



**Forestry Department**

**Food and Agriculture Organization of the United Nations**

**GLOBAL FOREST RESOURCES  
ASSESSMENT 2010**

**COUNTRY REPORT**

**UZBEKISTAN**

FRA2010/226  
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## The Forest Resources Assessment Programme

Sustainably managed forests have multiple environmental and socio-economic functions important at the global, national and local scales, and play a vital part in sustainable development. Reliable and up-to-date information on the state of forest resources - not only on area and area change, but also on such variables as growing stock, wood and non-wood products, carbon, protected areas, use of forests for recreation and other services, biological diversity and forests' contribution to national economies - is crucial to support decision-making for policies and programmes in forestry and sustainable development at all levels.

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

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

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The Global Forest Resources Assessment Country Report Series is designed to document and make available the information forming the basis for the FRA reports. The Country Reports have been compiled by officially nominated country correspondents in collaboration with FAO staff. Prior to finalisation, these reports were subject to validation by forestry authorities in the respective countries.

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# 1 Table T1 – Extent of Forest and Other wooded land

## 1.1 FRA 2010 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 <i>in situ</i> . 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 <i>in situ</i> ; 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”.
Other land with tree cover (Subordinated to “Other land”)	Land classified as “Other land”, spanning 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.
Inland water bodies	Inland water bodies generally include major rivers, lakes and water reservoirs.

## 1.2 National data

### 1.2.1 Data sources

References to sources of information	Quality (H/M/L)	Variable(s)	Year(s)	Additional comments
Land Fund of the Republic of Uzbekistan (Uzbekiston Respublikasining Er Fondi)	H	Total land area, total area of state forest resources	1990, 2000, 2005, 2008	
Distribution of the State Forest Resources as to Land Categories	M	Forest land, non-forest land	1990, 2000, 2005, 2008	
Annual Report of the Main Forestry Department Ministry of Agriculture and Water Resources of the Republic of Uzbekistan	M	Land covered by forests, free-growing forest lands, forest plantations and nurseries	1990, 2000, 2005, 2008	
FAOSTAT	H	Total land area		

## 1.2.2 Classification and definitions

National class	Definition
<b>Forested land</b>	
Covered by forest	Forests with closed crowns, where the need of care of soil is not required, the height of trees and annual growth of the last year corresponds to criteria of the Table of Quality Estimation for the main species, regular arrangement of the main species; young forests
• including forest plantations	Forest stands and plantations planted for protective and industrial purposes, and for forest restoration
Sparse forest stands	Single trees and trees combined with bushes, not corresponding to standards, crowns without required density and closing of crowns, insufficient annual growth and non-regular arrangement of the main species
Forest nurseries	Land assigned for growing of plantings in the special places, not in the forests. Seedlings and graftings are grown on these lands until they are not replanted to forests, usually during one-three years depending on species.
Uncovered by forest	Sites of: forest fires, glades, clearings, waste lands uncovered by trees and bushes
<b>Non-forested land</b>	
Other land	Land assigned for agricultural area, hay fields, pastures, arable land, farms, wetlands, glaciers etc.
Gardens and vineyards	Gardens and vineyards
Water reservoirs	Main rivers, lakes and water reservoirs

## 1.2.3 Original data

National Class	Area (1000 hectares)			
	1990	2000	2005	2008
Forested land				
Covered by forest	1895.3	3210.9	3294.0	3244.1
• including forest plantations	222.4	413.3	533.8	608.4
Sparse forest stands	1306.1	1594.7	904.1	824.3
Forest nurseries	0.7	0.9	1.0	0.7
Uncovered by forest	1781.6	2158.6	993.7	249.6
Non-forested land				
Other land	37180.3	33933.3	35715.9	39747.6
Gardens and vineyards	308.2	361.4	348.1	344.0
<b>TOTAL</b>	<b>42472.2</b>	<b>41259.8</b>	<b>41256.8</b>	<b>44410.3*</b>

\* Official land area of the Republic of Uzbekistan indicated as 44410.3 thousand hectares in the National Report on Land Resources of the Republic of Uzbekistan.

### 1.3 Analysis and processing of national data

There are large inconsistencies in the national classification of original data for the period 1990-2008. The main discrepancy is found in the classification of national classes “Covered by forest”, “Sparse forest stands” and “Uncovered by forest”. It is evident that the classification of “Sparse forest stands” and “Uncovered by forest” in 1990 are including large areas that are classified as “Covered by forest” in 2008. In order to generate a consistent time series for FRA 2010 reporting the most recent (2008) classification has been applied. It is assumed that the areas of “Forest nurseries”, “Covered by forest” and the sub-category “Including plantations” for the year 2000 are consistent with 2008. However, due to insurmountable differences in the other categories it is not possible to create consistent time-series.

#### 1.3.1 Calibration

Official land area of the Republic of Uzbekistan indicated as 44410.3 thousand hectares in the National Report on Land Resources of the Republic of Uzbekistan. Official area of Water fund land is 815.8 thousand hectares. As the both values differ from the data available at FAOSTAT, area of other land was adjusted accordingly in order to make national data consistent.

#### 1.3.2 Estimation and forecasting

The national classes “Forest nurseries”, “Covered by forest” with sub-category “Including plantations” for the year 2000 and 2005 is used to extrapolate the 1990 figure.

National class	Area, (1990)	Area, (2000)	Area, (2005)
Forested land	<b>1000 Ha</b>		
Covered by forest	3044.7	3210.9	3294.0
• including forest plantations	172.3	413.3	533.8
Forest nurseries	0.7	0.9	1.0

#### 1.3.3 Reclassification into FRA 2010 categories

National Class	Area (1000 hectares)			
	Forests	Other wooded land	Other land with tree cover	Inland Water
Percentage	%	%	%	%
Covered by forest, including forest plantations	100 %			
Sparse forest stands		100%		
Forest nurseries	100%			
Uncovered by forest			100%	
Other land			100%	
Gardens and vineyards			100%	

### 1.4 Data for Table T1

FRA 2010 categories	Area (1000 hectares)			
	1990	2000	2005	2010
Forest	3045	3212	3295	3275.5
Other wooded land	1306.1	1594.7	904	874
Other land	38188.9	37733.3	38341	38390.5
...of which with tree cover	308.2	361.4	348.1	344.0
Inland water bodies	2200	2200	2200	2200*
<b>TOTAL**</b>	<b>44740</b>	<b>44740</b>	<b>44740</b>	<b>44740</b>

\* Official area of Water fund land is 815.8 thousand hectares

\*\* Official land area of the Republic of Uzbekistan indicated as 44410.3 thousand hectares in the National Report on Land Resources of the Republic of Uzbekistan.

## 1.5 Comments to Table T1

Variable / category	Comments related to data, definitions, etc.	Comments on the reported trend
Forest	There are large inconsistencies in the national classification of original data for the period 1990-2008. The main discrepancy is found in the classification of national classes “Covered by forest”, “Sparse forest stands” and “Uncovered by forest”. It is evident that the classification of “Sparse forest stands” and “Uncovered by forest” in 1990 are including large areas that are classified as “Covered by forest” in 2008. In order to generate a consistent time series for FRA 2010 reporting the most recent (2008) classification has been applied. It is assumed that the areas of “Forest nurseries”, “Covered by forest” and the sub-category “Including plantations” for the year 2000 are consistent with 2008. However, due to insurmountable differences in the other categories it is not possible to create consistent time-series.	There was a severe drought during 2005-2008. For this reason, it caused the decrease of forests in the country.
Other wooded land		
Other land	For calibration the FAOSTAT data were used. The calibration was applied only to the “Other land” category, because the area of the country is changed as a result of returning of the lands rented from other countries.	
Other land with tree cover		
Inland water bodies	Official area of Water fund land is 815.8 thousand hectares and significantly differs from the values available in FAOSTAT database – 2200 thousand ha.	

### Other general comments to the table

Currently, Main Department of Forestry developed TCP project proposal with FAO to carry out forest inventory. Nowadays, Main Department of Forestry is searching for additional funding sources to carry out this activity.

### Expected year for completion of ongoing/planned national forest inventory and/or RS survey / mapping

Field inventory	2015
Remote sensing survey / mapping	2015



## 2 Table T2 – Forest ownership and management rights

### 2.1 FRA 2010 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.
Private ownership	Forest owned by individuals, families, communities, private co-operatives, corporations and other business entities, private religious and educational institutions, pension or investment funds, NGOs, nature conservation associations and other private institutions.
Individuals (sub-category of Private ownership)	Forest owned by individuals and families.
Private business entities and institutions (sub-category of Private ownership)	Forest owned by private corporations, co-operatives, companies and other business entities, as well as private non-profit organizations such as NGOs, nature conservation associations, and private religious and educational institutions, etc.
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.
<b>Categories related to the holder of management rights of public forest resources</b>	
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 institutions	Forest management rights and responsibilities are transferred from the Public Administration to corporations, other business entities, private co-operatives, private non-profit 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.

## 2.2 National data

### 2.2.1 Data sources

References to sources of information	Quality (H/M/L)	Variable(s)	Year(s)	Additional comments
Distribution of the State Forest Resources as to Land Categories	M	Public ownership	1990, 2000, 2005, 2008	
Annual Report of the Main Forestry Department Ministry of Agriculture and Water Resources of the Republic of Uzbekistan	L	Public ownership	1990, 2000, 2005, 2008	

### 2.2.2 Classification and definitions

Please see comments.

### 2.2.3 Original data

Data imported from T1

## 2.3 Analysis and processing of national data

### 2.3.1 Reclassification into FRA 2010 categories

National Classes of Ownership	Percentage of a National class belonging to a FRA Class		
	Public Ownership	Private Ownership	Other or unspecified Ownership
Percentage	%	%	%
State	100 %	0	0

## 2.4 Data for Table T2

**Table 2a - Forest ownership**

FRA 2010 Categories	Forest area (1000 hectares)		
	1990	2000	2005
Public ownership	3045	3212	3295
Private ownership	0	0	0
...of which owned by individuals	0	0	0
...of which owned by private business entities and institutions	0	0	0
...of which owned by local communities	0	0	0
...of which owned by indigenous / tribal communities	0	0	0
Other types of ownership	0	0	0
<b>TOTAL</b>	<b>3045</b>	<b>3212</b>	<b>3295</b>

Note: If other types of ownership is reported, please specify details in comment to the table.

Does ownership of trees coincide with ownership of the land on which they are situated?	<input type="checkbox"/>	Yes
	<input checked="" type="checkbox"/>	No
If No above, please describe below how the two differ:		
According to the Land Code of the Republic of Uzbekistan, the whole land of the Republic is state-owned, and land can be leased for growing trees and forests. And the profit out of this activity will belong to the lease, not the land itself.		

**Table 2b - Holder of management rights of public forests**

FRA 2010 Categories	Forest area (1000 hectares)		
	1990	2000	2005
Public Administration	3045	3212	3295
Individuals	0	0	0
Private corporations and institutions	0	0	0
Communities	0	0	0
Other	0	0	0
<b>TOTAL</b>	<b>3045</b>	<b>3212</b>	<b>3295</b>

**2.5 Comments to Table T2**

Variable / category	Comments related to data, definitions, etc.	Comments on the reported trend
Public ownership	According to the Law on “Forest” of the Republic of Uzbekistan forests as natural resources are the national property and they are protected by the state. No definitions are available.	
Private ownership		
Other types of ownership		
Management rights	The total forest fund of the Republic of Uzbekistan is distributed between the following institutions: Main Forestry Department under the Ministry of Agriculture and Water Resources of the RU, State Committee on Nature Protection, and other state institutions (Hokimiyat of Tashkent Region etc.). All the listed organizations are related to the state institutions	

Other general comments to the table

### 3 Table T3 – Forest designation and management

#### 3.1 FRA 2010 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.
Protected areas	Areas especially dedicated to the protection and maintenance of biological diversity, and of natural and associated cultural resources, and managed through legal or other effective means.
<b>Categories of primary designated functions</b>	
Production	Forest area designated primarily for production of wood, fibre, bio-energy and/or non-wood forest products.
Protection of soil and water	Forest area designated primarily for protection of soil and water.
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.
Social services	Forest area designated primarily for social services.
Multiple use	Forest area designated primarily for more than one purpose and where none of these alone is considered as the predominant designated function.
Other	Forest areas designated primarily for a function other than production, protection, conservation, social services or multiple use.
No / unknown	No or unknown designation.
<b>Special designation and management categories</b>	
Area of permanent forest estate (PFE)	Forest area that is designated to be retained as forest and may not be converted to other land use.
Forest area within protected areas	Forest area within formally established protected areas independently of the purpose for which the protected areas were established.
Forest area under sustainable forest management	To be defined and documented by the country.
Forest area with management plan	Forest area that has a long-term (ten years or more) documented management plan, aiming at defined management goals, which is periodically revised.

#### 3.2 National data

##### 3.2.1 Data sources

References to sources of information	Quality (H/M/L)	Variable(s)	Year(s)	Additional comments
Distribution of the State Forest Resources as to Land Categories	M	State forest fund	1990, 2000, 2005, 2008	
Annual Report of the Main Forestry Department Ministry of Agriculture and Water Resources of the Republic of Uzbekistan	M	Management by forest functions	1990, 2000, 2005, 2008	

### 3.2.2 Classification and definitions

National class	Definition
Covered by forest	Forests with closed crowns, where the need of care of soil is not required, the height of trees and annual growth of the last year corresponds to criteria of the Table of Quality Estimation for the main species, regular arrangement of the main species; young forests
... of which Natural and planted forests	Forests with closed crowns, where the height of trees and annual growth of the last year corresponds to criteria of the Table of Quality Estimation for the main species, regular arrangement of the main species
... of which Production plantations	Forest stands and plantations used for industrial purposes
... of which Conservation of biodiversity	Reserves and national natural parks
Sparse forest stands and forest nurseries	Forests combined with bushes requiring the additional care before restoration, not corresponding to standards, crowns without required density and closing of crowns, annual growth and non-regular arrangement of the main species, as well as land assigned for growing of plantings

### 3.2.3 Original data

National class	Area (1000 hectares)			
	1990	2000	2005	2008
Covered by forest	1895.3	3210.9	3294.0	3244.1
... of which Natural and planted forests	1722.7	2995.0	3013.8	3039.9
... of which Production plantations	3.1	4.8	5.1	5.3
... of which Conservation of biodiversity	169.5	211.1	275.1	198.9
forest nurseries	0.7	0.9	1.0	0.7
<b>Total</b>	<b>1896</b>	<b>3211,8</b>	<b>3295.0</b>	<b>3244.8</b>

## 3.3 Analysis and processing of national data

### 3.3.1 Reclassification into FRA 2010 categories

National classes	Percentage of a National class belonging to a FRA Primary function		
	Forest		
	Production	Protection of soil and water	Conservation of Biodiversity
Natural and planted forest		100%	
Production plantations	100%		
Conservation of biodiversity (reserves and national parks)			100%
Forest nurseries	100%		

### 3.4 Data for Table T3

**Table 3a – Primary designated function**

FRA 2010 Categories	Forest area (1000 hectares)			
	1990	2000	2005	2010
Production	5	6	6	5.5
Protection of soil and water	2957	2995	3014	3060
Conservation of biodiversity	83	211	275	210
Social services	0	0	0	0
Multiple use	0	0	0	0
Other (please specify in comments below the table)	0	0	0	0
No / unknown	0	0	0	0
<b>TOTAL</b>	<b>3045</b>	<b>3212</b>	<b>3295</b>	<b>3275.5</b>

**Table 3b – Special designation and management categories**

FRA 2010 Categories	Forest area (1000 hectares)			
	1990	2000	2005	2010
Area of permanent forest estate	3045	3212	3295	3275.5
Forest area within protected areas	83	211	275	210
Forest area under sustainable forest management	3045	3212	3295	3275.5
Forest area with management plan*	3045	3212	3295	3275.5

### 3.5 Comments to Table T3

Variable / category	Comments related to data, definitions, etc.	Comments on the reported trend
Production		
Protection of soil and water		
Conservation of biodiversity		
Social services		
Multiple use		
Other		
No / unknown designation		
Area of permanent forest estate		
Forest area within protected areas		
Forest area under sustainable forest management		
Forest area with management plan	All forestry organization have forest management plans in Uzbekistan, but 40% of them outdated, which was developed in Soviet Union time	

Other general comments to the table

## 4 Table T4 – Forest characteristics

### 4.1 FRA 2010 Categories and definitions

Term / category	Definition
Naturally regenerated forest	Forest predominantly composed of trees established through natural regeneration.
Introduced species	A species, subspecies or lower taxon, occurring <u>outside</u> its natural range (past or present) and dispersal potential (i.e. outside the range it occupies naturally or could occupy without direct or indirect introduction or care by humans).
<b>Characteristics categories</b>	
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.
Other naturally regenerated forest of introduced species (sub-category)	Other naturally regenerated forest where the trees are predominantly of introduced species.
Planted forest	Forest predominantly composed of trees established through planting and/or deliberate seeding.
Planted forest of introduced species (sub-category)	Planted forest, where the planted/seeded trees are predominantly of introduced species.
<b>Special categories</b>	
Rubber plantations	Forest area with rubber tree plantations.
Mangroves	Area of forest and other wooded land with mangrove vegetation.
Bamboo	Area of forest and other wooded land with predominant bamboo vegetation.

### 4.2 National data

#### 4.2.1 Data sources

References to sources of information	Quality (H/M/L)	Variable(s)	Year(s)	Additional comments
Annual Report of the Main Forestry Department Ministry of Agriculture and Water Resources of the Republic of Uzbekistan	M	Forest types	1990, 2000, 2005, 2008	

#### 4.2.2 Classification and definitions

National class	Definition
Forest plantations	Forests made by people for forests restoration
Production plantations	Forest stands and plantations used for industrial purposes
Shelterbelts	Protective forest belt planted to protect field crops and “green belts” around cities, villages, railroads, roads and hydro technical constructions (water reservoirs).
Reserves	Territory assigned for biodiversity conservation where any human activity is completely prohibited
Other area covered by forest	Other forests excluding forest and production plantations, reserves and shelterbelts

### 4.2.3 Original data

National class	Area (1000 hectares)			
	1990	2000	2005	2008
<b>Covered by forest</b>	<b>1895.3</b>	<b>3210.9</b>	<b>3294.0</b>	<b>3244.1</b>
... of which Forest plantations	222.4	413.3	533.8	552.9
... of which Production plantations	3.1	4.8	5.1	5.3
... of which Shelterbelts	21.1	45.7	55.5	55.5
... of which Reserves	56.7	56.7	56.7	71.8
... of which Other area covered by forest	1592.0	2690.4	2642.9	2558.6

## 4.3 Analysis and processing of national data

### 4.3.1 Estimation and forecasting

National class	Area (1000 hectares)				
	1990	2000	2005	2008	2010
<b>Covered by forest</b>	<b>3044.7</b>	<b>3210.9</b>	<b>3294.0</b>	<b>3244.1</b>	<b>3276</b>
... of which Forest plantations	172.3	413.3	533.8	552.9	579.5
... of which Production plantations	4.2	4.8	5.1	5.3	5.5
... of which Shelterbelts	26.1	45.7	55.5	50.2	51
... of which Reserves	56.7	56.7	56.7	71.8	72
... of which Other area covered by forest	2785.4	2690.4	2642.9	2563.9	2568

### 4.3.2 Reclassification into FRA 2010 categories

National classes	Percentage of a National class belonging to a FRA Class		
	Primary	Other naturally regenerated	Planted forest
Forest plantations			100%
Production plantations			100%
Shelterbelts			100%
Reserves	100%		
Other area covered by forest		100%	

## 4.4 Data for Table T4

Table 4a

FRA 2010 Categories	Forest area (1000 hectares)			
	1990	2000	2005	2010
Primary forest	57	57	57	72
Other naturally regenerated forest	2785	2691	2644	2568.5
...of which of introduced species	n.a.	n.a.	n.a.	n.a.
Planted forest	203	464	594	635
...of which of introduced species	n.a.	n.a.	n.a.	n.a.
<b>TOTAL</b>	<b>3045</b>	<b>3212</b>	<b>3295</b>	<b>3275.5</b>



**Table 4b**

FRA 2010 Categories	Area (1000 hectares)			
	1990	2000	2005	2010
Rubber plantations (Forest)	0	0	0	0
Mangroves (Forest and OWL)	0	0	0	0
Bamboo (Forest and OWL)	0	0	0	0

**4.5 Comments to Table T4**

Variable / category	Comments related to data, definitions, etc.	Comments on the reported trend
Primary forest		
Other naturally regenerating forest		
Planted forest		
Rubber plantations		
Mangroves		
Bamboo		

Other general comments to the table

## 5 Table T5 – Forest establishment and reforestation

### 5.1 FRA 2010 Categories and definitions

Term	Definition
Afforestation	Establishment of forest through planting and/or deliberate seeding on land that, until then, was not classified as forest.
Reforestation	Re-establishment of forest through planting and/or deliberate seeding on land classified as forest.
Natural expansion of forest	Expansion of forests through natural succession on land that, until then, was under another land use (e.g. forest succession on land previously used for agriculture).

### 5.2 National data

#### 5.2.1 Data sources

References to sources of information	Quality (H/M/L)	Variable(s)	Year(s)	Additional comments
Annual Report of the Main Forestry Department Ministry of Agriculture and Water Resources of the Republic of Uzbekistan	M	All	1990, 2000, 2005, 2008	

#### 5.2.2 Classification and definitions

National class	Definition
Afforestation	Establishment of forest through planting and/or deliberate seeding on land that, until then, was not classified as forest.
Reforestation	Re-establishment of forest through planting and/or deliberate seeding on land classified as forest.
Natural expansion of forest	Expansion of forests through natural succession on land that, until then, was under another land use (e.g. forest succession on land previously used for agriculture).

#### 5.2.3 Original data

National class	Area (1000 hectares)			
	1990	2000	2005	2008
Afforestation	15	19	22	15.5
....of which dried area of Aral	10	17.7	20.5	15
Reforestation	12	15.5	12	13.3
Natural expansion of forest	3	6.5	8	13.4
<b>Total</b>	30	41	42	42.2
Annual forest establishment of which of introduced species (hectares/years)	-	-	-	-

### 5.3 Data for Table T5

FRA 2010 Categories	Annual forest establishment (hectares/year)			...of which of introduced species <sup>1)</sup> (hectares/year)		
	1990	2000	2005	1990	2000	2005
Afforestation	15000	19000	22000	n.a.	n.a.	n.a.
Reforestation	12000	15500	12000	n.a.	n.a.	n.a.
...of which on areas previously planted	3000	4000	3000	n.a.	n.a.	n.a.
Natural expansion of forest	3000	6.500	8000	n.a.	n.a.	n.a.

Note: The figures for the reporting years refer to the year of reporting 1990, 2000 and 2005.

### 5.4 Comments to Table T5

Variable / category	Comments related to data, definitions, etc.	Comments on the reported trend
Afforestation		
Reforestation		
Natural expansion of forest		

Other general comments to the table

## 6 Table T6 – Growing stock

### 6.1 FRA 2010 Categories and definitions

Category	Definition
Growing stock	Volume over bark of all living trees more than X cm in diameter at breast height (or above buttress if these are higher). Includes the stem from ground level or stump height up to a top diameter of Y cm, and may also include branches to a minimum diameter of W cm.
Growing stock of commercial species	Growing stock (see def. above) of commercial species.

### 6.2 National data

#### 6.2.1 Data sources

References to sources of information	Quality (H/M/L)	Variable(s)	Year(s)	Additional comments
Annual report of the Main Forestry Department under the Ministry of Agriculture and Water Resources of the RU	M	Growing stock	1990, 2000, 2005, 2008	

#### 6.2.2 Classification and definitions

Comply with FRA 2005 definitions.

#### 6.2.3 Original data

National classes	Volume (million cubic meters over bark)			
	Forest and other wooded land			
	1990	2000	2005	2008
Growing stock	10.36	18.53	23.05	25.3
Commercial growing stock	0.033	0.034	0.034	0.030

### 6.3 Analysis and processing of national data

#### 6.3.1 Estimation and forecasting

National classes	Volume (million cubic meters over bark)			
	Forest and other wooded land			
	1990	2000	2005	2010
Growing stock	10.36	18.53	23.05	25.5
Commercial growing stock	0.033	0.034	0.034	0,030

#### 6.3.2 Reclassification into FRA 2010 categories

No reclassification was needed.

## 6.4 Data for Table T6

### Table 6a – Growing stock

FRA 2010 category	Volume (million cubic meters over bark)							
	Forest				Other wooded land			
	1990	2000	2005	2010	1990	2000	2005	2010
Total growing stock	10.36	18.53	23.05	25.5	n.a.	n.a.	n.a.	n.a.
... of which coniferous	4.20	5.88	6.14	6.79	n.a.	n.a.	n.a.	n.a.
... of which broadleaved	6.16	12.65	16.91	18.71	n.a.	n.a.	n.a.	n.a.
Growing stock of commercial species	0.033	0.034	0.034	0.030	n.a.	n.a.	n.a.	n.a.

### Table 6b – Growing stock of the 10 most common species

FRA 2010 category / Species name			Growing stock in forest (million cubic meters)		
Rank	Scientific name	Common name	1990	2000	2005
1 <sup>st</sup>	<i>Haloxydon</i> spp.	Saxaul	3.8	9.61	13.05
2 <sup>nd</sup>	<i>Juniperus</i> spp.	Archa	4.2	5.88	6.14
3 <sup>rd</sup>	<i>Populus diversifolia</i>	Terak	0.7	0.91	1.05
4 <sup>th</sup>	<i>Populus alba</i> , <i>P. pyramidalis</i> , <i>P. nigra</i> , <i>P. bolleana</i> , <i>P. bachofenii</i> , <i>P. Uzbekistanica</i> and others, and their hybrids	Mirzaterak, kukterak, oq terak, baqa terak	0.085	0.15	0.26
5 <sup>th</sup>	<i>Ulmus laevis</i> Pall	Qayragoch	0.059	0.08	0.10
6 <sup>th</sup>	<i>Acer campestre</i>	Zarang	0.049	0.06	0.08
7 <sup>th</sup>	<i>Robinia pseudoacacia</i>	Oq akacia	0.053	0.04	0.03
8 <sup>th</sup>	<i>Salix alba</i>	Tol	0.051	0.10	0.15
9 <sup>th</sup>	<i>Fraxinus excelsior</i>	Shumtol	0.033	0.03	0.02
10 <sup>th</sup>	-	-	0	0	0
	Remainder of species		1.330	1.67	2.17
<b>TOTAL</b>			<b>10.36</b>	<b>18.53</b>	<b>23.05</b>

Note: Rank refers to the order of importance in terms of growing stock, i.e. 1<sup>st</sup> is the species with the highest growing stock. Year 2000 is the reference year for defining the species list and the order of the species.

### Table 6c – Specification of threshold values

Item	Value	Complementary information
Minimum diameter (cm) at breast height <sup>1</sup> of trees included in growing stock (X)	cm	12 cm
Minimum diameter (cm) at the top end of stem for calculation of growing stock (Y)	cm	4 cm
Minimum diameter (cm) of branches included in growing stock (W)	cm	3cm
Volume refers to “above ground” (AG) or “above stump” (AS)		AS

<sup>1</sup> 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.

## 6.5 Comments to Table T6

Variable / category	Comments related to data, definitions, etc.	Comments on the reported trend
Total growing stock		
Growing stock of broadleaved / coniferous		
Growing stock of commercial species		
Growing stock composition		

<b>Other general comments to the table</b>
<p>Forests in Uzbekistan are characterized as the 1st category forests (i.e. have mainly the protective function). The species mostly distributed in the forests of Uzbekistan are saxaul (<i>Haloxylon</i> spp.) and juniper (<i>Juniperus</i> spp.). The saxaul is a desert tree, this species is not high with rather small diameter of trunk. In the past in 1960th it was classified as a bush, and later was transferred to the category of trees. Juniper is characterized with very slow growth. Six-year juniper trees can reach only one meter of height. This is one of the reasons why they cannot be restored easily in the mountain areas of the country</p>

## 7 Table T7 – Biomass stock

### 7.1 FRA 2010 Categories and definitions

Category	Definition
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 2mm 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.

### 7.2 National data

#### 7.2.1 Data sources

References to sources of information	Quality (H/M/L)	Variable(s)	Year(s)	Additional comments
Annual report of the Main Forestry Department under the Ministry of Agriculture and Water Resources of the RU	M	Growing stock	1990, 2000, 2005, 2008	
IPCC Good Practice Guidance for LULUCF		Biomass expansion factors, belowground and aboveground biomass ratio		

#### 7.2.2 Original data

Global Ecologic Zones of Uzbekistan

TeBWk      Temperate dessert  
TeM         Temperate mountain

#### 2005

Species	Forest area, 1000 ha	Growing stock M m <sup>3</sup>	GS m <sup>3</sup> /ha	BCEF	Root-shoot ratio	AGB	BGB
Haloxydon	2268	13.05	5.7	0.8	0.46	10.44	4.80
Juniperus	153	6.14	40.1	1.4	0.40	8.60	3.44
Populus diversifolia	23.5	1.05	44.7	2.05	0.46	2.15	0.99
Other Populus	3.8	0.26	68.4	1.4	0.46	0.36	0.17
Ulmus	2.7	0.10	37	1.7	0.46	0.17	0.08
Acer	1.2	0.08	66.7	1.4	0.46	0.11	0.05
Robinia pseudoacacia	0.8	0.03	37.5	1.7	0.46	0.05	0.02
Salix	2.5	0.15	60	1.4	0.46	0.21	0.10
Fraxinus excelsior	0.5	0.02	40	1.7	0.46	0.03	0.01
Remainder of species	839	2.17	2.59	1.7	0.46	3.69	1.70
<b>TOTAL</b>	<b>3295</b>	<b>23.05</b>				<b>25.81</b>	<b>11.36</b>

### 7.3 Analysis and processing of national data

Calculation of general conversion factors between biomass and growing stock

AGB / GS o.b.	1.12
BGB / GS o.b.	0.49
DWB / GS o.b.	NDA

### 7.4 Data for Table T7

FRA 2010 category	Biomass (million metric tonnes oven-dry weight)							
	Forest				Other wooded land			
	1990	2000	2005	2010	1990	2000	2005	2010
Above-ground biomass	11.60	20.75	25.81	28.56	n.a.	n.a.	n.a.	n.a.
Below-ground biomass	5.08	9.08	11.36	12.49	n.a.	n.a.	n.a.	n.a.
Dead wood	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
<b>TOTAL</b>	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

### 7.5 Comments to Table T7

Variable / category	Comments related to data, definitions, etc.	Comments on the reported trend
Above-ground biomass		
Below-ground biomass		
Dead wood		

Other general comments to the table



## 8 Table T8 – Carbon stock

### 8.1 FRA 2010 Categories and definitions

Category	Definition
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 specified depth chosen by the country and applied consistently through the time series.

### 8.2 National data

#### 8.2.1 Data sources

References to sources of information	Quality (H/M/L)	Variable(s)	Year(s)	Additional comments
Annual report of the Main Forestry Department under the Ministry of Agriculture and Water Resources of the RU	M	Growing stock	1990, 2000, 2005, 2008	
IPCC Good Practice Guidance for LULUCF		Carbon ratio		

#### 8.2.2 Original data

Data imported from T7.

National classes	Biomass (million metric tonnes oven-dry weight)							
	Forest				Other wooded land			
	1990	2000	2005	2008	1990	2000	2005	2010
Above-ground biomass	11.60	20.75	25.81	28.56	NDA	NDA	NDA	NDA
Below-ground biomass	5.08	9.08	11.36	12.49	NDA	NDA	NDA	NDA
Dead wood	NDA	NDA	NDA	NDA	NDA	NDA	NDA	NDA
<b>TOTAL</b>	NDA	NDA	NDA	NDA	NDA	NDA	NDA	NDA

### 8.3 Analysis and processing of national data

#### Multiplying biomass stock from T7 by 0.47 gives

National classes	Carbon stock (million tonnes)			
	1990	2000	2005	2008
Above-ground biomass	5.45	9.75	12.13	13.42
Below-ground biomass	2.39	4.27	5.34	5.87
Dead wood biomass	NDA	NDA	NDA	NDA

#### 8.3.1 Reclassification into FRA 2010 categories

### 8.4 Data for Table T8

FRA 2010 Category	Carbon (Million metric tonnes)							
	Forest				Other wooded land			
	1990	2000	2005	2010	1990	2000	2005	2010
Carbon in above-ground biomass	5.4	9.7	12.2	13.4	n.a.	n.a.	n.a.	n.a.
Carbon in below-ground biomass	2.4	4.3	5.3	5.9	n.a.	n.a.	n.a.	n.a.
<b>Sub-total: Living biomass</b>	<b>7.8</b>	<b>14.0</b>	<b>17.5</b>	<b>19.3</b>	n.a.	n.a.	n.a.	n.a.
Carbon in dead wood	n.a.	n.a.	n.a.	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.
<b>Sub-total: Dead wood and litter</b>	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Soil carbon	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
<b>TOTAL</b>	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

Soil depth (cm) used for soil carbon estimates	n.a.
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### 8.5 Comments to Table T8

Variable / category	Comments related to data, definitions, etc.	Comments on the reported trend
Carbon in above-ground biomass		
Carbon in below-ground biomass		
Carbon in dead wood		
Carbon in litter		
Soil carbon		

Other general comments to the table

## 9 Table T9 – Forest fires

### 9.1 FRA 2010 Categories and definitions

Category	Definition
Number of fires	Average number of vegetation fires per year in the country.
Area affected by fire	Average area affected by vegetation fires per year in the country.
Vegetation fire (supplementary term)	Any vegetation fire regardless of ignition source, damage or benefit.
Wildfire	Any unplanned and/or uncontrolled vegetation fire.
Planned fire	A vegetation fire regardless of ignition source that burns according to management objectives and requires limited or no suppression action.

### 9.2 National data

#### 9.2.1 Data sources

References to sources of information	Quality (H/M/L)	Variable(s)	Year(s)	Additional comments
Annual report of the Main Forestry Department under the Ministry of Agriculture and Water Resources of the RU	M	Forest Fire	1990, 2000, 2005, 2008	

#### 9.2.2 Classification and definitions

National class	Definition
Number of fires	Average number of vegetation fires per year in the country.
Area affected by fire	Average area affected by vegetation fires per year in the country.
Vegetation fire (supplementary term)	Any vegetation fire regardless of ignition source, damage or benefit.
Wildfire	Any unplanned and/or uncontrolled vegetation fire.

#### 9.2.3 Original data

Forest Area (1000 ha) affected by Forest fires*	1990	2000	2005	2008
	0.073	0.073	0.120	0.015

\* information reported for 5 year period

### 9.3 Data for Table T9

Table 9a

FRA 2010 category	Annual average for 5-year period					
	1990		2000		2005	
	1000 hectares	number of fires	1000 hectares	number of fires	1000 hectares	number of fires
Total land area affected by fire	0.073	9	0.073	7	0.120	14
... of which on forest	0.073	9	0.073	7	0.120	14
... of which on other wooded land	0	0	0	0	0	0
... of which on other land	0	0	0	0	0	0

**Table 9b**

FRA 2010 category	Proportion of forest area affected by fire (%)		
	1990	2000	2005
Wildfire	100%	100%	100%
Planned fire	0	0	0

Note: The figures for the reporting years refer to the averages of annually affected areas for the 5-year periods 1988-1992, 1998-2002 and 2003-2007 respectively

#### 9.4 Comments to Table T9

Variable / category	Comments related to data, definitions, etc.	Comments on the reported trend
Area affected by fire		
Number of fires		
Wildfire / planned fire		

Other general comments to the table

## 10 Table T10 – Other disturbances affecting forest health and vitality

### 10.1 FRA 2010 Categories and definitions

Term	Definition
Disturbance	Damage caused by any factor (biotic or abiotic) that adversely affects the vigour and productivity of the forest and which is not a direct result of human activities.
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.
Category	Definition
Disturbance by insects	Disturbance caused by insect pests.
Disturbance by diseases	Disturbance caused by diseases attributable to pathogens, such as bacteria, fungi, phytoplasma or virus.
Disturbance by other biotic agents	Disturbance caused by biotic agents other than insects or diseases, such as wildlife browsing, grazing, physical damage by animals, etc.
Disturbance caused by abiotic factors	Disturbances caused by abiotic factors, such as air pollution, snow, storm, drought, etc.

### 10.2 National data

#### 10.2.1 Data sources

References to sources of information	Quality (H/M/L)	Variable(s)	Year(s)	Additional comments
Annual report of the Main Forestry Department under the Ministry of Agriculture and Water Resources of the RU	M	Disturbances by pest and diseases	1990, 2000, 2005, 2008	

#### 10.2.2 Classification and definitions

No definitions are required.

#### 10.2.3 Original data

Forest Area (1000 ha) affected by	1990	2000	2005	2008
Pest	19.1	18.867	16.0	18.0
Diseases*	8.2	6.994	8.5	8.7

\*Information reported for individual year

### 10.3 Analysis and processing of national data

Not applied

#### 10.3.1 Reclassification into FRA 2010 categories

National Classes	Percentage of a National Class belonging to a FRA Class		
	Disturbance by insects	Disturbance by diseases	Other disturbance
	%	%	%
Pests	100%		
Disease		100%	

### 10.4 Data for Table T10

**Table 10a – Disturbances**

FRA 2010 category	Affected forest area (1000 hectares)		
	1990	2000	2005
Disturbance by insects	19.1	18.9	16.0
Disturbance by diseases	8.2	7.0	8.5
Disturbance by other biotic agents	n.a.	n.a.	n.a.
Disturbance caused by abiotic factors	n.a.	n.a.	n.a.
<b>Total area affected by disturbances</b>	<b>27.3</b>	<b>25.9</b>	<b>24.5</b>

Notes: The figures for the reporting years refer to the averages of annually affected areas for the 5-year periods 1988-1992, 1998-2002 and 2003-2007 respectively.

The total area affected by disturbances is not necessarily the sum of the individual disturbances as these may be overlapping.

**Table 10b – Major outbreaks of insects and diseases affecting forest health and vitality**

Description / name	Tree species or genera affected (scientific name)	Year(s) of latest outbreak	Area affected (1000 hectares)	If cyclic, approx. cycle (years)
<i>Ocneria dispar</i> L.	<i>Different tree species</i>	2006	1.5	2
<i>Gypsonoma euphraticana</i> Ams.	<i>Populus diversifolia</i>	2008	2.0	1
<i>Diaspidiotus slavonicus</i> Comst	<i>Populus &amp; Salix</i>	1998	1.8	3
<i>Lepidosaphes mesasiatica</i> Bor.	<i>Fraxinus, Juglans, Amygdalus and other</i>	1999	5.0	2
<i>M.Larici-populina</i>	<i>Populus</i>	2002	0.5	3
<i>Acolesthes santa</i> Solsky	<i>Acer, Quercus, Ulmas</i>	1995	0.7	6
<i>Cratomerus intermedius</i> Obenb	<i>Ulmas, Malus and other</i>	2005	0.2	3
<i>Phyllactinia suffulta</i> Sacc.	<i>Pistaciae</i>	2001	4.5	7

Note: Area affected refers to the total area affected during the outbreak.

**Table 10c – Area of forest affected by woody invasive species**

Scientific name of woody invasive species	Forest area affected 2005 (1000 hectares)
<i>n.a.</i>	
<b>Total forest area affected by woody invasive species</b>	

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

### 10.5 Comments to Table T10

Variable / category	Comments related to data, definitions, etc.	Comments on the reported trend
Disturbance by insects		
Disturbance by diseases		
Disturbance by other biotic agents		
Disturbance caused by abiotic factors		
Major outbreaks		
Invasive species		

Other general comments to the table

## 11 Table T11 – Wood removals and value of removals

### 11.1 FRA 2010 Categories and definitions

Category	Definition
Industrial roundwood removals	The wood removed (volume of roundwood over bark) for production of goods and services other than energy production (woodfuel).
Woodfuel removals	The wood removed for energy production purposes, regardless whether for industrial, commercial or domestic use.

### 11.2 National data

#### 11.2.1 Data sources

References to sources of information	Quality (H/M/L)	Variable(s)	Year(s)	Additional comments
Annual report of the Main Forestry Department under the Ministry of Agriculture and Water Resources of the RU	M	Round wood, woodfuel	1990, 2000, 2005, 2008	

#### 11.2.2 Classification and definitions

No definitions are required.

#### 11.2.3 Original data

National Classes	Volume in 1000 cubic meters of roundwood over bark			
	Recorded			Planned
	1990	2000	2005	2008
Industrial roundwood	3.3	5.0	9.0	10.3
Woodfuel	45.6	24.3	21.0	19.7
<b>Total</b>	<b>48.9</b>	<b>29.3</b>	<b>30.0</b>	<b>30.0</b>

### 11.3 Analysis and processing of national data

#### 11.4 Data for Table T11

FRA 2010 Category	Industrial roundwood removals			Woodfuel removals		
	1990	2000	2005	1990	2000	2005
Total volume (1000 m <sup>3</sup> o.b.)	3.3	5.0	9.0	45.6	24.3	21.0
... of which from forest	3.3	5.0	9.0	45.6	24.3	21.0
Unit value (local currency / m <sup>3</sup> o.b.)	n.a.	25000	70000	n.a.	3500	10000
Total value (1000 local currency)	n.a.	125000	630000	n.a.	85050	210000

Note: The figures for the reporting years refer to the averages of annually affected areas for the 5-year periods 1988-1992, 1998-2002 and 2003-2007 respectively.



	1990	2000	2005
Name of local currency	Rubl.ussr	uzb.sum	uzb.sum

### 11.5 Comments to Table T11

Variable / category	Comments related to data, definitions, etc.	Comments on the reported trend
Total volume of industrial roundwood removals		
Total volume of woodfuel removals		
Unit value		
Total value		

Other general comments to the table

## 12 Table T12 – Non-wood forest products removals and value of removals

### 12.1 FRA 2010 Categories and definitions

Term	Definition
Non-wood forest product (NWFP)	Goods derived from forests that are tangible and physical objects of biological origin other than wood.
Value of NWFP removals	For the purpose of this table, value is defined as the market value at the site of collection or forest border.

### NWFP categories

Category
<b><u>Plant products / raw material</u></b>
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
<b><u>Animal products / raw material</u></b>
9. Living animals
10. Hides, skins and trophies
11. Wild honey and bee-wax
12. Wild meat
13. Raw material for medicine
14. Raw material for colorants
15. Other edible animal products
16. Other non-edible animal products

### 12.2 National data

#### 12.2.1 Data sources

References to sources of information	Quality (H/M/L)	Variable(s)	Year(s)	Additional comments
Annual report of the Main Forestry Department under the Ministry of Agriculture and Water Resources of the RU	M		1990, 2000, 2005, 2008	

#### 12.2.2 Classification and definitions

No definitions are available.

**12.2.3 Original data**

National class	NWFP removal, Ton			
	1990	2000	2005	2008
<u>Plant products / raw material:</u>				
Food (almond, walnut, pistachio, fruits)	NA	3822.8	4650.0	4720.0
Fodder	NA	8957.0	11000.0	10200.0
Medicinal plants	248.0	292.0	240.0	247.0
Aromatic plants	142.0	45.0	45.0	45.0
Raw material for colorants and dyes	NA	55.0	55.0	55.0

National class	NWFP removal, Ton			
	1990	2000	2005	2008
<u>Animal products / raw material:</u>				
Trophies, pcs	82	508	154	162
Hides, pcs	1000	1000	1000	1000
Skins, pcs	1900	2090	1700	1900
Honey and bee-wax	183	22	40	50
Bush meat	5.25	2.32	2.14	2.50
Fish	4.2	16.9	6.0	5.0
Wool	0.17	0.229	0.153	0.120

**12.3 Analysis and processing of national data**

National class	NWFP removal, Ton			
	2000	2005	2008	2010
<u>Plant products / raw material:</u>				
Food (almond, walnut, pistachio, fruits)	3822.8	4650	4720	5000
Fodder	8957	11000	10200	15000
Medicinal plants	292	240	245	250
Aromatic plants	142	45	45	50
Raw material for colorants and dyes	55	55	55	55

## 12.4 Data for Table T12

Rank	Name of product	Key species	Unit	NWFP removals 2005		NWFP category
				Quantity	Value (1000 local currency)	
1 <sup>st</sup>	Vegetables and agricultural products	(Wheat, potato, rise, corn etc. .)	ton	8229.6	886000	8
2 <sup>nd</sup>	Fruits	Fruits	ton	4557.9	578000	1
3 <sup>rd</sup>	Medicinal and aromatic plants	(Rosa canina, rhus cariaria, menta piperita, coriander sativum, glycyrrhiza glakra etc.)	ton	285	300000	3
4 <sup>th</sup>	Nuts	Almond, Walnut, Pistachio	ton	92.1	195800	1
5 <sup>th</sup>	Honey and bee-wax	Honey	ton	40	140000	1
6 <sup>th</sup>	Fodder	Hay	ton	11000	115000	2
7 <sup>th</sup>	Fish	Fish	ton	6	30000	1
8 <sup>th</sup>	Meat	Meat	ton	2.14	10270	1
9 <sup>th</sup>	Skins		piece	1700	8500	10
10 <sup>th</sup>	Hides		piece	1000	7000	10
All other plant products					0	
All other animal products					3000	
<b>TOTAL</b>					<b>2273570</b>	

	2005
Name of local currency	Uzbek sum

## 12.5 Comments to Table T12

Variable / category	Comments related to data, definitions, etc.
10 most important products	Under category Nuts harvest of Almond (16.4 t.), Walnut (63t.) and Pistachio (12.7 t.) is reported of value 82000, 63000, 50800 Uzbek sums, respectively
Other plant products	
Other animal products	Trophies (154 pieces) of total value of 3000 Uzbek sums were reported under this category
Value by product	
Total value	

Other general comments to the table

## 13 Table T13 – Employment

### 13.1 FRA 2010 Categories and definitions

Category	Definition
Full-time equivalents (FTE)	A measurement equal to one person working full-time during a specified reference period.
Employment	Includes all persons in paid employment or self-employment.
Paid employment	Persons who during a specified reference period performed some work for <u>wage or salary</u> in cash or in kind.
Self-employment	Persons who during a specified reference period performed some work for <u>profit or family gain</u> in cash or in kind (e.g. employers, own-account workers, members of producers' cooperatives, contributing family workers).

### 13.2 National data

#### 13.2.1 Data sources

References to sources of information	Quality (H/M/L)	Variable(s)	Year(s)	Additional comments
Statistical Report 1-T of the Main Forestry Department under the Ministry of Agriculture and Water Resources of the RU	M		1990, 2000, 2005, 2008	

#### 13.2.2 Original data

National classes	Employment (1000 person-years)			
	1990	2000	2005	2008
Forestry sector and protected area management staff	5.082	6.639	6.720	7102

**13.3 Data for Table T13**

FRA 2010 Category	Employment (1000 years FTE)		
	1990	2000	2005
Employment in primary production of goods	4.482	6.039	6.07
...of which paid employment	3.76	4.989	4.70
...of which self-employment	0.722	1.05	1.37
Employment in management of protected areas	0.60	0.60	0.65

**13.4 Comments to Table T13**

Variable / category	Comments related to data, definitions, etc.	Comments on the reported trend
Employment in primary production of goods		
Paid employment / self-employment		
Employment in management of protected areas		

**Other general comments to the table**

Forest sector staff included directors of the forestry organizations, inspectors, specialists, protected area management specialists and all workers of the forestry organizations.

## 14 Table T14 – Policy and legal framework

### 14.1 FRA 2010 Categories and definitions

Term	Definition
Forest policy	A set of orientations and principles of actions adopted by public authorities in harmony with national socio-economic and environmental policies in a given country to guide future decisions in relation to the management, use and conservation of forest and tree resources for the benefit of society.
Forest policy statement	A document that describes the objectives, priorities and means for implementation of the forest policy.
National forest programme (nfp)	A generic expression that refers to a wide range of approaches towards forest policy formulation, planning and implementation at national and sub-national levels. The national forest programme provides a framework and guidance for country-driven forest sector development with participation of all stakeholders and in consistence with policies of other sectors and international policies.
Law (Act or Code) on forest	A set of rules enacted by the legislative authority of a country regulating the access, management, conservation and use of forest resources.

### 14.2 Data for Table T14

Indicate the existence of the following (2008)			
<b>Forest policy statement with national scope</b>		Yes	
	<input checked="" type="checkbox"/>	No	
If Yes above, provide:	Year of endorsement		
	Reference to document		
<b>National forest programme (nfp)</b>	<input checked="" type="checkbox"/>	Yes	
	<input type="checkbox"/>	No	
If Yes above, provide:	Name of nfp in country	National Forest programme and Action Plan of the Republic of Uzbekistan	
	Starting year	At the end of the 2006	
	Current status	<input checked="" type="checkbox"/>	In formulation
		<input type="checkbox"/>	In implementation
		<input type="checkbox"/>	Under revision
Reference to document or web site	<a href="http://www.forestry.uz">www.forestry.uz</a>		
<b>Law (Act or Code) on forest with national scope</b>	<input checked="" type="checkbox"/>	Yes, specific forest law exists	
	<input type="checkbox"/>	Yes, but rules on forests are incorporated in other (broader) legislation	
	<input type="checkbox"/>	No, forest issues are not regulated by national legislation	
If Yes above, provide:	Year of enactment	1999	
	Year of latest amendment	2000	
	Reference to document	“Law on forest” No. 770-1 <a href="http://faolex.fao.org/docs/texts/uzb41428.doc">http://faolex.fao.org/docs/texts/uzb41428.doc</a>	

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<b>In case the responsibility for forest policy- and/or forest law-making is decentralized, please indicate the existence of the following and explain in the comments below the table how the responsibility for forest policy- and law-making is organized in your country.</b>		
<b>Sub-national forest policy statements</b>		Yes
	X	No
If Yes above, indicate the number of regions/states/provinces with forest policy statements		
<b>Sub-national Laws (Acts or Codes) on forest</b>	X	Yes
		No
If Yes above, indicate the number of regions/states/provinces with Laws on forests		Law on forest of the Republic of Karakalpakstan (25.04.1999)

### 14.3 Comments to Table T14

Variable / category	Comments related to data, definitions, etc.
Forest policy statement with national scope	
National forest programme (nfp)	
Law (Act or Code) on forest with national scope	
Sub-national forest policy statements	
Sub-national Laws (Acts or Codes) on forest	

Other general comments to the table



## 15 Table T15 – Institutional framework

### 15.1 FRA 2010 Categories and definitions

Term	Definition
Minister responsible for forest policy-making	Minister holding the main responsibility for forest issues and the formulation of the forest policy.
Head of Forestry	The Head of Forestry is the Government Officer responsible for implementing the mandate of the public administration related to forests.
Level of subordination	Number of administrative levels between the Head of Forestry and the Minister.
University degree	Qualification provided by University after a minimum of 3 years of post secondary education.

### 15.2 Data for Table T15

Table 15a – Institutions

FRA 2010 Category	2008	
Minister responsible for forest policy formulation : please provide full title	Ministry of Agriculture and Water Resources of the Republic of Uzbekistan	
Level of subordination of Head of Forestry within the Ministry		1 <sup>st</sup> level subordination to Minister
		2 <sup>nd</sup> level subordination to Minister
	×	3 <sup>rd</sup> level subordination to Minister
		4 <sup>th</sup> or lower level subordination to Minister
Other public forest agencies at national level	- Main Department of Forestry under the Ministry of Agriculture and Water Resources of the Republic of Uzbekistan - Department of “Ugam-Chatkal National natural park” under the Tashkent provincial administration	
Institution(s) responsible for forest law enforcement	- Main Department of Forestry, - Department of “Ugam-Chatkal National natural park” under the Tashkent provincial administration - State Committee for Nature Protection - local government authorities	

Table 15b – Human resources

FRA 2010 Category	Human resources within public forest institutions					
	2000		2005		2008	
	Number	%Female	Number	%Female	Number	%Female
Total staff	6639	10.1	6720	10.5	7102	15
...of which with university degree or equivalent	1105	4.01	1276	3	1419	3.8

Notes:

1. Includes human resources within public forest institutions at sub-national level
2. Excludes people employed in State-owned enterprises, education and research, as well as temporary / seasonal workers.

### 15.3 Comments to Table T15

Variable / category	Comments related to data, definitions, etc.	Comments on the reported trend
Minister responsible for forest policy formulation		
Level of subordination of Head of Forestry within the Ministry		
Other public forest agencies at national level		
Institution(s) responsible for forest law enforcement		
Human resources within public forest institutions		

Other general comments to the table

## 16 Table T16 – Education and research

### 16.1 FRA 2010 Categories and definitions

Term	Definition
Forest-related education	Post-secondary education programme with focus on forests and related subjects.
Doctor's degree (PhD)	University (or equivalent) education with a total duration of about 8 years.
Master's degree (MSc) or equivalent	University (or equivalent) education with a total duration of about five years.
Bachelor's degree (BSc) or equivalent	University (or equivalent) education with a duration of about three years.
Technician certificate or diploma	Qualification issued from a technical education institution consisting of 1 to 3 years post secondary education.
Publicly funded forest research centers	Research centers primarily implementing research programmes on forest matters. Funding is mainly public or channelled through public institutions.

### 16.2 National data

#### 16.2.1 Data sources

References to sources of information	Quality (H/M/L)	Variable(s)	Year(s)	Additional comments
Annual Report of the Ministry of Education	H		1990, 2000, 2005, 2008	
Annual report of the Main Forestry Department under the Ministry of Agriculture and Water Resources of the RU	M		1990, 2000, 2005, 2008	

#### 16.2.2 Original data

National classes	Graduation <sup>1)</sup> of students in forest-related education					
	2000		2005		2008	
	Number	%Female	Number	%Female	Number	%Female
Master's degree (MSc) or equivalent	2	-	11	9.1	11	18.2
Bachelor's degree (BSc) or equivalent	120	10.8	147	5.4	248	7.7
Forest technician certificate / diploma	60	11.7	45	6.7	28	-
National classes	Professionals working in publicly funded forest research centres <sup>2)</sup>					
	2000		2005		2008	
	Number	%Female	Number	%Female	Number	%Female
Doctor's degree (PhD)	45	11.4	24	16.7	21	9.5
Master's degree (MSc) or equivalent	10	20	11	-	24	8.3
Bachelor's degree (BSc) or equivalent	278	18	185	9.7	167	9.6

## 16.3 Analysis and processing of national data

### 16.3.1 Estimation and forecasting

### 16.4 Data for Table T16

FRA 2010 Category	Graduation <sup>1)</sup> of students in forest-related education					
	2000		2005		2008	
	Number	%Female	Number	%Female	Number	%Female
Master's degree (MSc) or equivalent	2	-	11	9.1	11	18.2
Bachelor's degree (BSc) or equivalent	120	10.8	147	5.4	248	7.7
Forest technician certificate / diploma	60	11.7	45	6.7	28	-
FRA 2010 Category	Professionals working in publicly funded forest research centres <sup>2)</sup>					
	2000		2005		2008	
	Number	%Female	Number	%Female	Number	%Female
Doctor's degree (PhD)	45	11.4	24	16.7	21	9.5
Master's degree (MSc) or equivalent	10	20	11	-	24	8.3
Bachelor's degree (BSc) or equivalent	278	18	185	9.7	167	9.6

Notes:

1. Graduation refers to the number of students that have successfully completed a Bachelor's or higher degree or achieved a certificate or diploma as forest technician.
2. Covers degrees in all sciences, not only forestry.

### 16.5 Comments to Table T16

Variable / category	Comments related to data, definitions, etc.	Comments on the reported trend
Graduation of students in forest-related education		Because, the forestry technician college was closed, the technical specialists decreased. And, due to the establishment of new forestry faculties at Samarkand and Nukus Agrarian Universities, the number of BSc increased.
Professionals working in public forest research centres		

#### Other general comments to the table

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## 17 Table T17 – Public revenue collection and expenditure

### 17.1 FRA 2010 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, forest products include: roundwood; sawnwood; wood-based panels; pulp and paper; and non-wood forest products. As far as possible, this should include revenue collected by all levels of government (i.e. central, regional/provincial and municipal level), but it should exclude the income of publicly owned business entities.
Public expenditure	All government expenditure on forest related activities (further defined below).
Operational expenditure (sub-category to Public expenditure)	All government expenditure on public institutions solely engaged in the forest sector. Where the forest administration is part of a larger public agency (e.g. department or ministry), this should only include the forest sector component of the agency's total expenditure. As far as possible, this should also include other institutions (e.g. in research, training and marketing) solely engaged in the forest sector, but it should exclude the expenditure of publicly owned business entities.
Transfer payments (sub-category to Public expenditure)	All government expenditure on direct financial incentives paid to non-government and private-sector institutions, enterprises communities or individuals operating in the forest sector to implement forest related activities.
Domestic funding	Public expenditure funded from domestic public financial resources, including: retained forest revenue; forest-related funds; and allocations from the national budget (i.e. from non-forest sector public revenue sources).
External funding	Public expenditure funded from grants and loans from donors, non-governmental organisations, international lending agencies and international organisations, where such funds are channelled through national public institutions.

### 17.2 National data

#### 17.2.1 Data sources

References to sources of information	Quality (H/M/L)	Variable(s)	Year(s)	Additional comments
Annual report of the Main Forestry Department under the Ministry of Agriculture and Water Resources of the RU	M		2000, 2005, 2008	

#### 17.2.2 Original data

National classes	Domestic funding (1000 local currency)		
	2000	2005	2008
State budget	798187	2809216	6290982
Other forest revenue	890843	2599579	7948070
<b>Total public expenditure</b>	1689030	5408795	14239052

### 17.3 Data for Table T17

**Table 17a - Forest revenues**

FRA 2010 Categories	Revenues (1000 local currency)	
	2000	2005
Forest revenue	2364642	7572313

**Table 17b - Public expenditure in forest sector by funding source**

FRA 2010 Categories	Domestic funding (1000 local currency)		External funding (1000 local currency)		Total (1000 local currency)	
	2000	2005	2000	2005	2000	2005
Operational expenditure	1689030	5408795	0	0.	1689030	5408795
Transfer payments	n.a.	n.a.	0	0.	n.a.	n.a.
<b>Total public expenditure</b>	1689030	5408795	0	0	1689030	5408795
If transfer payments are made for forest management and conservation, indicate for what specific objective(s) - Please tick all that apply.	<input type="checkbox"/>	Reforestation				
	<input type="checkbox"/>	Afforestation				
	<input type="checkbox"/>	Forest inventory and/or planning				
	<input type="checkbox"/>	Conservation of forest biodiversity				
	<input type="checkbox"/>	Protection of soil and water				
	<input type="checkbox"/>	Forest stand improvement				
	<input type="checkbox"/>	Establishment or maintenance of protected areas				
	<input type="checkbox"/>	Other, specify below				

### 17.4 Comments to Table T17

Variable / category	Comments related to data, definitions, etc.	Comments on the reported trend
Forest revenue		It is directly related to the inflation of national currency. As every year inflation rate accounts for about 1.4%.
Operational expenditure		
Transfer payments		

Other general comments to the table