

GLOBAL FOREST RESOURCES ASSESSMENT 2015

COUNTRY REPORT

Tajikistan

Rome, 2014

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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TABLE OF CONTENTS

Report preparation and contact persons.....	4
1. What is the area of forest and other wooded land and how has it changed over time?	7
2. What is the area of natural and planted forest and how has it changed over time?	13
3. What are the stocks and growth rates of the forests and how have they changed?	18
4. What is the status of forest production and how has it changed over time?	28
5. How much forest area is managed for protection of soil and water and ecosystem services?	35
6. How much forest area is protected and designated for the conservation of biodiversity and how has it changed over time?	41
7. What is the area of forest affected by woody invasive species?	45
8. How much forest area is damaged each year?	49
9. What is the forest area with reduced canopy cover?	53
10. What forest policy and regulatory framework exists to support implementation of sustainable forest management SFM?	54
11. Is there a national platform that promotes stakeholder participation in forest policy development?	57
12. What is the forest area intended to be in permanent forest land use and how has it changed over time?	58
13. How does your country measure and report progress towards SFM at the national level?	62
14. What is the area of forest under a forest management plan and how is this monitored?	65
15. How are stakeholders involved in the management decision making for publicly owned forests?	68
16. What is the area of forest under an independently verified forest certification scheme?	69
17. How much money do governments collect from and spend on forests?	71
18. Who owns and manages the forests and how has this changed?	73
19. How many people are directly employed in forestry?	79
20. What is the contribution of forestry to Gross Domestic Product (GDP)?	81
21. What is forest area likely to be in the future	82

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Introductory Text

Place an introductory text on the content of this report

The forests in the Republic of Tajikistan are a state ownership. It is a common property of all people. Actually all forests of the republic are mountainous, and they are referred to the first group and cutting of the main usage in them will not be carried out, and all forestry activity is directed on preservation, increase and improvement of a condition of forests.

Among significant variety of vegetative communities there meet various tree-bushy breeds: wide - deciduous and small-leaved forests, unique juniper groves and tugai, nut and pistachio forests, and also deserted sparse growth of trees from saxauls , *kandym*, *cherkez* and other sandy breeds.

The percentage of forests in the republic is a little more than 3 % and it occupies the last place among the Central Asian republics. In such situation the special responsibility is with bodies which are carrying out management of forests their protection and reproduction.

Now the common area of lands of state forest fund makes 1,8 million ha, only 25 % of them is engaged in wood plantings. The area covered by forests makes 410 thousand ha, 38 thousand ha of them are forest cultures created per last years. From the common area of wood fund taking place in conducting bodies of a forest facilities 1 187,6 thousand ha, or about 70 % are fixed in long-term usage behind collective farms and state farms as pastures.

In the republic trees of III-IV classes of bonitet prevail, with completeness 0,3-0,4 and average stock on 1 ha 35m³.

Despite of low parameters of security by forest, the role of forests here is immeasurably great. The forest is necessary, first of all, as the store of moisture, protection of land, regulator of a climate, reclamation of environment, source of reception of food, medicinal and technical raw material and only in an insignificant degree as a source of reception of wood.

The first jobs on forest breeding were begun in 1882. Mass forest breeding in timber enterprises of the republic originates since 1947. Then there are not any obstacles for forest breeding, the lands of state forest fund till 1966 were not fixed in long-term usage with collective farms to state farms.

The forests depending on the main breed are distributed as follows. Juniper planting - 150 thousand ha, pistachio - 80 thousand ha, walnut - 9 thousand ha.

Annually forest restoration is spent on the area up to 1992 - 4500 ha, and since 1993 - 8600 ha. The safety of forest cultures incorporated in 1960-1982, makes - 72 %, and in 1982-94 - 68 %, 1994-1998- 78 % and 2007- 80%

The low safety of forest cultures is explained to that the majority of them are created in hard soil-climatic conditions and besides deficiency a means for necessary expenses for creation of forest cultures.

The hard climatic and soil conditions, remoteness, requirement of creation of forest plantings, dictate necessity of application of mechanization. However, the undeveloped road network, sparseness of sites, absence of means of mechanization, weak material technical base reduces even more quality and efficiency of jobs. The bodies of agriculture, for all time of usage of lands of State forest fund any measures on increase forests, efficiency of forest plantings, improvement of pastures have not made. Regular uncontrolled pasture of cattle during about 30 years have resulted in a wide circulation of erosive processes.

Protective forest breeding in the republic started to develop since 1969 and passed in two directions:

- afforestation of mountain slopes, ravines, gullies, and other inconvenient lands of collective farms and state farms;
- Creation forest shelter belts on irrigated lands.

Since 1988 of a making of forest shelter belts has not been not carried out, and the large attention to creation of pastures from forest shelter belts from saxaul is given. In Sugd and Khatlon provinces the similar jobs are annually carried out on 500 ha. These cultures improving herbage on sandy pastures on sand and simultaneously saxaul is a good forage for fine horned cattle.

The plantings from a walnut and pistachio were created as forest cultures, with soils protection and water guarding purpose, without taking into account the reception of valuable nut production.

Such plantings, naturally, can not form the basis preparations of nut production, the which need in national economy is very great.

The tendency of translation of nut growing on an intensive industrial basis recently was planned in the republic. However, the development of it restrains, first, by absence of material base, lack of means for financing jobs on a laying in a plantation. Despite of the above-stated obstacles silviculturists for last years have already made 1200 ha of a plantation of pistachio and walnut. Besides since 1964 on 3 million pieces of cuttings of a poplar for reception of business wood have been planed.

Forest vegetation in connection with distribution wild fruit on natural features are allocated on five large regions.

Wild growing forest fruiters in the republic are first of all huge, but still insufficiently used source of most valuable foodstuff.

The forests of the republic are rich by medicinal grasses, where more than 50 species are growing, which use is authorized by bodies of public health services.

The new Forest Code of the Republic of Tajikistan, approved in 2006, substantially strengthens in the legal and ecological relation the protection of forests and stimulates rational conducting a forestry.

For sustainable preservation and rational use of a biodiversity of forest ecosystems TSI Institute of forestry carries out the genetic inventory on basic forest-formation breeds, especially on nut trees.

The expansion of a network of nature-protection reserves and nature reservations is provided.

The forest fires put a significant loss to forestry and the ecological damage from it is estimated in tens of mln. TR. Therefore the improvement of a service of forest protection, construction and equipment fire-observant watch-towers, development of networks of fire-prevention roads and illumination by a modern communication facility of putting out fire and transport is provided according to the established standards.

Last years the numerous centers of the wreckers and illnesses are registered. With the purpose of increase of protection, the work on a biological method of protection of forests and suppression of the wreckers and illnesses, both by chemical and biological methods will be continued.

In perfection and rational use of forest resources the large role is in forest management. For this purpose the organization of forest monitoring, conducting of zoning on forest management with the use of satellite images and introduction of a remote method of research of inventory is necessary, especially for juniper forest, pistachio forests and others vegetative formations.

Desk Study?

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

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

Documents for this question:

- [Guide for country reporting FRA 2015](#)
- [FRA 2015 Terms and Definitions](#)

1.1 Categories and definitions

Category	Definition
Forest	Land spanning more than 0.5 hectares with trees higher than 5 meters and a canopy cover of more than 10 percent or trees able to reach these thresholds in situ. It does not include land that is predominantly under agricultural or urban land use.
Other wooded land	Land not classified as "Forest" spanning more than 0.5 hectares with trees higher than 5 meters and a canopy cover of 5-10 percent or trees able to reach these thresholds ; or with a combined cover of shrubs bushes and trees above 10 percent. It does not include land that is predominantly under agricultural or urban land use.
Other land	All land that is not classified as "Forest" or "Other wooded land".
...of which with tree cover (<i>sub-category</i>)	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 (<i>sub-category</i>)	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 (<i>sub-category</i>)	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 (<i>sub-category</i>)	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 (<i>sub-category</i>)	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	Forest resources USSR on 01.01.1987, The statistical collection/Goscomles USSR, M, 1998. (in Russian).	Forest	1987	N/A

2	Land fund of the Tajik SSR on 01.01.1990, Dushanbe, 1991, (in Russian).	Forest, OWL, OL and Land	1990	N/A
3	Land fund of the Republic of Tajikistan on 01.01.1995, Dushanbe, 1996, (in Russian).	Forest, OWL, OL and Land	1995	N/A
4	Land fund of the Republic of Tajikistan on 01.01.1999, Dushanbe, 2000, (in Tajik).	Forest, OWL, OL and Land	1999	N/A
5	Land fund of the Republic of Tajikistan on 01.01.2000, Dushanbe, 2001, (in Tajik).	Forest, OWL, OL and Land	2000	N/A
6	Land fund of the Republic of Tajikistan on 01.01.2002, Dushanbe, 2003, (in Tajik).	Forest, OWL, OL and Land	2002	N/A
7	Land fund of the Republic of Tajikistan on 01.01.2003, Dushanbe, 2004, (in Tajik).	Forest, OWL, OL and Land	2003	N/A
8	Environment protection of the Republic of Tajikistan / The statistical report of the Republic of Tajikistan on 1997-2002, Dushanbe, 2004, (in Russian).	Forest, OWL, OL and Land	1997-2002	N/A
9	Land fund of the Republic of Tajikistan on 01.01.2008, Dushanbe, 2005-2008, (in Tajik).	Forest, OWL, OL and Land	2005-2008	Analyses of all categories of lands based on data collected by land management committees
10	Environment protection of the Republic of Tajikistan / The statistical report of the Republic of Tajikistan on 1997-2002, Dushanbe, 2004, (in Russian).	Forest, OWL, OL and Land	2008	Analyses of all categories of lands based on data collected by land management committees, forestry and environmental protection.
11	The statistical of Year-book of the Forestry State Department	Forest	1987-2008	This is only one source, where is fixed all change occurring in forestry sector
12	Environment protection of the Republic of Tajikistan, Dushanbe, 2012, (in Tajik-Russian)	Forest, OWL, OL and Land	1991-2011	Analyses of all categories of lands based on data collected by land management committees, forestry and environmental protection.
13	Land fund of the Republic of Tajikistan on 01.01.2013, Dushanbe, 2013, (in Tajik).	Forest, OWL, OL and Land	2013	N/A
14	The statistical of Year-book of the Forestry State Department	Forest	2008-2012	This is only one source, where is fixed all change occurring in forestry sector

1.2.2 Classification and definitions

National class	Definition
Forest	Natural complex in which communities the trees of one or many species growing close from each other and forming more or less close forest stand prevail, the areas more than 0.1 ??.
Forest land	The lands covered and uncovered by forests, but intended for its restoration and given for needs of forestry.
Other wooded land	The lands covered by bush vegetation and rare stood trees, groups of trees growing on fields, along coastal zone of the mountain rivers.
Other land with trees	Urban park, squares and gardens

1.2.3 Original data

Forest area						
FRA Categories	Area (1000 hectares)					
	1987	1990	1997	2000	2003	2009
Forest	380	408	410	410	410	410
Other wooded land	142	142	142	142	142	142
Other land	13368	13340	13342	13342	13342	13342
...of which with tree cover ¹⁾	106	106	102	102	102	102
Inland water bodies	259	259	259	259	259	259
TOTAL	14255	14255	14255	14255	14255	14255

Forest expansion, deforestation, reforestation

The annual reports of forestry holdings about afforestation and reforestation from 1987 for 2013. Data are presented directly in the final reporting table.

1.3 Analysis and processing of national data

1.3.1 Adjustment

Forest area

The total country area as presented here are those published in a year-book «Land fund of the Republic of Tajikistan» and which are approved by the Decision of the Government of the Republic of Tajikistan. This area differs from the figures held by UN Statistics Division and FAOSTAT and the country has initiated a process to update these figures.

1.3.2 Estimation and forecasting

Forest area

As in archive of the State committee on land management of the Republic of Tajikistan since 1958 exist the yearbook «*Land funds of the Republic of Tajikistan*», there is no necessity makes an estimation of the existing data. The forecasts for 2005 and 2013 are made on the basis of annual data of the State committee on land management of the Republic of Tajikistan.

1.3.3 Reclassification

Forest area

Not applied

1.4 Data

Table 1a

Categories		Area (000 hectares)				
		1990	2000	2005	2010	2015
	Forest	408	410	410	410	412
	Other wooded land	142	142	142	142	142

	Other land	13344	13342	13342	13342	13340
	... of which with tree cover	106	102	102	102	102
	Inland water bodies	259	259	259	259	259
	TOTAL	14153.00	14153.00	14153.00	14153.00	14153.00

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
	Forest expansion	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	... of which afforestation	1.5	0.1	0.3	0.3	0.005	0.002	0.003	0.003
	... of which natural expansion of forest	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Deforestation	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	... of which human induced	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Reforestation	1.5	0.2	0.5	0.5	N/A	N/A	N/A	N/A
	... of which artificial	1.5	0.2	0.5	0.5	N/A	N/A	N/A	N/A

Tiers

Category	Tier for status	Tier for reported trend
Forest	Tier 2	Tier 2
Other wooded land	Tier 2	Tier 2
Forest expansion	Tier 3	Tier 2
Deforestation	Tier 3	Tier 2
Reforestation	Tier 3	Tier 2

Tier criteria

Category	Tier for status	Tier for reported trend
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<ul style="list-style-type: none"> • Forest • Other wooded land • Afforestation • Reforestation • Natural expansion of forest • Deforestation 	<p>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</p>	<p>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</p>
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1.5 Comments

Category	Comments related to data definitions etc	Comments on the reported trends
Forest	Full inventory, mapping/remote sensing was conducted in 1987-1989	Inventory and mapping carried out partially
Other wooded land	N/A	N/A
Other land	N/A	N/A
Other land with tree cover	N/A	N/A
Inland water bodies	N/A	N/A
Forest expansion	N/A	N/A
Deforestation	N/A	N/A
Reforestation	N/A	N/A

Other general comments to the table

The afforestation rate in 90th because of difficult economic situation was reduced and from 2000 the new phase of forest planting started and in present time the annual afforestation area makes 800 hectares, but because of low rate of seedlings endurance (because of dryness of a climate) insignificant area is transferred to the "forest land" category.

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 <i>outside</i> 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 (<i>sub-category</i>)	Other naturally regenerated forest where the trees are predominantly of introduced species.
...of which naturalized (<i>sub-sub category</i>)	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 (<i>sub-category</i>)	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 (<i>sub-category</i>)	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	Land fund of the Republic of Tajikistan on 01.01.2008, Dushanbe, 2008, (in Tajik).	Forest, OWL, OL and Land	2008	Analyses of all categories of lands based on data collected by land management committees

2	Environment protection of the Republic of Tajikistan / The statistical report of the Republic of Tajikistan on 1997-2002, Dushanbe, 2004, (in Russian).	Forest, OWL, OL and Land	2008	Analyses of all categories of lands based on data collected by land management committees, forestry and Environmental protection.
3	The statistical of Year-book of the Forestry State Department	Forest	1987-2008	This is the only one document, where all changes within forestry is included
4	Environment protection of the Republic of Tajikistan, Dushanbe, 2012, (in Tajik-Russian)	Forest, OWL, OL and Land	1991-2011	Analyses of all categories of lands based on data collected by land management committees, forestry and environmental protection.
5	Land fund of the Republic of Tajikistan on 01.01.2013, Dushanbe, 2013, (in Tajik).	Forest, OWL, OL and Land	2013	N/A
6	The statistical of Year-book of the Forestry State Department	Forest	1987-2008	This is the only one document, where all changes within forestry is included
7	Environment protection of the Republic of Tajikistan / The statistical report of the Republic of Tajikistan on 1997-2002, Dushanbe, 2004, (in Russian).	Forest, OWL, OL and Land	2008	Analyses of all categories of lands based on data collected by land management committees, forestry and Environmental protection.
8	Land fund of the Republic of Tajikistan on 01.01.2008, Dushanbe, 2008, (in Tajik).	Forest, OWL, OL and Land	2008	Analyses of all categories of lands based on data collected by land management committees

2.2.2 Classification and definitions

National class	Definition
Other naturally regenerated forest	Same as FRA 2015.
of which of introduced species	Same as FRA 2015.
Planted forest	Same as FRA 2015.
of which of introduced species	Same as FRA 2015.
12	100
Other natural regeneration	Planted
1990-2000	2000-2010

2.2.3 Original data

FRA 2005 Categories	Area (1000 hectares)			
	Forest			
	1990	1995	2000	2003
Primary	297	297	297	297
Modified natural	0	12	12	12
Semi-natural	35	35	35	35
Productive plantation	22	22	22	22
Protective plantation	54	44	44	44
TOTAL	408	410	410	410

The data for 1990 have been received on the basis of existing contemporary records FHE, and for 2005 as a result of interpolation of the existing data for the period of 2000-2003. Data from 2010 were received as a result of interpolation of above mentioned data and forecasting for 2015

2.3 Analysis and processing of national data

2.3.1 Adjustment

Not applied

2.3.2 Estimation and forecasting

As during 2000-2003 years strong change is not observed, the forecast for 2005, 2010 and 2015 remains as the last years.

2.3.3 Reclassification

Productive plantation, protective plantation and semi-natural forests are classified as planted forest.

2.4 Data

Table 2a

Categories		Forest area (000 hectares)				
		1990	2000	2005	2010	2015
	Primary forest	297	297	297	297	297
	Other naturally regenerated forest	12	12	12	12	12
	... of which of introduced species	N/A	N/A	N/A	N/A	N/A
	... of which naturalized	N/A	N/A	N/A	N/A	N/A
	Planted forest	99	101	101	101	103
	... of which of introduced species	2	4	4	4	4
TOTAL		408.00	410.00	410.00	410.00	412.00

Table 2b

Primary forest converted to (000 ha)								
1990-2000			2000-2010			2010-2015		
Other natural regeneration	Planted	Other land	Other natural regeneration	Planted	Other land	Other natural regeneration	Planted	Other land
12	100	N/A	101	12	N/A	103	12	N/A

Table 2c

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

Tiers

Category	Tier for status	Tier for reported trend
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Primary forest	Tier 2	Tier 2
Other naturally regenerated forest	Tier 3	Tier 3
Planted forest	Tier 3	Tier 3
Mangroves	Tier 3	Tier 3

Tier Criteria

Category	Tier for status	Tier for reported trend
Primary forest/Other naturally regenerated forest/Planted forest	<p>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</p> <p>Tier 2 : Data sources: Full cover mapping/ remote sensing or old NFI (more than 10 years) Tier 1 : Other</p>	<p>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</p>

2.5 Comments

Category	Comments related to data definitions etc	Comments on reported trend
Primary forest	Tier 2	Tier 2
Other naturally regenerating forest	Tier 2	Tier 2
Planted forest	Tier 3	Tier 3
Mangroves	N/A	N/A

Other general comments to the table

Full forest inventory in Tajikistan have been conducted in 1987. After the establishment of stability in the country this work owing to the scarcity of means was conducted partially, only in some separate forest enterprises. Forests of Tajikistan existing during thousands years, have undergone strong degradation. For last hundred years the general forest areas were strongly reduced and consequently concept virgin forests in mountain territory relative. Though for last 10 years the forest area of Tajikistan has remained without change, but in some places reduction parameters of density of forests is observed.

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	See Question 1	Forest	1987-2003	N/A
2	The statistical Year-book of the Tajik Forestry Association Production	Forest	1987-2003	N/A
3	Environment protection of the Republic of Tajikistan / The statistical report of the Republic of Tajikistan on 1997-2002, Dushanbe, 2004, (in Russian).	Forest, OWL, OL and Land	1997-2002	N/A

4	National Strategy and Action Plan on Conservation and Sustainable Use of Biodiversity of the Republic of Tajikistan, Dushanbe, 2003	Forest	1987-2008	This is the only one document, where all changes within forestry are included
5	National Strategy and Action Plan on Conservation and Sustainable Use of Biodiversity of the Republic of Tajikistan, Dushanbe, 2008	Forest	2005 2008	N/A
6	National action program to combat desertification in Tajikistan, Dushanbe, 2000	Forest, OWL, OL and Land	1990-2000	N/A
7	NFP (SLM) CACILM program, 2005, Dushanbe	Forest, OWL, OL and Land	1985-2005	SLM in Tajikistan is analyzed and statistical data for all type of land resource is done.
8	The statistical of Year-book of the Forestry State Department	Forest	1987-2008	This is the only one document, where all changes within forestry are included
9	The statistical of Year-book of the Forestry State Department	Forest	2009-2012	This is the only one document, where all changes within forestry are included
10	Environment protection of the Republic of Tajikistan, Dushanbe, 2012, (in Tajik-Russian)	Forest, OWL, OL and Land	1991-2011	Analyses of all categories of lands based on data collected by land management committees , forestry and environmental protection.

3.2.2 Classification and definitions

National class	Definition
Growing stock	Complies with FRA 2010 definition. 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.
Definitions related to the biomass stock	Comply with FRA 2015 definitions
Definitions related to the carbon stock	Comply with FRA 2005 definitions Carbon in above-ground biomass - Same as 2015 Carbon in below-ground biomass - Same as 2015 Carbon in dead wood biomass – Same as 2015 Carbon in litter Carbon in all non-living biomass with a diameter less than a minimum diameter chose by the country for lying dead (for example 10 cm), in various states of decomposition above the mineral or organic soil. This includes the litter, fomic, and humic layers. Soil carbon Organic carbon in mineral and organic soils (including peat) to a specified depth chosen by the country and applied consistently through the time series.

N/A	N/A
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3.2.3 Original data

Growing stock										
FRA Categories	Volume (million cubic meters over bark)									
	Forest					Other wooded land				
	1987	1990	1997	2000	2003	1987	1990	1995	2000	2003
Growing stock	5.7	5.7	5.5	5.3	5.2	0.6	0.6	0.5	0.5	0.5
FRA Categories / Species name (Scientific name and common name)	Growing Stock in Forests									
	(million cubic meters)									
	1990					2000				
Juniper – <i>Juniperus</i> L.	3.5					3.3				
Pistachio – <i>Pistacia</i> L.	0.42					0.40				
Maple – <i>Acer</i> L.	0.38					0.34				
Persian walnut – <i>Juglans regia</i>	0.35					0.32				
Poplar/Aspen/Cottonwood– <i>Populus</i> L.	0.27					0.25				
Birch – <i>Betula</i> L.	0.05					0.05				
Almond – <i>Amygdalus</i> L.	0.03					0.03				
Willow – <i>Salix</i> L.	0.03					0.03				
Elm – <i>Ulmus</i> L.	0.03					0.03				
Myrobalan plum – <i>Prunus</i> L.	0.03					0.03				
Remaining of species	0.57					0.52				
TOTAL	5.66					5.30				

Biomass stock

FRA 2005 Categories	Biomass (million metric tonnes oven-dry weight)							
	Forest				Other wooded land			
	1990	1995	2000	2003	1990	1995	2000	2003
Above-ground biomass	4.4	4.0	4.0	4.0	0.7	0.6	0.6	0.6
Below-ground biomass	1.7	1.6	1.6	1.6	0.2	0.1	0.1	0.1
Dead wood biomass	0.4	0.3	0.3	0.3	ins	ins	ins	ins
TOTAL	6.5	5.9	5.9	5.9	0.9	0.7	0.7	0.7

Carbon stock

Carbon in above-ground biomass and below-ground biomass was calculated with the use of data on biomass reported in this question.

FRA 2005 Categories	Carbon (Million metric tonnes)					
	Forest			Other wooded land		
	1990	2000	2005	1990	2000	2005
Carbon in dead wood	0.1	0.1	0.1	ins	ins	ins
Carbon in litter	ins	ins	ins	ins	ins	ins
Soil carbon to a depth of 30 cm	35.0	32.0	28.0	4.0	3.5	3.0

3.3 Analysis and processing of national data

3.3.1 Adjustment

Not applied

3.3.2 Estimation and forecasting

Growing stock

The data for 1990 have been received on the basis of existing contemporary records Forest production association, and for 2005 as a result of interpolation of the existing data for the period of 2000-2003. Data from 2015 were received as a result of interpolation of above mentioned data and forecasting for 2005-2012

Biomass stock

Data from 2003 was applied to 2005, 2010 and 2015.

Carbon stock

Not applied

3.3.3 Reclassification

Diameter at breast height (DBH) refers to diameter over bark measured at a height of 1.30 m above ground level or 30 cm above buttresses if these are higher than 1 m.

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

	Total growing stock	5.7	5.3	5.1	5.2	5.2	0.6	0.5	0.5	0.5	0.5
	... of which coniferous	N/A									
	... of which broadleaved	N/A									

Table 3b

Category/Species name			Growing stock in forest (million cubic meters)			
Rank	Scientific name	Common name	1990	2000	2005	2010
1 st	Juniperus L	Juniper	3.5	3.3	3.3	3.3
2 nd	Pistacia L.	Pistachio	0.42	0.4	0.4	0.4
3 rd	Acer L.	Maple	0.38	0.34	0.34	0.34
4 th	Juglans regia	Persian walnut	0.35	0.32	0.32	0.32
5 th	Populus L.	Poplar/Aspen/ Cottonwood	0.27	0.25	0.25	0.25
6 th	Betula L.	Birch	0.05	0.05	0.05	0.05
7 th	Amygdalus L.	Almond	0.03	0.03	0.03	0.03
8 th	Salix L.	Willow	0.03	0.03	0.03	0.03
9 th	Ulmus L.	Elm	0.03	0.03	0.03	0.03
10 th	Prunus L.	Myrobalan plum	0.03	0.03	0.03	0.03
Remaining			0.61	0.52	0.32	0.32
TOTAL			5.70	5.30	5.10	5.10

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)	6cm	N/A
Minimum diameter (cm) at the top end of stem for calculation of growing stock (Y)	4cm	N/A
Minimum diameter (cm) of branches included in growing stock (W)	2cm	N/A

Volume refers to above ground (AG) or above stump (AS)	AG/AS	N/A
--	-------	-----

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

Table 3c

Category		Net annual increment (m ³ per hectare and year)				
		Forest				
		1990	2000	2005	2010	2015
	Net annual increment	N/A	N/A	N/A	N/A	N/A
	... of which coniferous	N/A	N/A	N/A	N/A	N/A
	... 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
	Above ground biomass	4.4	4	4	4	4	0.7	0.6	0.6	0.6	0.6
	Below ground biomass	1.7	1.6	1.6	1.6	1.6	0.2	0.1	0.1	0.1	0.1
	Dead wood	0.4	0.3	0.3	0.3	0.3	N/A	N/A	N/A	N/A	N/A
TOTAL		6.50	5.90	5.90	5.90	5.90	.90	.70	.70	.70	.70

Table 3e

Category		Carbon (Million metric tonnes)									
		Forest					Other wooded land				
		1990	2000	2005	2010	2015	1990	2000	2005	2010	2015
	Carbon in above ground biomass	2.2	2	2	2	2	0.33	0.28	0.28	0.28	0.28

	Carbon in below ground biomass	0.85	0.8	0.8	0.8	0.8	0.09	0.05	0.05	0.05	0.05
	<i>Subtotal Living biomass</i>	3.05	2.8	2.8	2.8	2.8	0.42	0.33	0.33	0.33	0.33
	Carbon in dead wood	0.1	0.1	0.1	0.1	0.1	N/A	N/A	N/A	N/A	N/A
	Carbon in litter	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	<i>Subtotal Dead wood and litter</i>	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Soil carbon	35	32	28	32	32	4	3.5	3	3.5	3.5
TOTAL		38.15	34.90	30.90	34.90	34.90	4.42	3.83	3.33	3.83	3.83

Tiers

Variable/category	Tier for status	Tier for trend
Total growing stock	Tier 2	Tier 2
Net annual increment	Tier 2	Tier 2
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
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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
<ul style="list-style-type: none"> • 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	There is information only about stocks of forests within the limits of the state forests, which concern to the State committee of preservation of the environment and a forestry. On other sectors the data are absent.	N/A
Growing stock of broadleaved coniferous	N/A	N/A
Growing stock composition	N/A	N/A
Net annual increment	N/A	N/A
Above-ground biomass	N/A	N/A
Below-ground biomass	N/A	N/A
Dead wood	N/A	N/A

Carbon in above-ground biomass	N/A	N/A
Carbon in below-ground biomass	N/A	N/A
Carbon in dead wood	N/A	N/A
Carbon in litter	N/A	N/A
Soil carbon	N/A	N/A

Other general comments to the table

During filling the given table the data resulted in «National Strategy and Action Plan on Conservation and Sustainable Use of Biodiversity of the Republic of Tajikistan » (Dushanbe, 2008) and the data taking place in archives Forest Production association have been used.. On carbon stock: The data resulted in National report on climate change have been used. Other officially published data now do not exist.

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	Environment protection of the Republic of Tajikistan / The statistical report of the Republic of Tajikistan on 1997-2002, Dushanbe, 2004, (in Russian).	Forest, OWL, OL and Land	1997-2008	N/A
2	National action program to combat desertification in Tajikistan, Dushanbe, 2000	Forest, OWL, OL and Land	1990-2000	N/A
3	Land fund of the Republic of Tajikistan on 01.01.1995, Dushanbe, 1996, (in Russian).	Forest, OWL, OL and Land	1995	N/A
4	Land fund of the Republic of Tajikistan on 01.01.2003, Dushanbe, 2004, (in Tajik).	Forest, OWL, OL and Land	2003	N/A

5	The statistical Year-book of the Republic of Tajikistan on 1991, Dushanbe, 1992	Forest	1975-1991	N/A
6	The statistical Year-book of the Republic of Tajikistan on 2001, Dushanbe, 2002	Forest	1990-2001	N/A
7	Land fund of the Republic of Tajikistan on 2005-2008, Dushanbe, 2008, (in Tajik).	Forest, OWL, OL and Land	2005-2008	Analyses of all categories of lands based on data collected by land management committees
8	Environment protection of the Republic of Tajikistan / The statistical report of the Republic of Tajikistan on 1997-2002, Dushanbe, 2004, (in Russian).	Forest, OWL, OL and Land	2008	Analyses of all categories of lands based on data collected by land management committees, forestry and Environmental protection
9	The statistical Year-book of the Republic of Tajikistan on 2012, Dushanbe	Forest	1991-2011	N/A
10	Land fund of the Republic of Tajikistan on 2009-2012, Dushanbe, 2013, (in Tajik).	Forest, OWL, OL and Land	2009-2012	Analyses of all categories of lands based on data collected by land management committees
11	Environment protection of the Republic of Tajikistan, Dushanbe, 1991-2011	Forest, OWL, OL and Land	2012	N/A

4.2.2 Classification and definitions

National class	Definition
Comply with FRA 2015 definitions	N/A
N/A	N/A
N/A	N/A
N/A	N/A

4.2.3 Original data

FRA Categories / Designated function	Area (1000 hectares)			
	Primary function			
	1990	1997	2000	2003
Forest				

Production	22	22	22	22
Protection of soil and water	54	44	44	44
Conservation of biodiversity	332	344	344	344
Social services	0	0	0	0
Multiple purpose	0	0	0	0
No or unknown function	0	0	0	0
Total - Forest	408	410	410	410
Other wooded land				
Production	0	0	0	0
Protection of soil and water	142	142	142	142
Conservation of biodiversity	0	0	0	0
Social services	0	0	0	0
Multiple purpose	0	0	0	0
No or unknown function	0	0	0	0
Total – Other wooded land	142	142	142	142

4.3 Analysis and processing of national data

4.3.1 Adjustment

Not applied

4.3.2 Estimation and forecasting

Not applied

4.3.3 Reclassification

Not applied

4.4 Data

Table 4a

Categories		Forest area (000 hectares)				
		1990	2000	2005	2010	2015
	Production forest	22	22	22	22	22
	Multiple use forest	0	0	0	0	0

Table 4b

Rank	Name of product	Key species	Commercial value of NWFP removals 2010 (value 1000 local currency)	NWFP category
1 st	Food	Pistachio,Almond,Persianwalnutfruits,RheumandAlitumOschaninii		
2 nd	Rawmaterialformedicine	Liquorices,ferule	22	3
3 rd	Fodder	Cereal	2	2
4 th	Ornamentalplants	Differentkindofbushes	34	6
5 th	Hides,skinsandtrophies	Huntingaccordingtoinstallists	18	10
6 th	Wildmeat	Wideboar	8	12
7 th	Livinganimals	Sheepandgoats	17	9
8 th	Wildhoneyandbee-wax	Differentypeshoney	14	11

9 th	Other plant products	N/A	6	8
10 th	Other edible animal products	N/A	10	15
TOTAL			145.00	

2010	
Name of local currency	Somoni

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 beeswax
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	90	90
1991	0	0
1992	0	0
1993	0	0
1994	0	0
1995	0	0
1996	0	0
1997	0	0
1998	0	0
1999	0	0
2000	0	0
2001	0	0
2002	0	0
2003	0	0
2004	90	90
2005	90	90
2006	90	90
2007	90	90
2008	90	90
2009	90	90
2010	90	90
2011	90	90

Tiers

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

Multiple use forest	Tier 3	Tier 3
---------------------	--------	--------

Tier Criteria

Category	Tier for status	Tier for reported trend
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	N/A	N/A
Multiple use forest	N/A	N/A
Total wood removals	N/A	N/A
Commercial value of NWFP	N/A	N/A

Other general comments to the table

So all forests of Tajikistan classify to the first category (natural and soil protection), there is no industrial round wood production in them. According to the Tajik Forest Code the fabrication of industrial wood production is forbidden. There is only sanitary cutting. The Volume of sanitary cutting in 2010 came to 5,6 thous. m3., in 2010 - 5.7 and 2011- 6.2 thous. m3. This is an official data. The Official statistics of the State Forestry and Hunting enterprise cites data that the wood fuel cutting down comes to 6700 kub. metre. However, our expert estimation on given question shows that this numeral is greatly above and comes to 90 thous. m3

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 (<i>sub-category</i>)	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 (<i>sub-category</i>)	Forest area primarily designated or managed for coastal stabilization.
...of which desertification control (<i>sub-category</i>)	Forest area primarily designated or managed for desertification control.
...of which avalanche control (<i>sub-category</i>)	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 (<i>sub-category</i>)	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 (<i>sub-category</i>)	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 (<i>sub-category</i>)	Forest area designated or managed for public recreation.
...of which carbon storage or sequestration (<i>sub-category</i>)	Forest area designated or managed for carbon storage or sequestration.
...of which spiritual or cultural services (<i>sub-category</i>)	Forest area designated or managed for spiritual or cultural services.
...of which other (<i>sub-category</i>)	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	Environment protection of the Republic of Tajikistan, Dushanbe, 2012, (in Tajik-Russian)	Forest, OWL, OL and Land	2012	N/A

2	The statistical Year-book of the Republic of Tajikistan on 2012, Dushanbe	Forest	1991-2011	Analyses of all categories of lands based on data collected by land management committees , forestry and environmental protection.
3	National Strategy and Action Plan on Conservation and Sustainable Use of Biodiversity of the Republic of Tajikistan, Dushanbe, 2008	Forest	2005 2008	N/A
4	National Strategy and Action Plan on Conservation and Sustainable Use of Biodiversity of the Republic of Tajikistan, Dushanbe, 2012	Forest	2005 2012	N/A
5	The statistical Year-book of the Republic of Tajikistan on 2012, Dushanbe	Forest	1991-2011	Analyses of all categories of lands based on data collected by land management committees, forestry and environmental protection.
6	Environment protection of the Republic of Tajikistan, Dushanbe, 2012, (in Tajik-Russian)	Forest, OWL, OL and Land	2012	N/A

5.2.2 Classification and definitions

National class	Definition
N/A	Same as FRA 2015.
N/A	N/A
N/A	N/A
N/A	N/A

5.2.3 Original data

The data for 1990 have been received on the basis of existing contemporary records Forest production association, and for 2005 as a result of interpolation of the existing data for the period of 2000-2003. Data from 2010 were received as a result of interpolation of above mentioned data and forecasting for 2015

5.3 Analysis and processing of national data

5.3.1 Adjustment

Not applied

5.3.2 Estimation and forecasting

Not applied

5.3.3 Reclassification

Not applied

5.4 Data

Table 5a

Categories		Forest area (1000 hectares)				
		1990	2000	2005	2010	2015
	Protection of soil and water	197	209	209	209	211
	... of which production of clean water	N/A	N/A	N/A	N/A	N/A
	... of which coastal stabilization	N/A	N/A	N/A	N/A	N/A
	... of which desertification control	50	50	50	50	50
	... of which avalanche control	58	58	58	58	58

	... of which erosion, flood protection or reducing flood risk	89	101	101	101	103
	... of which other (please specify in comments below the table)	N/A	N/A	N/A	N/A	N/A

Other

The main function of the forest is soil protection from erosion, floods and avalanches. In addition coast-forests perform water protection function.

Table 5b

Categories	Forest area (1000 hectares)				
	1990	2000	2005	2010	2015
Ecosystem services, cultural or spiritual values	65	65	65	65	65
...of which public recreation	65	65	65	65	65
...of which carbon storage or sequestration	N/A	N/A	N/A	N/A	N/A
...of which spiritual or cultural services	N/A	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	N/A

Tiers

Category	Tier for reported trend	Tier for status
Protection of soil and water	Tier 3	Tier 3
Ecosystem services, cultural or spiritual values	Tier 2	Tier 2

Tier criteria

Category	Tier for status	Tier for reported trend
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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
<ul style="list-style-type: none"> • 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	N/A	N/A
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	N/A	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	Environment protection of the Republic of Tajikistan / The statistical report of the Republic of Tajikistan on 1997-2002, Dushanbe, 2004, (in Russian).	Forest, OWL, OL and Land	1997-2008	N/A
2	National action program to combat desertification in Tajikistan, Dushanbe, 2000	Forest, OWL, OL and Land	1990-2000	N/A
3	Land fund of the Republic of Tajikistan on 01.01.1995, Dushanbe, 1996, (in Russian).	Forest, OWL, OL and Land	1995	N/A
4	Land fund of the Republic of Tajikistan on 01.01.2003, Dushanbe, 2004, (in Tajik).	Forest, OWL, OL and Land	2003	N/A
5	The statistical Year-book of the Republic of Tajikistan on 1991, Dushanbe, 1992	Forest	1975-1991	N/A
6	The statistical Year-book of the Republic of Tajikistan on 2001, Dushanbe, 2002	Forest	1990-2001	N/A
7	Land fund of the Republic of Tajikistan on 2005-2008, Dushanbe, 2008, (in Tajik).	Forest, OWL, OL and Land	2005-2008	Analyses of all categories of lands based on data collected by land management committees

8	Environment protection of the Republic of Tajikistan / The statistical report of the Republic of Tajikistan on 1997-2002, Dushanbe, 2004, (in Russian).	Forest, OWL, OL and Land	2008	Analyses of all categories of lands based on data collected by land management committees, forestry and Environmental protection
9	Environment protection of the Republic of Tajikistan / The statistical report of the Republic of Tajikistan on 2009-2011, Dushanbe, 2012, (in Tajik- Russian).	Forest, OWL, OL and Land	2012	Analyses of all categories of lands based on data collected by land management committees, forestry and Environmental protection

6.2.2 Classification and definitions

National class	Definition
Conservation of biodiversity	Forests of strict reserves (zapovedniks), national park, wildlife preserves (zakaznik);
N/A	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

Not applied

6.3.2 Estimation and forecasting

Not applied

6.3.3 Reclassification

6.4 Data

Table 6

Categories		Forest area (000 hectares)				
		1990	2000	2005	2010	2015
	Conservation of biodiversity	110	110	110	110	110
	Forest area within protected areas	54	44	44	44	44

Tiers

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

Tier criteria

Category	Tier for status	Tier for reported trend
<ul style="list-style-type: none"> 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	N/A	N/A
Forest area within protected areas	N/A	N/A

Other general comments to the table
--

N/A

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	N/A	N/A	N/A	N/A
2	N/A	N/A	N/A	N/A
3	N/A	N/A	N/A	N/A
4	N/A	N/A	N/A	N/A

7.2.2 Classification and definitions

National class	Definition
N/A	N/A

7.2.3 Original data

<h2>7.3 Analysis and processing of national data</h2> <h3>7.3.1</h3>
--

7.3 Analysis and processing of national data

7.3.1 Adjustment

7.3.2

7.3.2 Estimation and forecasting

7.3.3

7.3.3 Reclassification

7.4 Data

Table 7

Scientific name of woody invasive species	Forest area affected (000 ha)	
	2005	2010
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		

10.		
Total		

Note: The total forest area affected by woody invasive species is not necessary the sum of the values above, as these may be overlapping.

Tiers

Category	Tier for status	Tier for reported trend
Invasive species		

Tier category

Category	Tier for status	Tier for reported trend
Invasive species	<p>Tier 3: Systematic assessment in forest inventory or other survey (e g by conservation department) within the last 5 years.</p> <p>Tier 2: Systematic assessment in forest inventory or other survey (e g by conservation department) conducted more than 5 years ago</p> <p>Tier 1: Other</p>	<p>Tier 3: Estimate based on repeated compatible tiers 3 (tier for status)</p> <p>Tier 2: Estimate based on repeated compatible tier 2 or combination tier 3 and 2 or 1 (tier for status)</p> <p>Tier 1: Other</p>

7.5 Comments

Category	Comments related to data, definitions, etc.	Comments on the reported trend
Invasive species		

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	See 4.2.3
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	Comply with FRA 2015 definitions
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

Not applied

8.3.2 Estimation and forecasting

The average for 1990 is obtained, using the data of 1987-1995, and the averages for the 2000 and 2005 are calculated using the data of 1998-2002 and 2003-2011 respectively.

8.3.3 Reclassification

Not applied

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	2.1	N/A	1.5	N/A	2.7	N/A	1	N/A	1.4	N/A
CFRQ	... of which forest area burned	0.2	N/A	0.2	N/A	0.3	N/A	0.4	N/A	0.4	N/A
Category		2008		2009		2010		2011		2012	
		000 ha	#	000 ha	#	000 ha	#	000 ha	#	000 ha	#
CFRQ	Total land area burned	2.2	N/A	2.7	N/A	1.8	N/A	1.9	N/A	2	N/A

	... of which forest area burned	0.6	N/A	0.6	N/A	0.5	N/A	0.4	N/A	0.4	N/A
---	---------------------------------	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

Table 8b

Outbreak category	Description/name	Year(s) of latest outbreak	Area damaged (000 hectares)
1	Insects	n.a.	N/A
2	Diseases	n.a.	N/A
3	Severeweatherevents	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 1	Tier 1
<ul style="list-style-type: none"> • Insects • Diseases • Severe weather events 	Tier 3	N/A

Tier criteria

Category	Tier for status	Tier for reported trend
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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
<ul style="list-style-type: none"> • 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

All fires on forest lands, in which also grazing lands are included, happens as a result of negligence or increase of the area of rain-fed lands. Permanent work to combat Insects and diseases is carried out, and therefore the area suffered from Insects and diseases is insignificant.

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	N/A

Tiers

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

Tier criteria

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

Comments

Category	Comments related to data definitions etc
Reduction in canopy cover	Due to the lack of large-scale satellite images the permanent monitoring of the project covering by forest is not carried out, therefore it is very difficult to follow the increase of this indicator. The surveys that were conducted in the field show that on the cut-off and dry forest lands additional forest re-plantation are carried out. That is why during 5-10 years these forest plantings have already become the full value trees and the forests obtain the initial form.

Other general comments

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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	Administrative Code of the Republic Tajikistan	N/A	1993	N/A
2	Forest Code of the Republic Tajikistan	N/A	2008	N/A
3	About nature protection	N/A	1993	N/A
4	The Land code	N/A	1998	N/A
5	The Water code	N/A	2000	N/A
6	The criminal code	N/A	1998	N/A
7	About the forest farms of industrial association of the Republic of Tajikistan	N/A	2006	N/A

10.2.2 Classification and definitions

National class	Definition
N/A	Same as FRA 2015.
N/A	N/A
N/A	N/A

N/A	N/A
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10.2.3 Original data

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10.3 Data

Table 10

Category				
	National	Sub-national		
		Regional	Provincial/State	Local
Policies supporting sustainable forest management	yes			
... of which, in <u>publicly</u> owned forests	yes			
... of which, in <u>privately</u> owned forests	yes			
Legislation and regulations supporting sustainable forest management	yes			
... of which, in <u>publicly</u> owned forests	yes			
... of which, in <u>privately</u> owned forests	yes			

10.4 Comments

Variable / category	Comments related to data definitions etc
Policies supporting sustainable forest management	Primary natural forest areas and secondary natural rehabilitated forest are enclosed in the category of forest area under sustainable forest management
Legislation and regulations supporting sustainable forest management	N/A

Other general comments

COMMENT: The politics on forestry resources is defined by the State and the Government of the Republic of Tajikistan and has found the reflection in the Constitution of the Republic of Tajikistan, Laws on environment protection, on bowels, on use of fauna, on especially protected natural territories, forestry both other codes and

decisions of the Government of Republic. Forestry development is closely interconnected to other branches of a national economy. The main politics of the Government and the State is directed on preservation and restoration of mountain forests, as one of the main components to preservation of natural riches of the republic and the main component of soil preservation from erosion. Despite of a heavy economic situation the Government of Tajikistan allocates the finance on forest restoration of various purpose. Also with the purpose of more rational use of forest areas the State allocates and strengthens under forest enterprises the land of State Land Store, with the purpose to expansion of large forests. Forestry development is closely connected to economic and social programs designed by the State.

All Tajikistan forests are state. By the guarantor to preservation, restoration, expansion and rational their use it is assigned on FHE. The most part of forests are in conducting of FHE, an insignificant part enter into conducting collective farms and state farms. However the control over their condition and rational use it is assigned on FHE. Structure of FHE includes all area protections, reserves, nature sanctuaries and others. National parks are part of the Ministry of Nature Protection. The control over desertification and carried out various methods to combat desertification in forest zones is implemented by FHE. Annually this organization on the area about 3.2 ths. ha provide the planting of antierosion species. Also the FHE provide the control over preservation of a forest biodiversity and an environment with other ministries. There is a special department for ecotourism include in structure of FHE. By this department it is developed various tourist routes in unique places of republic, including large forests.

The wood sector in mountain conditions plays an essential role in poverty reduction among local population. On a contractual basis with representatives of a forestry enterprises the local populations collect various forests gifts, a part from which they hand over the state, and other part remains to them and they can realize them. In particular a walnut, a pistachio, a dogrose, herbs and other forest products. Also the local population able for at insignificant payment can buy the fire wood and make grazing on large forest areas.

There is no forestry industry in Tajikistan and only in special shops sale of wood products is carried out.

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	N/A	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?	no
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11.3 Comments

Category	Comments related to data definitions etc
National stakeholder platform	There is not a national platform that promotes or allows for stakeholder participation in forest policy development.

Other general comments

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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 (<i>sub-category</i>)	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	Environment protection of the Republic of Tajikistan / The statistical report of the Republic of Tajikistan on 1997-2002, Dushanbe, 2004, (in Russian).	Forest, OWL, OL and Land	1997-2008	N/A
2	National action program to combat desertification in Tajikistan, Dushanbe, 2000	Forest, OWL, OL and Land	1990-2000	N/A
3	Land fund of the Republic of Tajikistan on 01.01.1995, Dushanbe, 1996, (in Russian).	Forest, OWL, OL and Land	1995	N/A
4	Land fund of the Republic of Tajikistan on 01.01.2003, Dushanbe, 2004, (in Tajik).	Forest, OWL, OL and Land	2003	N/A
5	The statistical Year-book of the Republic of Tajikistan on 1991, Dushanbe, 1992	Forest	1975-1991	N/A
6	The statistical Year-book of the Republic of Tajikistan on 2001, Dushanbe, 2002	Forest	1990-2001	N/A
7	Land fund of the Republic of Tajikistan on 2005-2008, Dushanbe, 2008, (in Tajik).	Forest, OWL, OL and Land	2005-2008	Analyses of all categories of lands based on data collected by land management committees

8	Environment protection of the Republic of Tajikistan / The statistical report of the Republic of Tajikistan on 1997-2002, Dushanbe, 2004, (in Russian).	Forest, OWL, OL and Land	2008	Analyses of all categories of lands based on data collected by land management committees , forestry and Environmental protection
9	Environment protection of the Republic of Tajikistan / The statistical report of the Republic of Tajikistan on 2003-2011, Dushanbe, 2012, (in Russian).	Forest, OWL, OL and Land	2012	Analyses of all categories of lands based on data collected by land management committees , forestry and Environmental protection

12.2.2 Classification and definitions

National class	Definition
Comply with FRA 2015 definitions	N/A
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

Not applied

12.3.2 Estimation and forecasting

Not applied

12.3.3 Reclassification

Not applied

12.4 Data

Table 12

Categories		Forest area 2010 (000 ha)
	Forest area intended to be in permanent forest land use	410
	... of which permanent forest estate	344

Tiers

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

Tier Criteria

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

12.5 Comments

Category	Comments related to data definitions etc
Forest area intended to be in permanent forest land use	N/A
Permanent forest estate	Primary natural forest areas and secondary natural rehabilitated forest are enclosed in this category

Other general comments

The forests in the Republic of Tajikistan are a state ownership. It is a common property of all people. Actually all forests of the republic are mountainous, and they are referred to the first group and cutting of the main usage

in them will not be carried out, and all forestry activity is directed on preservation, increase and improvement of a condition of forests.

Now the common area of lands of state forest fund makes 1,8 million ha, only 25 % of them is engaged in wood plantings. The area covered by forests makes 412 thousand ha; 38 thousand ha of them are forest cultures created per last years. From the common area of wood fund taking place in conducting bodies of a forest facilities 1187,6 thousand ha, or about 70 % are fixed in long-term usage behind collective farms and state farms as pastures.

In the republic trees of III-IV classes of bonitet prevail, with completeness 0,3-0,4 and average stock on 1 ha 35m³.

The distribution of lands of state forest fund by categories of lands looks as follows:

- Lands, covered with forests, - 412 thousand ha
- Forest cultures - 88 thousand ha
- Not connected forest cultures - 27 thousand ha
- Lands uncovered by forest - 299 thousand ha

From them:

Sparse wood 173 thousand ha

gaps 126,1 thousand ha

Forest lands in total 740 thousand ha

Non forest lands 1060 thousand ha

From them:

- ploughland - 6,6 thousand ha
- Haymaking - 4,7 thousand ha
- Pasture - 840 thousand ha
- Other - 8,6 thousand ha.

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	The statistical Year-book of the FHE on 1999-2011, Dushanbe	N/A	1999-2011	N/A
2	Environment protection of the Republic of Tajikistan / The statistical report of the Republic of Tajikistan on 1997-2002, Dushanbe, 2004, (in Russian).	Forest, OWL, OL and Land	2008	Analyses of all categories of lands based on data collected by land management committees, forestry and Environmental protection
3	Environment protection of the Republic of Tajikistan / The statistical report of the Republic of Tajikistan on 2003-2011, Dushanbe, 2012, (in Russian).	Forest, OWL, OL and Land	2012	Analyses of all categories of lands based on data collected by land management committees, forestry and Environmental protection
4	N/A	N/A	N/A	N/A

13.2.2 Classification and definitions

National class	Definition
Comply with FRA 2015 definitions	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	20	2012	no	yes	no	no	no	no
Other field assessments	20	2012	no	yes	no	no	no	no
Updates to other sources	N/A	N/A	no	no	no	no	no	no
Expert estimate	60	2012						

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	yes
3 Other (please document)	no
4 None	no

Other type of forest reporting
N/A

13.4 Comments

Category	Comments
N/A	Because of the lack of finances the forest inventory is conducted periodically and mainly by expert method. FHEs have not enough funds for purchasing of satellite images.
N/A	N/A
N/A	N/A

Other general comments

--

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

Documents for this question:

- [Guide for country reporting FRA 2015](#)
- [FRA 2015 Terms and Definitions](#)

14.1 Categories and definitions

Category	Definition
Forest area with management plan	Forest area that has a long-term documented management plan, aiming at defined management goals which is periodically revised
...of which for production (<i>sub-category</i>)	Forest management plan mainly focused on production
...of which for conservation (<i>sub-category</i>)	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	Environment protection of the Republic of Tajikistan / The statistical report of the Republic of Tajikistan on 1997-2002, Dushanbe, 2004, (in Russian).	Forest, OWL, OL and Land	1997-2008	N/A
2	National action program to combat desertification in Tajikistan, Dushanbe, 2000	Forest, OWL, OL and Land	1990-2000	N/A
3	Land fund of the Republic of Tajikistan on 01.01.1995, Dushanbe, 1996, (in Russian).	Forest, OWL, OL and Land	1995	N/A
4	Land fund of the Republic of Tajikistan on 01.01.2003, Dushanbe, 2004, (in Tajik).	Forest, OWL, OL and Land	2003	N/A
5	The statistical Year-book of the Republic of Tajikistan on 1991, Dushanbe, 1992	Forest	1975-1991	N/A
6	The statistical Year-book of the Republic of Tajikistan on 2001, Dushanbe, 2002	Forest	1990-2001	N/A
7	Land fund of the Republic of Tajikistan on 2005-2008, Dushanbe, 2008, (in Tajik).	Forest, OWL, OL and Land	2005-2008	Analyses of all categories of lands based on data collected by land management committees

8	Environment protection of the Republic of Tajikistan / The statistical report of the Republic of Tajikistan on 1997-2002, Dushanbe, 2004, (in Russian).	Forest, OWL, OL and Land	2008	Analyses of all categories of lands based on data collected by land management committees, forestry and Environmental protection
9	Environment protection of the Republic of Tajikistan / The statistical report of the Republic of Tajikistan on 2003-2011, Dushanbe, 2012, (in Russian).	Forest, OWL, OL and Land	2012	Analyses of all categories of lands based on data collected by land management committees, forestry and Environmental protection

14.3 Data

Table 14a

Forest plan type	Forest area 2010 (000 ha)
Forest area with management plan	410
... of which for production	22
... of which for conservation	388

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	no

Table 14c

Percent of area under forest management plan that is monitored annually	100
---	-----

Tiers

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

Tier criteria

Category	Tier for status
Forest area with management plan	Tier 3 : Reports that describe national records 5 years old or less that contain long-term forest monitoring plans Tier 2 : Industry or other records indicating the presence of a long-term forest management plan Tier 1 : Other

Percent of area under forest management plan that is monitored annually	Tier 3 : Government documentation of monitoring extent Tier 2 : Reports from forest managers or other documental sources Tier 1 : Other
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14.4 Comments

Category	Comments
Forest area with management plan	Forest plantations are enclosed in this category
N/A	N/A
N/A	N/A

Other general comments

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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	no
2. Operations phase	yes
3. Review of operations	no

Tiers

Category	Tier for status
Type of stakeholder inputs	Tier 3

Tier criteria

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

15.2 Comments

Category	Comments
N/A	The stakeholders at the decision making stage participate partially but at the maintenance stage -actively This process includes the collection of fruits of the plantation and natural forests.
N/A	N/A
N/A	N/A

Other general comments

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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
	FSC	0	0	0	0	0	0	0
	PEFC	0	0	0	0	0	0	0
	Other	0	0	0	0	0	0	0
		2007	2008	2009	2010	2011	2012	
	FSC	0	0	0	0	0	0	
	PEFC	0	0	0	0	0	0	
	Other	0	0	0	0	0	0	

Table 16b

Domestic forest management certification		Forest area (000 ha)						
		2000	2001	2002	2003	2004	2005	2006
	1.Name	410	410	410	410	410	410	410
	2.Name	0	0	0	0	0	0	0
	3.Name	0	0	0	0	0	0	0

		2007	2008	2009	2010	2011	2012	
	1.Name	410	410	410	410	412	412	
	2.Name	0	0	0	0	0	0	
	3.Name	0	0	0	0	0	0	

Tier criteria

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

Tiers

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

16.3 Comments

Category	Comments related to data definitions etc
Certified forest area using an international forest management certification scheme	N/A
Domestic forest management certification	N/A

Other general comments

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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: <ul style="list-style-type: none"> • <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	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

17.3 Data

Table 17

Category	Revenues / expenditures (000 local currency)		
	2000	2005	2010
Forest revenue	N/A	N/A	N/A
Public expenditure on forestry	N/A	N/A	N/A
	2000	2005	2010
Name of Local Currency	N/A	N/A	N/A

17.4 Comments

Category	Comments related to data definitions etc
Forest revenue	N/A
Public expenditure on forestry	N/A
Other general comments	N/A

Other general comments

The State allocates 7, 3 million Somoni annually for the development of the forest sector

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 (<i>sub-category</i>)	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 (<i>sub-category</i>)	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 (<i>sub-category</i>)	Forest owned by individuals and families.
...of which private business entities and institutions (<i>sub-category</i>)	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 (<i>sub-category</i>)	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	Land fund of the Tajik SSR on 01.01.1990, Dushanbe, 1991, (in Russian).	Forest, OWL, OL and Land	1990	N/A
2	Land fund of the Republic of Tajikistan on 01.01.1995, Dushanbe, 1996, (in Russian).	Forest, OWL, OL and Land	1995	N/A
3	Land fund of the Republic of Tajikistan on 01.01.2000, Dushanbe, 2001, (in Tajik).	Forest, OWL, OL and Land	2000	N/A
4	Land fund of the Republic of Tajikistan on 01.01.2002, Dushanbe, 2003, (in Tajik).	Forest, OWL, OL and Land	2002	N/A
5	Land fund of the Republic of Tajikistan on 01.01.2003, Dushanbe, 2004, (in Tajik).	Forest, OWL, OL and Land	2003	N/A
6	Land fund of the Republic of Tajikistan on 2005-2008, Dushanbe, 2008, (in Tajik).	Forest, OWL, OL and Land	2005-2008	Analyses of all categories of lands based on data collected by land management committees
7	Land fund of the Republic of Tajikistan on 2009-2012, Dushanbe (in Tajik).	Forest, OWL, OL and Land	2009-2012	Analyses of all categories of lands based on data collected by land management committees

18.2.2 Classification and definitions

National class	Definition
Public ownership	Same as FRA 2015
Private ownership	Same as FRA 2015
Individuals(sub-category of Private ownership)	Same as FRA 2015
Private business entities and institutions(sub-category of Private ownership)	Same as FRA 2015
Local communities (sub-category of Private ownership)	Forest owned by a group of individuals belonging to the same community residing within or in the vicinity of a forest area. The community members are co-owners that share exclusive rights and duties, and benefits contribute to the community development.
Indigenous / tribal communities (sub-category of Private ownership)	Forest owned by communities of indigenous or tribal people.

Other types of ownership	Other kind of ownership arrangements not covered by the categories above. Also includes areas where ownership is unclear or disputed.
Public Administration	Same as FRA 2015
Individuals/households	Same as FRA 2015
Private institutions	Same as FRA 2015
Communities	Same as FRA 2015
Other form of management rights	Same as FRA 2015

18.2.3 Original data

FRA Categories	Area (1000 hectares)		
	Forest		
	1990	2000	2009
Private ownership	no	no	no
Public ownership	408	360	360
Other ownership	no	50	50
TOTAL	408	410	410

18.3 Analysis and processing of national data

18.3.1 Adjustment

Not applied

18.3.2 Estimation and forecasting

Not applied

18.3.3 Reclassification

Not applied

18.4 Data

Table 18a

Categories		Forest area (1000 hectares)			
		1990	2000	2005	2010
	Public ownership	358	360	360	410
	... of which owned by the state at national scale	N/A	N/A	N/A	N/A
	... of which owned by the state at the sub-national government scale	N/A	N/A	N/A	N/A
	Private ownership	0	0	0	0
	... of which owned by individuals	0	0	0	0
	... of which owned by private business entities and institutions	0	0	0	0
	... of which owned by local, tribal and indigenous communities	0	0	0	0
	Unknown ownership	50	50	50	0
TOTAL		408.00	410.00	410.00	410.00

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
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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	358	360	360	410
Individuals	0	0	0	0
Private companies	0	0	0	0
Communities	0	0	0	0
Other	0	0	0	0
TOTAL	358.00	360.00	360.00	410.00

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
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Public ownership	For the purpose of the sustainable forest management and control, the forest massifs which were before under jurisdiction of kolkhozes and sovkhoses were transferred from the category of the «Unknown ownership» into the property of the state as above mentioned organizations were re-organized into many farming enterprises	N/A
Private ownership	N/A	N/A
Unknown ownership	N/A	N/A
Management rights	N/A	N/A

Other general comments to the table

N/A

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	The statistical of Year-book of the Forestry State Department	Forest	1987-2008	N/A
2	Forestry ?ountry report on the republic of Tajikistan, Dushanbe	Forest	2004	N/A
3	UNECE/FAO The Country report, Forestry and Forest Products Sector, Tajikistan, Dushanbe - Geneva, 2006	Forest	2006	N/A
4	The statistical of Year-book of the Forestry State Department	Forest	2009-2012	N/A
5	Forestry #ountry report on the republic of Tajikistan, Dushanbe	Forest	2012	N/A

19.2.2 Classification and definitions

National class	Definition
N/A	Same as FRA 2015.
N/A	N/A
N/A	N/A
N/A	N/A

19.2.3 Original data

Annual reports of State Forestry and Hunting Department. Data presented directly in the final reporting table.

The average for the 2000, 2005 and 2010 is calculated respectively using the data of 1998-2012.

19.3 Data

Table 19

Category		Employment (000 years FTE)			
		1990	2000	2005	2010
	Employment in forestry	3.753	5.374	5.874	4.48
	... of which female	0.38	0.476	0.48	0.438

19.4 Comments

Category	Comments related to data definitions etc	Comments on the reported trend
Employment in forestry	Reducing the number of employees due to the reorganization of the FHE and leaving of several organizations from the FHE.	N/A

Other general comments to the table

Most of local people around the forests on a rent basis collecting wood and other forest products and improving their family income

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)	6.6	Samoni	2010

20.3 Comments

Category	Comments
N/A	N/A

Other general comments

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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	The statistical of Year-book of the Forestry State Department	Forest	2009-2012	N/A
2	Forestry Country report on the republic of Tajikistan, Dushanbe	Forest	2012	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	420	450

Table 21b

Category	Forest area (000 ha)
	2013
Forests earmarked for conversion	412

21.4 Comments

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

Other general comments

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