with number of year was made.

After replacing for X=5 corresponds for the year 2010 (for 2015, x=10)(for 2015, x=10) the respectively prognosed figure, was found.

The found regressions are following:

Forest

Carbon in above-ground biomass $y = -0.0027x3+0.0608x2-0.3188x+37.451$ $R^2 = 0.3225$

Carbon in below-ground biomass $y = -0.0009x3+0.0205x2-0.1171x + 11.97$ $R^2 = 0.272$

Carbon in living biomass $y = -0.0036x3+0.0813x2-0.4359x+49.421$ $R^2 = 0.3095$

Carbon in dead wood biomass $y = -0.0002x3+0.0099x2-0.1282x+14.624$ $R^2 = 0.8755$

Carbon in litter $y = 0.0001x3+0.0017x2-0.0657x+11.956$ $R^2 = 0.865$

Carbon in dead wood and litter $y = -8E-05x3+0.0115x2-0.1939x+26.58$ $R^2 = 0.9057$

Soil carbon to a depth of 0-30 cm $y = 0.0008x3+0.0071x2-0.3408x+69.375$ $R^2 = 0.9435$

Other wooded land

Carbon in above-ground biomass $y = -0.0027x3+0.0523x2-0.2062x+3.9835$ $R^2 = 0.8141$ Carbon in below-ground biomass $y = -0.0077x3+0.1486x2-0.5978x+11.281$ $R^2 = 0.8237$

Carbon in living biomass $y = -0.0104x3+0.201x2-0.804x+15.264$ $R^2 = 0.822$

Carbon in dead wood biomass $y = 0.0003x3-0.0042x2+0.0183x+4.7632$ $R^2 = 0.8259$

Carbon in litter $y = 0.0009x3-0.017x2+0.0912x+3.9791$ $R^2 = 0.8612$

Carbon in dead wood and litter $y = -0.0104x3+0.201x2-0.804x+15.264$ $R^2 = 0.822$

Soil carbon to a depth of 0-30 cm $y = -0.005x3+0.0924x2-0.2078x+22.56$ $R^2 = 0.8778$

For X=5 the forecasting figure of the years 2010 in the table 3e, was taken place

3.3.3 Reclassification

Need not

3.4 Data

Table 3a

Category		Growing stock volume (million m^3 over bark)									
		Forest					Other wooded land				
		1990	2000	2005	2010	2015	1990	2000	2005	2010	2015
CFRQ	Total growing stock	75.2	75.8	74.4	75	76.3	6.9	8	7.9	7.3	7.9
CFRQ	... of which coniferous	17.8	19.1	18.2	18.5	19.3	0	0	0	0	0
CFRQ	... of which broadleaved	57.4	56.7	56.2	56.5	57	6.9	8	7.9	7.3	7.9

Table 3b

Category/Species name			Growing stock in forest (million cubic meters)			
Rank	Scientific name	Common name	1990	2000	2005	2010
1 st	Fagus silvatica L.	Beech	37.774	37.928	37.24	37.879
2 nd	Quercus sp. L.	Oaks	15.067	14.346	14.508	14.402
3 rd	Pinus nigra Arn.	Black pine	10.37	11.37	10.647	10.957
4 th	Abies alba L.	Silver fir	3.928	3.956	3.83	3.945
5 th	N/A	N/A	N/A	N/A	N/A	N/A
6 th	N/A	N/A	N/A	N/A	N/A	N/A
7 th	N/A	N/A	N/A	N/A	N/A	N/A
8 th	N/A	N/A	N/A	N/A	N/A	N/A
9 th	N/A	N/A	N/A	N/A	N/A	N/A
10 th	N/A	N/A	N/A	N/A	N/A	N/A

Remaining			8.109	8.222	8.177	7.805
TOTAL			75.25	75.82	74.40	74.99

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	The figures were taken by National Volume and Yield Tables for the main species.
Minimum diameter (cm) at the top end of stem for calculation of growing stock (Y)	2	The figures were taken by National Volume and Yield Tables for the main species.
Minimum diameter (cm) of branches included in growing stock (W)	2	The figures were taken by National Volume and Yield Tables for the main species.
Volume refers to above ground (AG) or above stump (AS)	AG	The National Volume and Yield Tables for the main species given the above ground volume and productivity.

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)				
		Forest				
		1990	2000	2005	2010	2015
CFRQ	Net annual increment	N/A	N/A	N/A	N/A	N/A
CFRQ	... of which coniferous	N/A	N/A	N/A	N/A	N/A
CFRQ	... of which broadleaved	N/A	N/A	N/A	N/A	N/A

Table 3d

Category		Biomass (million metric tonnes oven-dry weight)									
		Forest					Other wooded land				
		1990	2000	2005	2010	2015	1990	2000	2005	2010	2015
CFRQ	Above ground biomass	74.6	74.8	73.2	74.1	75.3	7.5	8.7	6.1	7.8	8.9

CFRQ	Below ground biomass	23.8	23.8	23.4	23.6	23.9	21.3	24.7	17.3	22	24.9
CFRQ	Dead wood	28.9	28.2	28.6	28.6	28.6	9.6	9.6	9.6	9.6	9.6
TOTAL		127.30	126.80	125.20	126.30	127.80	38.40	43.00	33.00	39.40	43.40

Table 3e

Category		Carbon (Million metric tonnes)									
		Forest					Other wooded land				
		1990	2000	2005	2010	2015	1990	2000	2005	2010	2015
CFRQ	Carbon in above ground biomass	37.3	37.4	36.6	37	37.6	3.8	4.4	3	3.9	4.5
CFRQ	Carbon in below ground biomass	11.9	11.9	11.7	11.8	11.9	10.7	12.3	8.6	11	12.5
CFRQ	*Subtotal Living biomass*	49.2	49.3	48.3	48.8	49.6	14.5	16.7	11.6	15	16.9
CFRQ	Carbon in dead wood	N/A	N/A	N/A	N/A	14.1	N/A	N/A	N/A	N/A	4.8
CFRQ	Carbon in litter	11.9	11.5	11.7	11.7	11.6	4.1	4.1	4.7	4.1	4
CFRQ	*Subtotal Dead wood and litter*	N/A	N/A	N/A	N/A	25.7	N/A	N/A	N/A	N/A	8.9
CFRQ	Soil carbon	69	67.3	68.9	67.9	67.5	22.5	24.5	22.3	23.2	24.7
TOTAL		130.10	128.10	128.90	128.40	142.70	41.10	45.30	38.60	42.20	50.50

Tiers

Variable/category	Tier for status	Tier for trend
Total growing stock	Tier 1	Tier 1
Net annual increment	Tier 1	Tier 1
Above ground biomass	Tier 1	Tier 1
Below ground biomass	Tier 1	Tier 1

Dead wood	Tier 1	Tier 1
Carbon in above-ground biomass	Tier 1	Tier 1
Carbon in below ground biomass	Tier 1	Tier 1
Carbon in dead wood and litter	Tier 1	Tier 1
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 sub-national 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 sub-national biomass conversion expansion factors applied Tier 2: Application of country specific national or sub-national 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	Consider the calculated volume after the volume and yield tables.	Growing stock for each one and total of forest and other wooded land species would be fluctuating up and down values after years.

Growing stock of broadleaved coniferous	Consider the calculated volume after the volume and yield tables.	Growing stock for each one and total of forest and other wooded land species would be fluctuating up and down values after years.
Growing stock composition	Consider the calculated volume after the volume and yield tables.	Growing stock of commercial species for each one and total of forest and other wooded land species would be fluctuating up and down values after years.
Net annual increment	N/A	N/A
Above-ground biomass	Calculated figures considering the wood volume after species and specie groups and density weight for main species.	Forest and Other wooded land above ground biomass would be up and down fluctuating values after years.
Below-ground biomass	Calculated figures considering the above-ground wood volume after species and specie groups and reports below-ground biomass/above-ground biomass factors.	Forest and Other wooded land below ground biomass would be up and down fluctuating values after years.
Dead wood	FRA2010 Original data were used for deadwood. It has been assumed that 2010 and 2015 data are constant.	N/A
Carbon in above-ground biomass	N/A	Forest and Other wooded land Carbon in above-ground was prognosed to fluctuate up and down values after years.
Carbon in below-ground biomass	N/A	Forest and Other wooded land Carbon in below ground was prognosed to fluctuate up and down values after years.
Carbon in dead wood	N/A	Forest Carbon in dead wood was prognosed to fluctuate up and down. Other wooded land Carbon in dead wood was prognosed to increase.
Carbon in litter	N/A	Forest and Other wooded land Carbon in litter was prognosed to increase.
Soil carbon	Calculated basing to the figures on forest and other wooded land areas after activity clay of the table 3.5.	Forest and Other wooded land Soil Carbon to a depth of 0-30 cm were prognosed to increase.

Other general comments to the table
Total forest biomass would be up and down fluctuating values after years. Forest and Other wooded land Total Carbon were prognosed to fluctuate up and down values after years.

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	ARFCSCFF. 1991-1998.Annual Report of Forest Cadastre on Situation of Country Forest Fund. 1991-1999. Former Institute of Forest and Pasture Researches	Production Protection of soil and water Conservation of biodiversity Social services Multiple purpose No or unknown function	1990-1998	N/A
2	ARFCSCFF. 1999-2005. Annual Report of Forest Cadastre on Situation of Country Forest Fund. 2000-2004. Former General Directory of Forest and Pastures.	Production Protection of soil and water Conservation of biodiversity Social services Multiple purpose No or unknown function	1999-2005	N/A

| 3 | ARFCSCFF. 2006-2007. Annual Reports of Forest Cadastre on Situation of Country Forest Fund. 2006-2007. Directory of Forest Development Policies | Production Protection of soil and water Conservation of biodiversity Social services Multiple purpose No or unknown function | 2006-2007 | N/A |
| 4 | N/A | N/A | N/A | N/A |

4.2.2 Classification and definitions

National class	Definition
Production	Same as FRA 2015
Multiple use	Same as FRA 2015
N/A	N/A
N/A	N/A

4.2.3 Original data

FRA 2010 Categories/	Forest Area in "000" ha		
Designated function	1990	2000	2005
Production	685	620	611.3
Protection of soil and water	86.9	96.8	131.1
Conservation of biodiversity	16.9	52.4	40
Social services	NDA	NDA	NDA
Multiple purpose	NDA	NDA	NDA
No or unknown function	NDA	NDA	NDA
TOTAL	788.8	769.2	782.4

	Other Wooded Land Area in "000" ha		
Designated function	1990	2000	2005
Production	226.3	217.1	215.9

Protection of soil and water	25.8	25.5	23.9
Conservation of biodiversity	3.9	11.9	18
Social services	NDA	NDA	NDA
Multiple purpose	NDA	NDA	NDA
No or unknown function	NDA	NDA	NDA
TOTAL	255.9	254.5	257.8

4.3 Analysis and processing of national data

4.3.1 Adjustment

Need not.

4.3.2 Estimation and forecasting

Estimation and forecasting

1990-2005 reported

Forecasting for the years 2010and 2015 by mean of the found regression amongst the figures for each one-year with number of year was made.

After replacing for x=5 corresponds for the year 2010 (for 2015, x=10) the respectively prognosed figure, was found.

The found regressions are following:

Forest

Forest Production $\quad y = 0.0741x3 - 1.777x2 + 5.162x + 680.95$ $\qquad R^2 = 0.9717$

Protection of $\quad y = -0.0523x3 + 1.7132x2 - 11.925x + 102.94$ $\qquad R^2 = 0.8949$

soil and water

Conservation $\quad y = -0.0204x3 + 0.2993x2 + 2.0244x + 10.079$ $\qquad R^2 = 0.536$

of biodiversity

Other wooded land

Production $\quad y = 0.015x3 - 0.3608x2 + 1.4194x + 225.39$ $\qquad R^2 = 0.75$

Protection of $\quad y = 0.0022x3 - 0.0493x2 + 0.1745x + 25.018$ $\qquad R^2 = 0.0716$

soil and water

Conservation $\quad y = -0.0193x3 + 0.4964x2 - 2.3012x + 6.4118$ $\qquad R^2 = 0.9152$

of biodiversity

For x=5 the forecasting figure of the year 2010 and for x=10 for 2015 estimation in the table 4a.

NDA-No data available

*There is a programme of Ministry of Environment, Forestry and Water Management to make double the area of protection zones from 2006 year up to 2009 year, but it is not identified, yet which part of the area to be composed by forest, other wooded lands etc. also which part will be to protect the lands by erosion and waters, biodiversity conservation etc.

4.3.3 Reclassification

Need not.

4.4 Data

Table 4a

Categories		Forest area (000 hectares)				
		1990	**2000**	**2005**	**2010**	**2015**
CFRQ	Production forest	685	620	611.3	614.2	629
CFRQ	Multiple use forest	N/A	N/A	N/A	N/A	N/A

Table 4b

Rank	Name of product	Key species	Commercial value of NWFP removals 2010 (value 1000 local currency)	NWFP category
1 st	N/A	N/A	N/A	N/A
2 nd	N/A	N/A	N/A	N/A
3 rd	N/A	N/A	N/A	N/A
4 th	N/A	N/A	N/A	N/A
5 th	N/A	N/A	N/A	N/A
6 th	N/A	N/A	N/A	N/A
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			.00	

2010	
Name of local currency	Lekë

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

Year	FRA 2015 category (1000 m^3 u.b.)	
	Total wood removals	**...of which woodfuel**
1990	2076	1556
1991	2556	1556
1992	2556	1556
1993	595	538
1994	409	345.5
1995	409	345.5

1996	409	345.5
1997	409	345.5
1998	27.7	12.66
1999	230	174
2000	447	324
2001	264.6	186.6
2002	304.8	222.2
2003	296.2	221
2004	296.2	221
2005	296.2	221
2006	296.2	221
2007	430	350
2008	430	350
2009	430	350
2010	430	350
2011	430	350

Tiers

Category	Tier for status	Tier for reported trend
Production forest	Tier 1	Tier 1
Multiple use forest	Tier 1	Tier 1

Tier Criteria

Category	Tier for status	Tier for reported trend
Production forest Multiple use forest	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	The figures from annual updated forest area reports by Forest Cadastre, were taken	Production forest and other wooded land areas would be reducing.
Multiple use forest	Increasing of multiple needs will make indispensable the preparing of management planes to design the forests with primary functions in this line, as soon as possible.	N/A
Total wood removals	N/A	N/A
Commercial value of NWFP	N/A	N/A

Other general comments to the table
N/A

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 (sub-category)	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 sources of information	Variables	Years	Additional comments

1	ARFCSCFF. 1991-1998.Annual Report of Forest Cadastre on Situation of Country Forest Fund. 1991-1999. Former Institute of Forest and Pasture Researches	Protection of soil and water	1990-1998	N/A
2	ARFCSCFF. 1999-2005. Annual Report of Forest Cadastre on Situation of Country Forest Fund. 2000-2004. Former General Directory of Forest and Pastures.	Protection of soil and water	1999-2005	N/A
3	ARFCSCFF. 2006-2007. Annual Reports of Forest Cadastre on Situation of Country Forest Fund. 2006-2007. Directory of Forest Development Policies	Protection of soil and water	2006-2007	N/A
4	N/A	N/A	N/A	N/A

5.2.2 Classification and definitions

National class	Definition
N/A	N/A
N/A	N/A
N/A	N/A
N/A	N/A

5.2.3 Original data

FRA 2010 Categories/	Forest Area in "000" ha		
	Primary function		
Designated function	1990	2000	2005
Production	685	620	611.3
Protection of soil and water	86.9	96.8	131.1
Conservation of biodiversity	16.9	52.4	40
Social services	NDA	NDA	NDA

Multiple purpose	NDA	NDA	NDA
No or unknown function	NDA	NDA	NDA
TOTAL	788.8	769.2	782.4

FRA 2010 Categories/	Other Wooded Land Area in "000" ha		
	Primary function		
Designated function	1990	2000	2005
Production	226.3	217.1	215.9
Protection of soil and water	25.8	25.5	23.9
Conservation of biodiversity	3.9	11.9	18
Social services	NDA	NDA	NDA
Multiple purpose	NDA	NDA	NDA
No or unknown function	NDA	NDA	NDA
TOTAL	255.9	254.5	257.8

5.3 Analysis and processing of national data

5.3.1 Adjustment

5.3.2 Estimation and forecasting

Estimation and forecasting

1990-2005 reported

2010 evaluated by mean of regression.

Forecasting for the years 2010 by mean of the found regression amongst the figures for each one-year with number of year was made.

After replacing for X=5 corresponds for the year 2010 the respectively prognosed figure, was found.

The found regressions are following:

Forest

Forest Production	$y = 0.0741x3 - 1.777x2 + 5.162x + 680.95$	$R^2 = 0.9717$
Protection of soil and water	$y = -0.0523x3 + 1.7132x2 - 11.925x + 102.94$	$R^2 = 0.8949$
Conservation of biodiversity	$y = -0.0204x3 + 0.2993x2 + 2.0244x + 10.079$	$R^2 = 0.536$

Other wooded land

Production	$y = 0.015x3 - 0.3608x2 + 1.4194x + 225.39$	$R^2 = 0.75$
Protection of soil and water	$y = 0.0022x3 - 0.0493x2 + 0.1745x + 25.018$	$R^2 = 0.0716$
Conservation of biodiversity	$y = -0.0193x3 + 0.4964x2 - 2.3012x + 6.4118$	$R^2 = 0.9152$

For X=5 the forecasting figure of the year 2010 in the table T 3, was taken place.

NDA-No data available

*There is a programme of Ministry of Environment, Forestry and Water Management to make double the area of protection zones from 2006 year up to 2009 year, but it is not identified, yet which part of the area to be

composed by forest, other wooded lands etc. also which part will be to protect the lands by erosion and waters, biodiversity conservation etc.

5.3.3 Reclassification

The figures were taken from T3 in the FRA 2010 report, even if the definition is slightly different as FRA2015 definition includes all areas designated for protection of soil and water and not only primary designations.

5.4 Data

Table 5a

	Categories	Forest area (1000 hectares)				
		1990	**2000**	**2005**	**2010**	**2015**
CFRQ	Protection of soil and water	86.9	96.8	131.1	131.1	131.1
CFRQ	... of which production of clean water	N/A	N/A	N/A	N/A	N/A
CFRQ	... of which coastal stabilization	N/A	N/A	N/A	N/A	N/A
CFRQ	... of which desertification control	N/A	N/A	N/A	N/A	N/A
CFRQ	... of which avalanche control	N/A	N/A	N/A	N/A	N/A
CFRQ	... of which erosion, flood protection or reducing flood risk	N/A	N/A	N/A	N/A	N/A
CFRQ	... of which other (please specify in comments below the table)	N/A	N/A	N/A	N/A	N/A

Other
N/A

Table 5b

	Forest area (1000 hectares)				
Categories	**1990**	**2000**	**2005**	**2010**	**2015**

Ecosystem services, cultural or spiritual values	N/A	N/A	N/A	N/A
...of which public recreation	N/A	N/A	N/A	N/A
...of which carbon storage or sequestration	N/A	N/A	N/A	N/A
...of which spiritual or cultural services	N/A	N/A	N/A	N/A
...of which other (please specify in comments below the table)	N/A	N/A	N/A	N/A

Tiers

Category	Tier for reported trend	Tier for status
Protection of soil and water	Tier 1	Tier 1
Ecosystem services, cultural or spiritual values	Tier 1	Tier 1

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	The figures were taken from T3 in the FRA 2010 report, even if the definition is slightly different as FRA2015 definition includes all areas designated and not only primary designations. The figure for 2015 was repeated assuming that no major changes occurred. The original figures were taken by the FRA2010 national correspondent from annual updated forest area reports by Forest Cadastre and he extrapolated data for missing years.	Protection forest and other wooded land area of soil and water would be fluctuating up and down during of the year's period.
Production of clean water	N/A	N/A
Coastal stabilization	N/A	N/A
Desertification control	N/A	N/A
Avalanche control	N/A	N/A
Erosion, flood protection or reducing flood risk	N/A	N/A
Other protective functions	N/A	N/A
Ecosystem services, cultural or spiritual values	Increasing of social needs will make indispensable the preparing of management planes to design the forests with primary functions for social services, as soon as possible.	N/A
Public recreation	N/A	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
N/A

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	ARFCSCFF. 1991-1998.Annual Report of Forest Cadastre on Situation of Country Forest Fund. 1991-1999. Former Institute of Forest and Pasture Researches	Production Protection of soil and water Conservation of biodiversity Social services Multiple purpose No or unknown function	1990-1998	N/A
2	ARFCSCFF. 1999-2005. Annual Report of Forest Cadastre on Situation of Country Forest Fund. 2000-2004. Former General Directory of Forest and Pastures.	Production Protection of soil and water Conservation of biodiversity Social services Multiple purpose No or unknown function	1999-2005	N/A
3	ARFCSCFF. 2006-2007. Annual Reports of Forest Cadastre on Situation of Country Forest Fund. 2006-2007. Directory of Forest Development Policies	Production Protection of soil and water Conservation of biodiversity Social services Multiple purpose No or unknown function	2006-2007	N/A
4	N/A	N/A	N/A	N/A

6.2.2 Classification and definitions

National class	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	N/A
N/A	N/A
N/A	N/A

6.2.3 Original data

See 4.2.3

6.3 Analysis and processing of national data

6.3.1 Adjustment

6.3.2 Estimation and forecasting

See 4.2.3

6.3.3 Reclassification

6.4 Data

Table 6

Categories		Forest area (000 hectares)				
		1990	**2000**	**2005**	**2010**	**2015**
CFRQ	Conservation of biodiversity	16.8	52.4	40	31	39.9
CFRQ	Forest area within protected areas	103.7	149.2	171.1	162.1	N/A

Tiers

Category	Tier for status	Tier for reported trend
Conservation of biodiversity	Tier 1	Tier 1
Forest area within protected areas	Tier 1	Tier 1

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	The figures from annual updated forest area reports by Forest Cadastre were taken.	Conservation of biodiversity would be fluctuating up and down during of the year's period.
Forest area within protected areas	N/A	It is increasing.

Other general comments to the table
No new information on the forest area within protected areas.

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
Invasive species	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	FOURTH NATIONAL REPORT TO THE UNITED NATIONS CONVENTION ON BIOLOGICAL DIVERSITY Period covered by the report: August 2007-December 2010 http://www.cbd.int/doc/world/al/al-nr-04-en.pdf	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
N/A	N/A
N/A	N/A
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 woody invasive species	Forest area affected (000 ha)	
	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	N/A	N/A

Tiers

Category	Tier for status	Tier for reported trend
Invasive species	Tier 1	Tier 1

Tier Criteria

Category	Tier for status	Tier for reported trend

| Invasive species | Tier 3: Systematic assessment in forest inventory or other survey (e.g. by conservation department) within the last 5 years) Tier 2: Systematic assessment in forest inventory or other survey (e.g. by conservation department conducted more than 5 years ago) 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 |

7.5 Comments

Category	Comments related to data definitions etc	Comments on the reported trend
Invasive species	N/A	N/A

Other general comments to the table
Invasive alien species – not a major threat to biodiversity in Albania yet, although no research has been done so far manly due to the lack of human and financial resources. http://www.cbd.int/doc/world/al/al-nr-04-en.pdf

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	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

8.2.2 Classification and definitions

National class	Definition
N/A	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

	Category	000 ha, number of fires									
		2003		2004		2005		2006		2007	
		000 ha	#	000 ha	#	000 ha	#	000 ha	#	000 ha	#
CFRQ	Total land area burned	9.79	N/A	1.11	N/A	9.36	N/A	0.58	N/A	84.82	N/A
CFRQ	... of which forest area burned	0.21	N/A	0.02	N/A	0.04	N/A	0.12	N/A	5.87	N/A
	Category	2008		2009		2010		2011		2012	
		000 ha	#	000 ha	#	000 ha	#	000 ha	#	000 ha	#
CFRQ	Total land area burned	20.86	N/A	3.8	N/A	7.18	N/A	36.88	N/A	23.64	N/A
CFRQ	... of which forest area burned	0.4	N/A	0.06	N/A	0.69	N/A	1.8	N/A	4.36	N/A

Table 8b

Outbreak category	Description/name	Year(s) of latest outbreak	Area damaged (000 hectares)
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	N/A	N/A
N/A	N/A	N/A	N/A
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 2	Tier 2
• Insects • Diseases • Severe weather events	N/A	N/A

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
• Insects • Diseases • Severe weather events	**Tier 3** : Systematic survey (e.g. via inventory or aerial damage assessment) **Tier 2** : Management records **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

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
Reduction in canopy cover	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)
Reduction in canopy cover	22.69

Tiers

Category	Tier for reported trend
Reduction in canopy cover	Tier 2

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	Illegal Logging in SEE and EE (Governance, Implementation and Enforcement), Illegal logging activities in Albania, B. DIAGNOSTIC AUDIT http://illegallogging.rec.org/ publications/AL_IL %20Diagnostic %20Audit_Final.pdf	N/A	2010	N/A
2	European FP6 – Integrated Project Draft version Coordinated by the Centre for Philosophy of Law – Université Catholique de Louvain – http:// refgov.cpdr.ucl.ac.be WP– GPS-18 (draft)	N/A	N/A	N/A
3	N/A	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

N/A	N/A
N/A	N/A
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	yes	yes	yes
... of which, in <u>publicly</u> owned forests	yes	yes	yes	yes
... of which, in <u>privately</u> owned forests	yes	yes	yes	yes
Legislation and regulations supporting sustainable forest management	yes	yes	yes	yes
... of which, in <u>publicly</u> owned forests	yes	yes	yes	yes
... of which, in <u>privately</u> owned forests	yes	yes	yes	yes

10.4 Comments

Variable / category	Comments related to data definitions etc
Policies supporting sustainable forest management	Forest area under sustainable forest management. All forest area is under sustainable forest management.
Legislation and regulations supporting sustainable forest management	The main piece of legislation to achieve more sustainable forest management is the 'Law on Forests and the Forest Police' from 2005, which aims at 'environmental conservation and the production of wood material and other forest products' . European FP6 – Integrated Project Draft version Coordinated by the Centre for Philosophy of Law – Université Catholique de Louvain – http://refgov.cpdr.ucl.ac.be WP–GPS-18 (draft)

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	European FP6 – Integrated Project Coordinated by the Centre for Philosophy of Law – Université Catholique de Louvain – http:// refgov.cpdr.ucl.ac.be WP–GPS-20	N/A	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 stakeholder participation in forest policy development?	yes

11.3 Comments

Category	Comments related to data definitions etc
National stakeholder platform	Before 1992, all Albanian forests and pastures were state property. The restitution to previous owners began in 1996. The process of transferring forest management to the communities is conceived as a procedure to increase awareness and responsibility of the local actors. Community boards have been installed, composed of representatives of the local government, stakeholders (user associations, local people), and the forest service. They collectively deal with the formulation of management plans and make the necessary decisions

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	ARFCSCFF. 1991-1998.Annual Report of Forest Cadastre on Situation of Country Forest Fund. 1991-1999. Former Institute of Forest and Pasture Researches	Production Protection of soil and water Conservation of biodiversity Social services Multiple purpose No or unknown function	1990-1998	N/A
2	ARFCSCFF. 1999-2005. Annual Report of Forest Cadastre on Situation of Country Forest Fund. 2000-2004. Former General Directory of Forest and Pastures.	Production Protection of soil and water Conservation of biodiversity Social services Multiple purpose No or unknown function	1999-2005	N/A
3	ARFCSCFF. 2006-2007. Annual Reports of Forest Cadastre on Situation of Country Forest Fund. 2006-2007. Directory of Forest Development Policies	Production Protection of soil and water Conservation of biodiversity Social services Multiple purpose No or unknown function	2006-2007	N/A
4	N/A	N/A	N/A	N/A

12.2.2 Classification and definitions

National class	Definition
Area of permanent forest estate (PFE)	Same as FRA2015

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

12.2.3 Original data

See 4.2.3.

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

Categories		Forest area 2010 (000 ha)
CFRQ	Forest area intended to be in permanent forest land use	
CFRQ	... of which permanent forest estate	776.3

Tiers

Category	Tier for status
Forest area intended to be in permanent forest land use	Tier 1
Permanent forest estate	Tier 1

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	All forest are considered as permanent forest estate.
Permanent forest estate	For the future it will be increasing by reforestations on the refused lands (unusable crop lands refused by farmers during the redistribution of lands after changed social system), abandoned lands and on eroded lands and riverbanks.

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	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

13.2.2 Classification and definitions

National class	Definition
N/A	N/A
N/A	N/A
N/A	N/A
N/A	N/A

13.3 Data

Table 13a

Category	% of total forest area	Most recent year	Check all boxes that apply					
			Continuous	Periodic	Permanent ground plots	Temporary ground plots	Aerial/ remote sensing sample based	Aerial/ remote sensing full coverage
Forest inventory	N/A	N/A						
Other field assessments	N/A	N/A						
Updates to other sources	N/A	N/A						
Expert estimate	0	2013						

Table 13b

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

Other type of forest reporting
N/A

13.4 Comments

Category	Comments
N/A	N/A
N/A	N/A
N/A	N/A

Other general comments

FRA 2015 – Country Report, Albania

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	ARFCSCFF. 1991-1998.Annual Report of Forest Cadastre on Situation of Country Forest Fund. 1991-1999. Former Institute of Forest and Pasture Researches	Production Protection of soil and water Conservation of biodiversity Social services Multiple purpose No or unknown function	1990-1998	N/A
2	ARFCSCFF. 1999-2005. Annual Report of Forest Cadastre on Situation of Country Forest Fund. 2000-2004. Former General Directory of Forest and Pastures.	Production Protection of soil and water Conservation of biodiversity Social services Multiple purpose No or unknown function	1999-2005	N/A
3	ARFCSCFF. 2006-2007. Annual Reports of Forest Cadastre on Situation of Country Forest Fund. 2006-2007. Directory of Forest Development Policies	Production Protection of soil and water Conservation of biodiversity Social services Multiple purpose No or unknown function	2006-2007	N/A
4	N/A	N/A	N/A	N/A

14.3 Data

Table 14a

Forest plan type	Forest area 2010 (000 ha)

75

Forest area with management plan	776.3
... of which for production	614.2
... of which for conservation	162.1

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	N/A

Tiers

Category	Tier for status
Forest area with management plan	Tier 1
Percent of area under forest management plan that is monitored annually	Tier 1

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	All forest area have been covered by management plane for each state forest unit (one forest unit=3000-5000 hectare). At present is continuing to prepare the management plans after village and community forests, after changings of the forest ownership, parallel.
N/A	N/A
N/A	N/A

Other general comments

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	yes
3. Review of operations	yes

Tiers

Category	Tier for status
Type of stakeholder inputs	Tier 1

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

Other general comments

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	0	0	0	0	0
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	0	0	0	0	0	0	
CFRQ	PEFC	0	0	0	0	0	0	
CFRQ	Other	0	0	0	0	0	0	

Table 16b

Domestic forest management certification		Forest area (000 ha)						
		2000	2001	2002	2003	2004	2005	2006
CFRQ	N/A	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		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 1
Domestic forest management certification	Tier 1

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	N/A

Other general comments

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

Documents for this question:

- Guide for country reporting FRA 2015
- FRA 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: • <u>Goods</u> : roundwood; sawnwood; biomass; woodbased panels; pulp and paper and non-wood forest products. • <u>Services</u> : 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	Unpublished figures by Directory of Forestry Development Policies	Forest revenue	2000,2005	N/A
2	Unpublished figures by Finance Directory-Ministry of Environment, Forestry and Water Management	Operational expenditure	2000,2005	N/A
3	Unpublished figures by Finance Directory-Ministry of Environment, Forestry and Water Management	Transfer payments	2000,2005	N/A
4	Unpublished figures by Finance Directory-Ministry of Environment, Forestry and Water Management	Domestic funding	2000,2005	N/A
5	Unpublished figures by Forestry Project Management Unit- Directory of Forestry Development Policies and World Bank	External funding	2000,2005	N/A

17.3 Data

Table 17

Category	Revenues / expenditures (000 local currency)

	2000	**2005**	**2010**
Forest revenue	125100	105300	N/A
Public expenditure on forestry	879407.6	957462.2	N/A

	2000	2005	2010
Name of Local Currency	Lekë	Lekë	Lekë

17.4 Comments

Category	Comments related to data definitions etc
Forest revenue	Need to have a Database System. Change the state administrate and very difficulty to find the figures.
Public expenditure on forestry	Need to have a Database System. Change the state administrate and very difficulty to find the figures. External funding for the 2000 and 2005 year s calculated as the average of the 1998-2002 and 2003-2007 years, respectively. External funding are changed in local currency multiplication with change rate USA$ 1=142,56 Leke for the 2000 year and 88,50 Leke for the 2005 year Need to have a Database System. Change the state administrate and very difficulty to find the figures. External funding for the 2000 and 2005 year calculated as the average of the 1998-2002 and 2003-2007 years, respectively. External funding are changed in local currency multiplication with change rate USA$ 1=142,64 Leke for the 2000 year and 88,50 Leke for the 2005 year. Difference between revenues and total public expenditure is very big about nine times and, forest sector need to try very much to harvest all possible resources, to balance it. Also, need to use the calculation methodology for all profits came by forests.
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 to corporations, other business entities private cooperatives, private nonprofit institutions and associations, 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	ARFCSCFF. 1991-1998. Annual Reports of Forest Cadastre on Situation of Country Forest Fund. 1991-1999. Institute of Forest and Pasture Researches	Private ownership Public ownership	1990-1998	N/A
2	ARFCSCFF. 1999-2005. Annual Reports of Forest Cadastre on Situation of Country Forest Fund. 2000-2004. General Directory of Forest and Pastures.	Private ownership Public ownership	1999-2005	N/A
3	ARFCSCFF. 2006-2007. Annual Reports of Forest Cadastre on Situation of Country Forest Fund. 2006-2007. Directory of Forest Development Policies	Private ownership Public ownership	2006-2007	N/A
4	N/A	N/A	N/A	N/A

18.2.2 Classification and definitions

National class	Definition
N/A	Item 2/19-"Forest or Wood ownership" is a forest fund area, with a different largeness, together with its infrastructure, which is public ownership possess by central power or communal power, or private ownership.
N/A	N/A
N/A	N/A
N/A	N/A

18.2.3 Original data

	Area in "000" ha		
Forest	1990	2000	2005
Private ownership	0	6.8	13
Public ownership	788.8	762.4	769.4

Other ownerships	0	0	0
TOTAL	788.8	769.2	782.4

	Area in "000" ha		
Other Wooded Land	1990	2000	2005
Private ownership	0	2.3	4.5
Public ownership	255.9	252.2	253.3
Other ownerships	0	0	0
TOTAL	255.9	254.5	257.8

18.3 Analysis and processing of national data

18.3.1 Adjustment

Need not.

18.3.2 Estimation and forecasting

Estimation and forecasting

1990-2005 reported

The found regressions are following:

Forest

Private ownerships $y = 0.0278x3 - 0.4655x2 + 3.7353x + 0.4429$ $R^2 = 0.9802$

Public ownership $y = 0.0075x3 - 0.0172x2 - 2.9552x + 791.43$ $R^2 = 0.9409$

Other ownerships

Total area $y = 0.0013x3 + 0.2397x2 - 4.769x + 794$ $R^2 = 0.9182$

Other wooded land

Private ownership $\quad y = 0.0333x3 - 0.4643x2 + 2.3738x - 0.7571 \qquad R^2 = 0.9866$

Public ownership $\quad y = 0.0005x3 - 0.0162x2 + 0.0126x + 255.75 \qquad R^2 = 0.3053$

Other ownerships

Total area $\qquad y = -0.0021x3 + 0.0832x2 - 0.673x + 256.71 \qquad R^2 = 0.701$

In table 18a, 2010 figures for private ownership has been assumed as constant and for public ownership it has been adjusted to equal total forest area reported in table 1a.

18.3.3 Reclassification

Need not.

18.4 Data

Table 18a

Categories		Forest area (1000 hectares)			
		1990	**2000**	**2005**	**2010**
CFRQ	Public ownership	788.8	762.4	769.4	763.3
CFRQ	... of which owned by the state at national scale	N/A	N/A	N/A	N/A
CFRQ	... of which owned by the state at the sub-national government scale	N/A	N/A	N/A	N/A
CFRQ	Private ownership	0	6.8	13	13
CFRQ	... of which owned by individuals	0	6.8	13	13
CFRQ	... of which owned by private business entities and institutions	0	0	0	0
CFRQ	... of which owned by local, tribal and indigenous communities	0	0	0	0
CFRQ	Unknown ownership	0	0	0	0

TOTAL	788.80	769.20	782.40	776.30

Tiers

Category	Tier for status	Tier for reported trend
Public ownership	Tier 1	Tier 1
Private ownership	Tier 1	Tier 1
Unknown ownership	Tier 1	Tier 1

Tier criteria

Category	Tier for status	Tier for reported trend
Ownership	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 years old. 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

Table 18b - Holder of management rights of public forests

Categories	Forest area (000 hectares)			
	1990	2000	2005	2010
Public Administration	788.8	713.1	550.8	N/A
Individuals	0	0	0	N/A
Private companies	0	0	0	N/A
Communities	0	49.3	218.6	N/A
Other	0	0	0	N/A
TOTAL	788.80	762.40	769.40	.00

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

Other	Tier 1	Tier 1

18.5 Comments

Category	Comments related to data definitions etc	Comments on the reported trend
Public ownership	The definitions were approved by the law no.9385, date 04.05.2005 (item 2/19) on forest and forest service and appendix of the law no.9791, date 23.07.2007. Communal forest area was included in Public ownership There are some differences between two definitions but adaptable because there are some regulations on forest transfer critters from state to community and by agreement.	Forest and other wooded land public ownership area would be reducing.
Private ownership	There are some differences between two definitions but adaptable because there are some regulations on forest transfer critters from state to privates and by agreement.	Forest and other wooded land private ownership areas will be increasing slowly.
Unknown ownership	The same as FAO definition.	It is not started, yet but for the future the other types of ownership areas to increase, are prognosed.
Management rights	The community forests are the public forests but given to community to use after the management planes and an agreement signed by community and Forest Service.	Management rights of community and private, too, will be increasing.

Other general comments to the table
N/A

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	Un published figures by archive of former General Directory of Forest and Pastures	1990,2000,2005	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

19.2.2 Classification and definitions

National class	Definition
N/A	FRA 2010 categories and definitions were applied.
N/A	N/A
N/A	N/A
N/A	N/A

19.2.3 Original data

19.3 Data

Table 19

Category		Employment (000 years FTE)			
		1990	**2000**	**2005**	**2010**
CFRQ	Employment in forestry	2.063	0.347	0.161	N/A
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	The figures were taken by the archive of former General Directory of Forest and Pasture and former Institute of Forest and Pasture Researches	The trend is coming to reduce but, increasing of the forest activity in the forest harvest area would increase and employment in primary production of goods.

Other general comments to the table
No new information available.

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)	N/A	N/A	N/A

20.3 Comments

Category	Comments
Gross value added from forestry (at basic prices)	N/A

Other general comments

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	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

21.3 Data

Table 21a

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

Table 21b

Category	Forest area (000 ha)
	2013
Forests earmarked for conversion	N/A

21.4 Comments

Category	Comments
Government target/aspiration for forest area	N/A

Forests earmarked for conversion	N/A

Other general comments