



**Forestry Department**

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

**GLOBAL FOREST RESOURCES  
ASSESSMENT**

**COUNTRY REPORTS**

**BELARUS**

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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 area, 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)).

The Global Forest Resources Assessment process is coordinated by the Forestry Department at FAO headquarters in Rome. The contact person for matters related to FRA 2010 is:

Mette Løyche Wilkie  
Senior Forestry Officer  
FAO Forestry Department  
Viale delle Terme di Caracalla  
Rome 00153. Italy

E-mail: [Mette.LoycheWilkie@fao.org](mailto:Mette.LoycheWilkie@fao.org)

Readers can also use the following e-mail address: [fra@fao.org](mailto:fra@fao.org)

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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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## Report preparation and contact persons

The present report was prepared by the following person(s):

Name (Family name. First name)	Institution / address	E-mail	Fax	Tables
Valiantsin L. Krasouski	Belgosles	olk@tut.by	+ 375 172 263 092	1-17

## **Introduction**

The present report was prepared by the group of specialists from the Republican Unitary Forest Management and Planning enterprise «*Belgosles*». The group was led by Mr.Valiantsin L. Krasouski, the Deputy (alternate) of the FRA National Correspondent in Belarus.

The data/ information of the statistical reporting of the State Statistical Committee of the Republic of Belarus, Ministry of Economy of the Republic of Belarus, Ministry for Forestry of the Republic of Belarus, other bodies/ institutions of the state administration/ management, as well as data from the State Land Cadastre, the State Forest Cadastre, and the State Forest Account of the Republic of Belarus, were used in this Report. Some specific/ individual data/ information were received by the National Correspondent on the basis of the analytical calculation.

In the process of the elaboration of the National Report, a few individual indicators of the state of forests and forest conditions had had been précised, as well as some terms and definitions and new methodologies were applied. Accordingly, the corresponding individual data/ information on characteristics and the condition of Belarus forests had been changed in comparison with the FRA-2005 and TBFRA-2000 Assessments.

All the above changes are noted in detail in the “*Country comments*” of corresponding Tables.

We are taking this opportunity to draw your attention to the wrong/ inaccurate information provided by FAOSTAT with regard to areas of internal water basins of the Republic of Belarus.

# 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 “ <i>Forest</i> ”, 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 “ <i>Forest</i> ” or “ <i>Other wooded land</i> ”.
Other land with tree cover (Subordinated to “ <i>Other land</i> ”)	Land classified as “ <i>Other land</i> ”, 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
Forest Code of the Republic of Belarus	H	Tables coverage	2000	Categories and definitions
Directions (Reference Book/ Manual) for Forest Management and Planning work in State Forest Fund	H	Tables coverage	2002	Categories and definitions
State Land Cadastre of the Republic of Belarus for 1998-2008	H	Land use	1999-2008	Contains the information about the distribution of land by categories and land users
Simultaneous State Forest Account of the Republic of Belarus for 1993 and 2000, 2005	H	Forest cover	1994, 2005	Contains the information about areas and growing stock of the SFF of the Republic of Belarus
Information about Forest Fund of the MF of RB for 2001-2007	H	Forest cover	2002-2007	Contains the information about areas and growing stock of the SFF of the MF of Belarus

### 1.2.2 Classification and definitions

National class	Definition
Forest	The totality of the natural and artificially established woody and bushy vegetation, top-soil layers/cover, animals and micro-organisms, constituting the forest biocenosis, and being utilised in the economic, recreational, health-supporting, sanitary-hygienic, research-scientific and other purposes.
Forest Fund (FF)	The Forest Fund comprises all forests, and also lands of Forest Fund, which are not covered by forests (forest lands and non-forest lands).

Woody and bushy vegetation which is not included in Forest Fund	Scattered/ single trees. their groups/clusters; as well as other woody-bushy vegetation, including protective forest belts on the agricultural lands, on lands within the limits of rail and auto-roads, other transportation and communication lines and channels; on lands designated for health-supporting institutions / organisations, settlements (except urban forests), on lands allocated to citizens for collective gardening and the summer cottages construction, on lands of private households, lands for the construction and maintenance of apartment houses.
Forest lands	Forest lands include stocked forest lands, and also un-stocked forest lands, which are to be reforested/ afforested, and which are available for forestry needs.
Stocked (closed) forest lands	Stocked (closed) forest lands of the Forest Fund, occupied by young stands of trees species with the stand density of 0.4 and higher, and stands of other age classes/ groups with the stand density of 0.3 and higher, as well as land areas occupied by the bushy vegetation, where stands of trees species can be established without special forest-amelioration work.
Open (un-stocked) forest lands	Open (un-stocked) forest lands are not designated for forest re-establishing (clear-cut areas, burned forest areas, vanished stands, sparse stands, waste and bare land, openings, areas occupied by nurseries, non-closed plantations and other).

**Note:** The national classification does not consider the threshold levels of the height and size of the area for including the forest fund lands into a specific category. The minimum area that is being accounted is 0.1 hectare.

### 1.2.3 Original data

National classes	1993 1000 ha	2000 1000 ha	2003 1000 ha
Stocked (closed) forest lands	7376.3	7848.4	n.a.
Open (un-stocked) forest lands	404.2	424.5	n.a.
Woody and bushy vegetation which is not included in Forest Fund	n.a.	490.5	486

## 1.3 Analysis and processing of national data

### 1.3.1 Calibration

Source	Total Area (1000 ha)
National data	20760
FAOSTAT	20760

**Note:** There is no need to perform the calibration since the national land area data match the FAOSTAT land area database.

### 1.3.2 Estimation and forecasting

Due to the lack of other information, the figures from 1993 were used for reporting year 1990 except for woody and bushy vegetation not included in Forest Fund where the figure for 2000 was used.

During the last 5 years the large Forest Fund areas have been transferred from/to different land users so the linear interpolation method for the 2005 forecasting was not applied. The forecast for 2005 was implemented on the basis of the annual information about the State Forest Fund of the Ministry for Forestry of the Republic of Belarus and the State Land Cadastre of the Republic of Belarus.

National classes	1990 1000 ha	1993 1000 ha	2000 1000 ha	2003 1000 ha	2005 1000 ha
Stocked (closed) forest lands	7376	7376.3	7848.4	NDA	8008
Open (un-stocked) forest lands <sup>1/</sup>	404	404.2	424.5	NDA	428
Woody and bushy vegetation which is not included in Forest Fund	491	NDA	490.5	486	486
Other lands areas	12477	NDA	11984,6	NDA	11826
Inland water bodies <sup>2/</sup>	12	12	12	12	12
<b>TOTAL<sup>2/</sup></b>	20760	20760	20760	20760	20760

<sup>1/</sup> - Non-closed planted forests, as well as plantations and nurseries are included in this category

<sup>2/</sup> - FAOSTAT data

The 2010 data have been defined by the following methods:

- forest area was defined by the linear interpolation method applied for the latest years, taking into account the actual areas as of 01.01.2008;

- area of other wooded land was given taking into account the actual areas as of 01.01.2008 (data are from the State Land Cadastre records), and assuming some insignificant growth of areas.

### 1.3.3 Reclassification into FRA 2010 categories

National classes	FRA 2005 classes				
	Forest	OWL	Other land	OLTC	Inland water bodies
Stocked (closed) forest lands	100%	0	0	0	0
Open (un-stocked) forest lands	100%	0	0	0	0
Woody and bushy vegetation which is not included in Forest Fund	0	100%	0	0	0

### 1.4 Data for Table T1

FRA 2010 categories	Area (1000 hectares)			
	1990	2000	2005	2010
Forest	7780	8273	8436	8630
Other wooded land	491	490	486	520
Other land	12477	11985	11826	11598
...of which with tree cover	n.a.	n.a.	n.a.	n.a.
Inland water bodies	12	12	12	12
<b>Total for country</b>	<b>20760</b>	<b>20760</b>	<b>20760</b>	<b>20760</b>

The data in the table on Forest and Inland water bodies are given taking into account the aspects noted in the above comments.

### 1.5 Comments to Table T1

Variable / category	Comments related to data, definitions, etc.	Comments on the reported trend
Forest	The principle of ascribing the Forest Fund lands to the category “ <i>Forest</i> ” was partly changed. In the current report, the lands which were temporary not covered by forest (non-stocked planted areas, nurseries and forest plantations, burned and varnished stands, clear cuts, openings) have been ascribed to the category “ <i>Forest</i> ”. In the previous report (FRA-2005) these lands of the Forest Fund were included into the category “ <i>Other land with tree cover</i> ”.	The forest area in the Republic has been increasing quite intensively, as noted in Table 1.4. This is mainly due to two factors: - by natural afforestation of the former low-quality agricultural lands, and – by planting on lands handed over (allocated) for afforestation.
Other wooded land	The estimated area of “Other wooded land” includes the area in the national category “ <i>Open/unstocked forest land</i> ” within the State Forest Fund and includes areas that would qualify as	The FRA category “ <i>Other wooded land</i> ” includes areas ascribed, according to the State Land Cadastre, to the woody brushy/ bushy vegetation. These areas presented also by scattered

	<p>“Forest” according to the FRA 2005 definitions. However, no quantitative information is available that allow for an appropriate subdivision into “Forest” and “Other wooded land”. Therefore all this area has been classified as “Other wooded land”.</p>	<p>trees, and their groups, as well as by other woody brushy/ bushy vegetation, located on agricultural lands; in the belts allocated for the railways and auto-roads protection, on lands of recreational institutions, settlements, and on the land areas, given to citizens for collective orchards growing and summer cottages (dachas) construction. These areas are not covered by the forest management planning (the land category, trees density, species composition, age classes, trees height and other inventory variables are not defined). On this reason these lands area could not be registered in the category “Forest”.</p>
Other land		
Other land with tree cover	<p>We do not consider advisable, at this stage, to transfer the lands from the category “Other wooded land” to the category “Other land with tree cover”, also these lands are located among agricultural lands, they do not have any relation to the agricultural are urban land-use. Moreover, these lands, as a rule, are being transferred into the category “Forest”. The increase of these areas depends on over-growing of low-quality lands, which are not profitable for the new agricultural use, by the woody vegetation.</p>	
Inland water bodies	<p>Area of “Inland water bodies” is given according to the FAOSTATdatabase.</p>	

**Other general comments to the table**

The main difficulty in the compilation of this table was the significant difference in the national classification of land areas (Land / Forest Fund) and the classification of individual forest areas and other wooded land applied in FRA-2010, as well as the lack of national definitions and data/ information on individual forest and other wooded land areas.

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

Field inventory	
Remote sensing survey / mapping	

## 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
Forest Code of the Republic of Belarus	H	Land tenure	2000	Normative document on the ownership categories in the forests of the Republic of Belarus

## 2.2.2 Classification and definitions

National class	Definition
Private ownership	The land areas acquired by citizens of the Republic of Belarus, those who permanently reside on the territory of the Republic of Belarus, or equivalent to those “permanently reside on the territory”, according to the legislation of the Republic of Belarus

## 2.3 Data for Table T2

**Table 2a - Forest ownership**

FRA 2010 Categories	Forest area (1000 hectares)		
	1990	2000	2005
Public ownership	7780	8273	8436
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>	7780	8273	8436

Note: If other types of ownership are 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 checked="" type="checkbox"/>	Yes
	<input type="checkbox"/>	No
If No above, please describe below how the two differ:		

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

FRA 2010 Categories	Forest area (1000 hectares)		
	1990	2000	2005
Public Administration	7780	8273	8436
Individuals	0	0	0
Private corporations and institutions	0	0	0
Communities	0	0	0
Other	0	0	0
<b>TOTAL</b>	7780	8273	8436

## 2.4 Comments to Table T2

Variable / category	Comments related to data, definitions. etc.	Comments on the reported trend
Public ownership		
Private ownership	In the indicated sources of data there are no corresponding clear definitions of other ownership categories (with the exception of “private”). The FRA-2010 categories are used for filling in the Table.	
Other types of ownership		
Management rights		

**Other general comments to the table**

All forests in the Republic of Belarus, according to the legislation currently in force, are in the exclusive/ exceptional State ownership.

### 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
Forest Code of the Republic of Belarus	H	Forest cover	2000	Document sets norms of the functional distribution of forests of the RB
Simultaneous State Forest Account of the Republic of Belarus	H	Forest cover	2000, 2005	Contains the information about designated functions of forests
Rules (regulations) of assigning forests to the protection groups and categories	H	Forest cover	2003	Document sets norms of the distribution of Forest Fund by protection categories

The regulations of the order of the distribution/ assignment of forests according to the protection groups and categories, and of the transferring of forests from one protection group/ category into another one, as well as of the allocation of the specifically protected forest areas.	H	Forest cover	2008	Document sets norms of the distribution of Forest Fund by protection categories
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### 3.2.2 Classification and definitions

National class	Definition
Forests on specifically protected nature territories	Forests located on specifically protected nature territories (natural parks - “zapovednik”), national parks, wildlife preservation areas (“zakaznik”) of the national importance, natural monuments of the national importance).
Water-protecting forests	Protected (“forbidden”) belts of forests and forests within the limits of the water-protecting zones along the riverbanks /shores, lakes, water reservoirs, and other water-storage objects.
Protective forests	Soil erosion preventing forests, protective forest belts along the railroads and auto-roads of general use.
Sanitary-hygienic and health-supporting (recreation) forests	Urban forests, forests of the “green belts” (zones) around cities, around other settlements and industrial enterprises, including forests of parks within the “green zones”, forest of the first and second belts of the sanitary protection of watersheds, and forests of sanitary protection of health resorts – health resorts’ forests.
Exploitable forests	Forests available for wood supply (Exploitable forests).

### 3.2.3 Original data

National classes	Forest	
	1993 1000 ha	2000 1000 ha
Forests on specifically protected nature territories	357	487
Water-protecting forests	645	1233
Protective forests	1046	1109
Sanitary-hygienic and health-supporting (recreation) forests	1234	1261
Exploitable forests	4498	4183
<b>TOTAL</b>	<b>7780</b>	<b>8273</b>

### 3.3 Analysis and processing of national data

#### 3.3.1 Calibration

Not required.

#### 3.3.2 Estimation and forecasting

The figures for 1993 were used for reporting year 1990.

National classes	Forest		
	1990 1000 ha	2000 1000 ha	2005 1000 ha
Forests on specifically protected nature territories	357	487	1181
Water-protecting forests	645	1233	1274
Protective forests	1046	1109	300
Sanitary-hygienic and health-supporting (recreation) forests	1234	1261	1495
Exploitable forests	4498	4183	4186
<b>TOTAL</b>	<b>7780</b>	<b>8273</b>	<b>8436</b>

The Table data are partly changed (they were brought in accordance with the table T1). The areas in the category “Forests on specifically protected nature territories” have increased due to ascribing “zakazniks” (wildlife preservation areas) of the republic importance to this category, those allocated (according to the law prescriptions) from other protection categories.

When assessing the 2010 data, first of all, the available data / information on the status of 01.01.2008 were taken into account. The further forecasting was implemented by the linear interpolation method.

#### 3.3.3 Reclassification into FRA 2010 categories

National functions	Category/Designated function FRA 2010					
	Production	Protection of soil and water	Conservation of biodiversity	Social services	Multiple purpose	No or unknown function
Forests on specifically protected nature territories	0	0	100%	0	0	0
Water-protecting forests	0	100%	0	0	0	0
Protective forests <sup>1/</sup>	0	100%	0	0	0	0
Sanitary-hygienic and health-supporting (recreation) forests	0	0	0	100%	0	0
Exploitable forests	100%	0	0	0	0	0
Woody and bushy vegetation which is not a part of the Forest Fund	0	0	0	0	0	100%

<sup>1/</sup> - Protective forests according to the national classification include erosion-preventing forests, protective forest belts along the railroads and auto-roads of general use. The FRA 2010 classification does not foresee directly this function (class), that is why according experts estimates these forests are included in the category “Protection of soil and water”, as the most suitable (corresponding) to their really implemented function.

All forests have protective and social functions as a primary or secondary function.

### 3.4 Data for Table T3

#### Table 3a – Primary designated function

FRA 2010 Categories	Forest area (1000 hectares)			
	1990	2000	2005	2010
Production	4498	4183	4186	4282
Protection of soil and water	1691	2342	1574	1611
Conservation of biodiversity	357	487	1181	1208
Social services	1234	1261	1495	1529
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>	7780	8273	8436	<b>8630</b>

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

FRA 2010 Categories	Forest area (1000 hectares)			
	1990	2000	2005	2010
Area of permanent forest estate	7780	8273	8436	<b>8630</b>
Forest area within protected areas	357	487	1181	1208
Forest area under sustainable forest management	7780	8273	8436	<b>8630</b>
Forest area with management plan <sup>7376</sup>	7780	8273	8436	<b>8630</b>

## 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	All forests in the Republic are designated for the permanent / continuous productive forestry.	
Forest area within protected areas	Forest areas within protected areas include the IUCN categories I – IV, i.e. “zapovedniks” (except the State Poles radiation-contamination ecological “zapovednik”, which is not ascribed to the protected territories, according to the national legislation. It has a special status of the nature utilization), national parks, nature monuments and wildlife preservation areas (“zakazniks”) of the republic importance.	
Forest area under sustainable forest management		
Forest area with management plan	All Forest Fund territories under the category “Forest”, are covered by the basic forest inventory with the 10-year rotation, and they are the subject for the elaboration of the forest management plan for the 10-year period.	

**Other general comments to the table**

According to the National Correspondent opinion, and on the basis of the available information, there should not be expected any significant changes in the structure of the main designated functions of forests in the Republic in the nearest years. The functional structure of forests, which has been formed/ constituted during the decades, does correspond to the objectives and targets of the forest management (forestry) and the nature utilization.

## 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
Simultaneous State Forest Account of the Republic of Belarus	H	Forest cover	2000, 2005	Contains the information about areas within the Forest Fund. Additionally to the indicated data sources, the data were used from the State Forest Cadastre, completed annually on 01 January, and covering all Forest Fund of the Republic, on the basis of results of the included changes and forest inventory works (basic and permanent forest management planning).

#### 4.2.2 Classification and definitions

National class	Definition
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	The FRA-2010 classification was used in full for the completing (filling in) this Table
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### 4.2.3 Original data

FRA 2010 Categories	Forest	
	1993 1000 ha	2000 1000 ha
Primary	400	400

## 4.3 Analysis and processing of national data

### 4.3.1 Estimation and forecasting

The figures for 1993 were applied to reporting year 1990. The actual figures for 2000 and 2005 were used for 2000 and 2005. The data for 2010 were defined by the linear interpolation method.

### 4.4 Data for Table T4

**Table 4a**

FRA 2010 Categories	Forest area (1000 hectares)			
	1990	2000	2005	2010
Primary forest	400	400	400	400
Other naturally regenerated forest	5862	6181	6279	6373
...of which of introduced species	0	0	0	0
Planted forest	1518	1692	1757	1857
...of which of introduced species	1	1	1	1
<b>TOTAL</b>	<b>7780</b>	<b>8273</b>	<b>8436</b>	<b>8630</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	Primary forests include strictly (absolutely) protected forest reserve parts of “zapovedniks”, as well as not-accessible parts of forests, which are not touched by the economic activity.	
Other naturally regenerating forest	Forests (except <i>Primary forests</i> ) on which any information about methods of their original establishment (sowing/ seeding or planting) is missing. There are no significant areas falling under the sub-category “ <i>Other naturally regenerating</i> ”	

	<i>forest of introduced species</i> ” in the Republic; in any case, there are no information on that category. That is why we can put “0” with the high probability and accuracy.	
Planted forest	All forests, on which there are data/ information about their establishment by planting or seeding methods, are included	
Rubber plantations	no	
Mangroves	no	
Bamboo	no	

**Other general comments to the table**

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## 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

### 5.3 National data

#### 5.3.1 Data sources

References to sources of information	Quality (H/M/L)	Variable(s)	Year(s)	Additional comments
Data of the National Statistical Committee of the Republic of Belarus Ministry for Forestry of the Republic of Belarus	M	Extent of implemented works	1988–2007	

#### 5.3.2 Classification and definitions

National class	Definition
	The FRA-2010 terms and definitions were entirely applied/used for completing (filling in) this Table

### 5.4 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	712	8954	18136	13	32	107
Reforestation	27330	27758	34362	63	94	113
...of which on areas previously planted	1497	1413	2972	6	3	4
Natural expansion of forest	3113	5378	6572	0	0	0

Note: <sup>1/</sup> The figures for the reporting years refer to the averages for the 5-year periods 1988-1992, 1998-2002 and 2003-2007 respectively.

5.5 *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**

The scale / scope/ areas of the afforestation and reforestation during the last years have sharply increased. The main reasons for that is the transfer of low-productive agricultural lands for the afforestation, increased volumes of main cuttings, sanitary clear cuts on the territories of dying (drying off ) spruce stands, windblown stands and storm-damaged stands. In our opinion, the extent of afforestation (forest-growing) during the forthcoming years should not increase. Contrary, their decrease might be possible. The extent of the forest regeneration should be stabilized at the currently reached level. There might also possible a short-term falls of the afforestation extent, due to the non-developed (non-mastered) allowable annual cut (AAC) in main cuttings, because of difficulties with the supply (drop of demands) of wood during the economic crisis period.

## 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 definition 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
Simultaneous State Forest Account of the Republic of Belarus	H	Growing stock	1993, 2000, 2005	Contains the information about the growing stock of the Forest Fund of the RB
Terminology dictionaries/glossaries	H	Terms and Definitions	1993	
Forest Cadastre Book of the Republic of Belarus	H	Growing stock	2004-2007	Information about the growing stock of the Forest Fund of the RB

#### 6.2.2 Classification and definitions

National class	Definition
Growing stock	Volume of stem wood of all living trees available in the particular stand. in cubic meters.

#### 6.2.3 Original data

##### Growing stock volume

FRA 2005 Categories	Volume (million cubic meters over bark)			
	Forest		OWL	
	2000	2003	2000	2003
Growing stock	1339.2	1382.4	n.a.	n.a.

##### Growing stock composition

FRA 2005 Categories / Species name (Scientific name and common name)	Growing Stock in Forests (million cubic meters)	
	1993	2000
1. Common Pine - <i>Pinus sylvestris</i> L.	611.1	738.2
2. Common Birch - <i>Betula verrucosa</i>	173.9	232.6
3. Norway Spruce - <i>Picea abies</i> L.	156.1	167.9

4. Aspen	- <i>Populus tremula</i>	79.1	97.5
5. Common Alder	- <i>Alnus glutinosa</i> L.	33.9	43.2
6. Pedunculate Oak	- <i>Quercus robur</i> L.	22.2	27.4
7. Grey (White) Alder	- <i>Alnus incana</i> L.	9.3	21.2
8. Common Ash	- <i>Fraxinus excelsior</i> L.	3.5	5.1
9. European Hornbeam	- <i>Carpinus betulus</i>	1.5	2.3
10. Bosnian Maple	- <i>Acer platanoides</i>	-	0.5
Remainder of species		2.6	3.3
<b>TOTAL</b>		<b>1093.2</b>	<b>1339.2</b>

### 6.3 Analysis and processing of national data

#### 6.3.1 Estimation and forecasting

FRA 2005 Categories	Volume (million cubic meters over bark)					
	Forest			OWL		
	1990	2000	2005	1990	2000	2005
Growing stock	1093,2	1339.2	1434,8	n.a.	n.a.	n.a.

**Note:** Estimation and forecasting was implemented by the linear interpolation method. The 1993 data have been used for reporting year 1990 (growing stock composition).

#### 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	1093.2	1339.2	1434.8	1580.0	n.a.	n.a.	n.a.	n.a.
... of which coniferous	807.8	906.2	955.1	1061.0	n.a.	n.a.	n.a.	n.a.
... of which broadleaved	285.4	433.0	479.7	519.0	n.a.	n.a.	n.a.	n.a.
Growing stock of commercial species	1091.1	1337.1	1433.9	1579.0	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>Pinus sylvestris</i> L.	Common Pine	611.1	738.2	790.3
2 <sup>nd</sup>	<i>Betula verrucosa</i>	Common Birch	173.9	232.6	264.3
3 <sup>rd</sup>	<i>Picea abies</i> - L	Norway Spruce	156.1	167.9	164.8
4 <sup>th</sup>	<i>Populus tremula</i>	Aspen	79.1	97.5	28.6
5 <sup>th</sup>	<i>Alnus glutinosa</i> L.	Common Alder	33.9	43.2	109.5
6 <sup>th</sup>	<i>Quercus robur</i> L.	Pedunculate Oak	22.2	27.4	44.5
7 <sup>th</sup>	<i>Alnus incana</i> L.	Grey (White) Alder	9.3	21.2	22.6
8 <sup>th</sup>	<i>Fraxinus excelsior</i> L.	Common Ash	3.5	5.1	5.9
9 <sup>th</sup>	<i>Carpinus betulus</i>	European Hornbeam	1.5	2.3	2.1

10 <sup>th</sup>	<i>Acer platanoides</i>	Bosnian Maple	-	0.5	0.0
Remaining			2.6	3.3	2.2
<b>TOTAL</b>			<b>1093.2</b>	<b>1339.2</b>	<b>1434.8</b>

Note: Rank refers to the order of importance in terms of growing stock, i.e. the 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/ rank 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)	2 cm	No established threshold
Minimum diameter (cm) at the top end of stem for calculation of growing stock (Y)		No established threshold
Minimum diameter (cm) of branches included in growing stock (W)		Not included
Volume refers to “above ground” (AG) or “above stump” (AS)	AG	

## 6.5 Comments to Table T6

Variable / category	Comments related to data, definitions, etc.	Comments on the reported trend
Total growing stock	The OWLs in the Republic of Belarus are represented by the open (un-stocked) forest lands and by woody and bushy vegetation. With a rare exception, there have not been done any inventory of the latter... It is difficult to say anything definite with regard to the distribution of these areas by categories, species distribution, and moreover about the growing stock. Due to this situation, the data on OWL are not given in this table.	
Growing stock of broadleaved / coniferous		
Growing stock of commercial species	The list of commercial species in the Republic includes all main forest-forming tree species with the exception of shrubs ( <i>Salix</i> spp.) and other species ( <i>Malus</i> spp.).	
Growing stock composition		

### Other general comments to the table

<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.

## 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
Simultaneous State Forest Account of the Republic of Belarus	H	Biomass stock	1993, 2000, 2005	Biomass stock data were calculated on the basis of the volume of the growing stock
Forest Cadastre Book of the Republic of Belarus	H	Biomass stock	2004-2007	

#### 7.2.2 Classification and definitions

National class	Definition

### 7.3 Analysis and processing of national data

For calculation of data for Table 7 the standard coefficients and values provided by IPCC were used. Data for 1990 and 2005 for the above-ground biomass, and below-ground biomass, were calculated on the basis of the actual growing stock data (Table 6), as well as the standard coefficients.

#### 7.3.1 Estimation and forecasting

Data for 2010 were received by the linear interpolation method, and taking into account the actual increase of the growing and carbon stocks during the last years.

## 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	629.7	786.6	881.9	996.6	n.a.	n.a.	n.a.	n.a.
Below-ground biomass	190.7	238.0	267.9	302.7	n.a.	n.a.	n.a.	n.a.
Dead wood	3.8	5.4	5.8	6.2	n.a.	n.a.	n.a.	n.a.
<b>TOTAL</b>	<b>824.2</b>	<b>1030.0</b>	<b>1155.6</b>	<b>1305.5</b>	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	The deadwood biomass data were calculated on the basis of the corresponding wood stocks, derived from the database of the compartment units “ <i>Forest Fund of the Republic of Belarus</i> ” by the electronic programming methods.	The significant changes of data in this category in comparison with the previous reporting have happened due to the precision of deadwood stock data. The precision was implemented on the basis of the reports from the research work, which was not taken into account in the previous reporting.

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
Simultaneous State Forest Account of the Republic of Belarus	H	Carbon stock	1993, 2000, 2005	Carbon stock was calculated on the basis of biomass stock data
Forest Cadastre Book of the Republic of Belarus	H	Carbon stock	2004-2007	
Summary sketch/ essay on the results of the soil- and forest-typology inspection/ investigation of the state industrial forestry associations/ units	H	Soil types	2006-2008	Distribution of forests by soil types

*The distribution of forest areas by soil types have been harmonized with / adopted to the European soil types*

#### 8.2.2 Classification and definitions

National class	Definition

#### 8.2.3 Original data

##### Calculation of soil carbon accumulation

Soil types	Area, thousand ha				Carbon stock accumulation 1 ha, tonne	Carbon stock accumulation, million tonne			
	1990	2000	2005	2010		1990	2000	2005	2010
HAC soils 15%	1167,0	1241	1265	1295	68 <sup>IV</sup>	79,3	84,4	86,0	88,1
LAC soils 21%	1633,8	1737	1772	1812	30 <sup>IV</sup>	49,0	52,1	53,2	54,4

Sandy soils 36%	2800,8	29,78	3037	3107	10 <sup>1/</sup>	28,0	29,8	30,4	31,1
Spodic soils 6%	466,8	496	506	518	117 <sup>1/</sup>	54,6	58,0	59,2	60,6
Wetlands soils 22%	1711,6	1821	1856	1898	146 <sup>1/</sup>	249,9	265,9	271,0	277,1
TOTAL 100%	7780	8273	8436	8630		460,8	490,2	499,8	511,3

<sup>1/</sup> For the «LAC soils» type the national indicator of carbon accumulation was applied, for other types of soil the standard values per hectare suggested by IPCC-GPG were used in the calculation.

### 8.3 Analysis and processing of national data

#### 8.3.1 Estimation and forecasting

The calculation of carbon stock was implemented on the methodological basis elaborated by IPCC. For the calculation of carbon stock in above-ground biomass, carbon stock in below-ground biomass, and carbon stock in deadwood, the conversion factor 0,47 was applied, for the carbon in litter – for coniferous stands – 0,31, broadleaved – 0,25, and for the calculation of the soil carbon accumulation – from 0,68 to 1,46, depending on the soil types (Table 8.2.3) .

#### 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	296.0	369.7	414.5	468.4	n.a.	n.a.	n.a.	n.a.
Carbon in below-ground biomass	89.6	111.9	125.9	142.3	n.a.	n.a.	n.a.	n.a.
<b>Sub-total: Living biomass</b>	<b>385.6</b>	<b>481.6</b>	<b>540.4</b>	<b>610.7</b>	n.a.	n.a.	n.a.	n.a.
Carbon in dead wood	1.9	2.7	2.9	3.1	n.a.	n.a.	n.a.	n.a.
Carbon in litter	222.6	236.7	241.3	247.0	n.a.	n.a.	n.a.	n.a.
<b>Sub-total: Dead wood and litter<sup>1.9</sup></b>	<b>224.5</b>	<b>239.4</b>	<b>244.2</b>	<b>250.1</b>	n.a.	n.a.	n.a.	n.a.
Soil carbon	460.8	490.2	499.8	511.3	n.a.	n.a.	n.a.	n.a.
<b>TOTAL</b>	<b>1070.9</b>	<b>1211.2</b>	<b>1284.4</b>	<b>1372.1</b>	n.a.	n.a.	n.a.	n.a.

Soil depth (cm) used for soil carbon estimates	30
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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 Economic and Financial Report of the Ministry for Forestry	H	Forest cover	1988-2007	Information about losses and disturbances of forests

#### 9.2.2 Classification and definitions

The national terms and definitions correspond to the FRA-2010 terms and definitions, so the latter ones were applied in the compilation of this table.

#### 9.2.3 Original data

##### Forest fires

FRA category	Annual data for the 5-year period											
	1988 year		1989 year		1990 year		1991 year		1992 year		Average	
	Area, ha	Number of fires	Area, ha	Number of fires	Area, ha	Number of fires	Area, ha	Number of fires	Area, ha	Number of fires	Area, ha	Number of fires
Total area, affected by fires	834,2	1769	1044,6	1956	1039,1	2471	319,3	1517	25683,4	8121	5784	3167
... including forests <sup>1/</sup>	832,3	н.д.	1036,9	н.д.	1022,4	2471	309,9	н.д.	20412,2	н.д.	4723	2471

FRA category	Annual data for the 5-year period											
	1998 year		1999 year		2000 year		2001 year		2002 year		Average	
	Area, ha	Number of fires	Area, ha	Number of fires	Area, ha	Number of fires	Area, ha	Number of fires	Area, ha	Number of fires	Area, ha	Number of fires
Total area, affected by fire	567,7	876	6260,8	3959	1931,0	2569	442,8	1111	22282,3	5274	6297	2758
... including forests <sup>1/</sup>	552,3	801	4214,5	3374	1760,1	2170	359,2	1025	10107,7	4539	3399	2382

FRA category	Annual data for the 5-year period											
	2003 year		2004 year		2005 year		2006 year		2007 year		Average	
	Area, ha	Number of fires	Area, ha	Number of fires	Area, ha	Number of fires	Area, ha	Number of fires	Area, ha	Number of fires	Area, ha	Number of fires
Total area,	4362,6	2027	586,6	1121	344,6	1114	2515,7	3252	662,0	1079	1694	1719

affected by fires												
...including forests <sup>1/</sup>	3080,5	1811	559,5	1001	321,9	1018	2508,4	2834	612,7	1376	1417	1608

<sup>1/</sup> Forest areas affected by fires

Fires according to the national norms (standards) are recorded in the Republic of Belarus starting from 0.01 ha. Data in the above table are on the Forest Fund of the Ministry for Forestry of the Republic of Belarus

### 9.3 Analysis and processing of national data

#### 9.3.1 Calibration

In fact, the calibration was not applied. The reported data were used.

#### 9.3.2 Reclassification into FRA 2010 category

Not required.

### 9.4 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	5.8	3167	6.3	2758	1.7	1719
... of which: on forest	4.7	2471	3.4	2382	1.4	1608
... of which: on other wooded land	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
... of which: on other land	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

**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

### 9.5 Comments to Table T9

Variable / category	Comments related to data, definitions, etc.	Comments on the reported trend
Area affected by fire	The reported data of the Ministry for Forestry of the Republic of Belarus include the summarised data/ information about disturbances in the Forest Fund of the Ministry, covering forests and OWL areas without breaking down by the two categories.	
Number of fires		

Wildfire / planned fire	According to the statistical reporting, there had not been planned fires during the reported period in forests of the Republic.	
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<b>Other general comments to the table</b>
<p>Data for the reporting years are taken from the National Statistical Committee of the Republic of Belarus and the Ministry for Forestry of the Republic of Belarus                  Data/information on fires on “<i>Other wooded land</i>” and “<i>Other land</i>” areas are entirely not available</p>

## 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 those 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
Data/ information is from the annual reports to the Ministry for Forestry of the Republic of Belarus, and from the State Forest Cadastre	H	Forest cover	1998-2007	Information about losses and disturbances of forests. Data for 2005 and the data in Table 10b are reported by the State Institution “ <i>Bellesozazchita</i> ” of the Ministry for Forestry of the Republic of Belarus

#### 10.2.2 Classification and definitions

The national terms and definitions correspond to the FRA 2010 terms and definitions, so the latter ones were applied in the compilation of this table.

#### 10.2.3 Original data

Categories/Classes	Annual area (hectares)					Average annual area for 5 years (hectares)
	1998	1999	2000	2001	2002	
Disturbance by insects	NDA	62555	NDA	28645	36001	42400
Disturbance by diseases	163178	159994	157646	168191	159245	161561

Other disturbance:						
- wildlife / animals	29	34	-	11	20	19
- excessive moisture	514	221	237	564	400	387

Data in the above table are on the Forest Fund of the Ministry for Forestry of the Republic of Belarus

Categories/Classes	Annual area (hectares)					Average annual area for 5 years (hectares)
	2003	2004	2005	2006	2007	
Disturbance by insects	99659	54947	17159	10501	24163	41286
Disturbance by diseases	170411	166728	159613	162086	162007	164169
Other disturbance:						
- biotic	31	67	52	28	32	42
- abiotic	1097	16138	8057	2754	3072	6224

Data in the above table are on the Forest Fund of the Ministry for Forestry of the Republic of Belarus

### 10.3 Analysis and processing of national data

#### 10.3.1 Calibration

Not required

#### 10.3.2 Reclassification into FRA 2010 categories

Not required

### 10.4 Data for Table T10

**Table 10a – Disturbances**

FRA 2010 category	Affected forest area (1000 hectares)		
	1990	2000	2005
Disturbance by insects	n.a.	50.6	41.3
Disturbance by diseases	n.a.	193.0	164.2
Disturbance by other biotic agents	n.a.	0.02	0.1
Disturbance caused by abiotic factors	n.a.	0.5	6.2
<b>Total area affected by disturbances</b>	n.a.	<b>244.1</b>	<b>211.8</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)
Dendrolimus pini L	<i>Pinus-silvestris</i>	2002-2006	40	10
Lymantria monacha	<i>Pinus-silvestri.Picea abies L</i>	1993-1997	30	10-12
Panolis flammea Schiff	<i>Pinus-silvestris</i>	2000-2002	13	once in 50

				years
Diprion pini L.	<i>Pinus-silvestris</i>	2003	28	10-12
Neodiprion sertifer Geoffr	<i>Pinus-silvestris</i>	2000-2006	30	5-7
Lymantria dispar L.	<i>Quercus robur Betula verrucosa</i>	2003-2007	27	13-15
Operophtera brumata	<i>Quercus robur Betula verrucosa</i>	annually	up to 40	8-10
Heterobasidion annosum Bref	<i>Pinus-silvestris</i>	annually	120-160	annually
Erwinia populina	<i>Betula verrucosa</i>	2002-2006	5	once in 50 years

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)
<b>Total forest area affected by woody invasive species</b>	n.a.

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	The data are given together for forests and OWL	
Disturbance by diseases	The data are given together for forests and OWL	
Disturbance by other biotic agents	The data are given together for forests and OWL	
Disturbance caused by abiotic factors		
Major outbreaks		
Invasive species	Account of forests affected by invasive tree species currently is not being provided in the Republic.	

#### Other general comments to the table

The reported data of the Ministry for Forestry of the Republic of Belarus include the summarised data/information about disturbances in the Forest Fund of the Ministry, including forests and OWL, without breaking down by the two categories.  
Data on disturbances affecting forest health and vitality for 1990 are entirely not available.

## 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
Data are from the National Statistical Committee of the Republic of Belarus	H	Roundwood, overbark	1988 – 2007	No

#### 11.2.2 Original data

##### Wood removals and value of removals in the Republic of Belarus

FRA category	Industrial roundwood removals					
	1988 year	1989 year	1990 year	1991 year	1992 year	Average
Total volume (1000 m <sup>3</sup> o.b.) <sup>1/</sup>	6076,3	5948,0	5436,3	5096,2	4836,6	5478,7
... of which: from forests						
	Woodfuel removals <sup>2/</sup>					
	1988 year	1989 year	1990 year	1991 year	1992 year	Average
Total volume (1000 m <sup>3</sup> o.b.) <sup>1/</sup>	889,0	802,8	785,5	815,3	815,1	821,54
... of which: from forests						

FRA category	Industrial roundwood removals					
	1998 year	1999 year	2000 year	2001 year	2002 year	Average
Total volume (1000 m <sup>3</sup> o.b.) <sup>1/</sup>	4424,4	4795,9	4737,3	4987,2	5435,1	4875,98
... of which: from forests	4424,4	4795,9	4737,3	4987,2	5435,1	4875,98
	Woodfuel removals <sup>2/</sup>					
	1998 year	1999 year	2000 year	2001 year	2002 year	Average
Total volume (1000 m <sup>3</sup> o.b.) <sup>1/</sup>	869,3	1012,1	939,7	929,4	1002,2	950,54
... of which: from forests	869,3	1012,1	939,7	929,4	1002,2	950,54

FRA category	Industrial roundwood removals					
	2003 year	2004 year	2005 year	2006 year	2007 year	Average
Total volume (1000 m <sup>3</sup> o.b.) <sup>1/</sup>	5920,9	6717,5	6861,1	6710,1	6646,6	6571,2
... of which: from forests	5920,9	6717,5	6861,1	6710,1	6646,6	6571,2
	Woodfuel removals <sup>2/</sup>					
	2003 year	2004 year	2005 year	2006 year	2007 year	Average
Total volume (1000 m <sup>3</sup> o.b.) <sup>1/</sup>	1114,6	1234,3	1171,7	1332,3	518,1	1074,2
... of which: from forests	1114,6	1234,3	1171,7	1332,3	518,1	1074,2

<sup>1/</sup>Data are shown in thousands solid m<sup>3</sup> (solid cubic metres). <sup>2/</sup>Data are on the category "Fuel wood for heating".

### 11.3 Analysis and processing of national data

#### 11.3.1 Estimation and forecasting

All data are over bark

#### 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.)	5478.7	4876.0	6571.2	821.5	950.5	1074.2
... of which: from forest	5478.7	4876.0	6571.2	821.5	950.5	1074.2
Unit value (local currency / m <sup>3</sup> o.b.)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total value (1000 local currency)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

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	n.a.	n.a.	n.a.

#### 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	As noted above, during the nearest years there possible a decrease of wood harvesting and removals in the Republic, due to falling/ drop of the domestic demand, as well as the export volumes. At the same time, the Allowable Annual Cut in main cuttings, as well as the current age class structure, allows the increase of wood harvesting, especially of broadleaved species.	
Total volume of woodfuel removals		
Unit value		
Total value	A lot of changes have happened during the reporting period in the prices policy in wood removals. This, and other reasons, like repeated changes of the taxation policy/values, changes in the order of sales of wood in the forest and at the low landings, as well as unstable rates of the national currency to US dollar. We had not been in a position to obtain the official data with the “justification” that they are not available. As a consequence, we do not object to use the data from the previous period, but we could not guarantee their accuracy/ reliability.	

#### Other general comments to the table

The value of the production unit, as well as the total value in the national currency, is not provided by the Committee.

## 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
Data of the National Statistical Committee of the Republic of Belarus, Ministry of Forestry of the Republic of Belarus	M	Non-wood Forest Products	2005	No

### 12.3 Data for Table T12

Rank	Name of product	Key species	Unit	NWFP removals 2005		NWFP category
				Quantity	Value (1000 local currency)	
<b>Plant products / raw material</b>						
1st	Food	mushrooms	T	4420.9	11179284	1
2nd	Food	berries	T	11811.0	11508845	1
3rd	Exudates	soft resin	T	7332.0	7097376	7
4th	Exudates	Birch sap	T	7394.5	n.a	7
5th	Fodder		T	6837	n.a	2
6th	Christmas (New Year) trees		Th. pc	37.8	189	6
7th	Raw material for medicine and aromatic products		T	3.3	n.a	3
<b>Animal products / raw material</b>						
8th	Wild honey and bee-wax		T	n.a.	57887707	11
9th	Wild meat		T	n.a.	72200	12
10th	Living animals		Th. pc.	n.a.	106.6	9
All other plant products					694657	
All other animal products					0	
<b>TOTAL</b>					<b>n.a</b>	

	2005
Name of local currency	Belarus roubles

#### 12.4 Comments to Table T12

Variable / category	Comments related to data, definitions. etc.
10 most important products	
Other plant products	
Other animal products	
Value by product	
Total value	

Other general comments to the table
Data / information for this table are taken from different sources, which are sometime controversial one to another, so these data do not claim an absolute truth / reliability.

## 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
Annual Report of the Ministry for Forestry of the Republic of Belarus	H	Employment (number of working people)	1990, 2000, 2005	
Data of the National Statistical Committee of the Republic of Belarus,	H		1990, 2000, 2005	

#### 13.2.2 Classification and definitions

The FRA 2010 terms and definitions were applied for the compilation of this table.

#### 13.2.3 Original data

The number of persons from the population engaged in the economy branch «Forestry» (average for the year)

	1990	2000	2005
TOTAL, thousand people	21,8	32,5	33,3

The number of employed/ occupied/ engaged population (working people) includes persons working in the organizations/ institutions of all categories/ forms of the ownership, individual entrepreneurs /employers and persons working for them according to contracts.

The economy branch «Forestry» is given according to the All-State Classification of the National Economy Branches applied in the Republic.

### 13.3 Analysis and processing of national data

#### 13.3.1 Calibration

The calibration was not required

### 13.4 Data for Table T13

FRA Category	Employment (1000 years FTE)		
	1990	2000	2005
Employment in primary production of goods	21.8	32.5	33.3
...of which paid employment	21.8	32.5	33.3
...of which self-employment	0	0	0
Employment in management of protected areas	n.a	1.2	1.3

### 13.5 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	Data are taken from the Staff Registers of National Parks and strictly protected areas / nature parks (“zapovednik”), without wildlife preservation areas (“zakaznik”) of the national importance, and natural monuments. The occupation of people in the management of wildlife preservation areas (“zakaznik”), and natural monuments, is very difficult to define as they are not classified as autonomous institutions/ bodies, and it is not possible to provide a “delineation” of the employment in the production area and in areas of management of protected territories.	

#### Other general comments to the table

The FRA-2005 data are changed due to the precision of data in the National Statistical Committee of the Republic of Belarus, Ministry of Forestry of the Republic of Belarus

## 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>	Y	Yes	
		No	
If Yes above, provide:	Year of endorsement	1996	
	Reference to document	Concept of the Forestry Sustainable Development of the Republic of Belarus up to the year 2015, approved by the Decree/ enactment of the Cabinet / Office of Ministers of the Republic of Belarus of 09 September 1996.	
<b>National forest programme (nfp)</b>	Y	Yes	
		No	
If Yes above, provide:	Name of nfp in country	Programme of the Forestry Development of the Republic of Belarus for 2007 – 2011	
	Starting year	2007	
	Current status		In formulation
		Y	In implementation
			Under revision
		Process temporarily suspended	
Reference to document or web site	“Strategic Plan of the Forestry Development of the Republic of Belarus”, elaborated in 1997. The Programme of the Forestry Development of the Republic of Belarus for 2007 – 2011, approved by the Decree of Council of Ministers of the Republic of Belarus in 2006.		

<b>Law (Act or Code) on forest with national scope</b>	<input 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	2000
	Year of latest amendment	2008
	Reference to document	Forest Code of the Republic of Belarus

**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>Sub-national forest policy statements</b>	<input type="checkbox"/>	Yes
	<input type="checkbox"/>	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>	<input type="checkbox"/>	Yes
	<input type="checkbox"/>	No
If Yes above. indicate the number of regions/states/provinces with Laws on forests		

### 14.3 Comments to Table T14

Variable / category	Comments related to data. definitions. etc.
Forest policy statement with national scope	The Concept of the Forestry Sustainable Development of the Republic of Belarus up to the year 2015, “ <i>Strategic Plan of the Forestry Development of the Republic of Belarus</i> ”, and the Programme of the Forestry Development of the Republic of Belarus for 2007 – 2011 – are different documents. The first one includes the main directions of the development of the Belarus forestry. The second one was elaborated as the further development of the Concept, and it is the product of the international cooperation with 150 specialists and consultants from 7 European countries. The Programme was elaborated in 2006, and it defines the forestry organization and management for a shorter period. Besides, some individual clauses/ provisions / propositions were précised and concretized as the result of analysis of changes in the Republic’s forest policy that happened after the elaboration of the Strategic Plan.
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	Minister for Forestry of the Republic of Belarus	
Level of subordination of Head of Forestry within the Ministry	x	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	The Belarus production-trade concern / consortium of the forest, woodworking, and pulp and paper industry “ <i>Bellesbumprom</i> ”- in the area of wood harvesting and wood processing	
Institution(s) responsible for forest law enforcement	Minister for Forestry of the Republic of Belarus	

**Table 15b – Human resources**

FRA 2010 Category	Human resources within public forest institutions					
	2000		2005		2008	
	Number	%Female	Number	%Female	Number	%Female
Total staff	32685	14.1	33888	15.1	33653	16.1
...of which: with university degree or equivalent	3798	25.0	4429	27.8	4590	29.7

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.

**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	The Head of Forestry is the Minister for Forestry of the Republic of Belarus	
Other public forest agencies at national level		
Institution(s) responsible for forest law enforcement		
Human resources within public forest institutions	The number of employees (human resources) of state forest institutions includes workers according to their employment agreements and contracts. According to the Notional legislation, when signing the contract with the worker /employee, the additional stimulating payment/ remuneration and other encouraging incentives (an elevated salary, additional payments, extended vacations, and other) are foreseen. When concluding the employment agreements, these stimulating factors are not guaranteed.	

**Other general comments to the table**

The number of employees (human resources) in Table 15b is given according to the general leading principles. Data are provided by the National Statistical Committee. The total staff (total number of employees) includes all the forest sector institutions / bodies.

## 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 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
Data of the National Statistical Committee of the Republic of Belarus,	M		2000, 2005, 2008	

### 16.3 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	130	25 <sup>3/</sup>	197	27 <sup>3/</sup>	170	24 <sup>3/</sup>
Bachelor's degree (BSc) or equivalent	0	0	0	0	0	0
Forest technician certificate / diploma	225	22	246	26	334	33
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)	7	14	7	14	3	0
Master's degree (MSc) or equivalent	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Bachelor's degree (BSc) or equivalent <sup>4/</sup>	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

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.
3. The National Statistical Committee has no the official data/ figures. The data given are the evaluation (expert estimates) of the National Correspondent.

4. The data in this row are being corrected. In the field of the forest-related education and sciences, the 5-year high education (Master's degree or equivalent) do exist in the Republic. The data / figures on numbers of the employees engaged from other regions of the former Soviet Union, where the University education had foreseen the Bachelor's degree or equivalent, are not included into the National statistical database.

#### 16.4 Comments to Table T16

Variable / category	Comments related to data, definitions, etc.	Comments on the reported trend
Graduation of students in forest-related education	There are no official data / figures in the National Statistical Committee. The shown data given are evaluation (expert estimates) according to the National Correspondent.	
Professionals working in public forest research centres	In the Belarus Republic, in the field of the forest-related education and sciences, there exist the 5-year high education (Master's degree or equivalent). The data / figures on numbers of the employees engaged from other regions of the former Soviet Union, where the University education had foreseen the Bachelor's degree or equivalent, the National statistical database does not include.	

Other general comments to the table
In the statistical reporting of the National Statistical Committee there are no data on number of specialists/ professionals working in the forestry scientific- and research centres.

## 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
The reported data from the Ministry for Forestry	M	Forest revenue and expenditures in the forest sector	2000, 2005	

**Table 17a - Forest revenues**

FRA 2010 Categories	Revenues (1000 local currency)	
	2000	2005
Forest revenue	21380393	150825055

**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	19507062	141303438	0	0	19507062	141303438
Transfer payments	0	0	0	0	0	0
<b>Total public expenditure</b>	19507062	141303438	0	0	19507062	141303438
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				

**17.3 Comments to Table T17**

Variable / category	Comments related to data, definitions, etc.	Comments on the reported trend
Forest revenue		
Operational expenditure		
Transfer payments		

Other general comments to the table