Forestry Department
Food and Agriculture Organization of the United Nations

GLOBAL FOREST RESOURCES ASSESSMENT 2010

COUNTRY REPORT

REPUBLIC OF MOLDOVA

FRA2010/134
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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).

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:

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Contents

Report preparation and contact persons

No report has been received from the Republic of Moldova.

This report is the result of a desk study prepared by the FRA secretariat in Rome and Geneva, which is based on the existing available information using the established format for FRA 2010 country reports

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 *in situ*. It does not include land that is predominantly under agricultural or urban land use.
Other wooded land	Land not classified as "Forest", spanning more than 0.5 hectares; with trees higher than 5 meters and a canopy cover of 5-10 percent, or trees able to reach these thresholds *in situ*; 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
UNECE/FAO, 2000. Forest Resources of Europe, CIS, North America, Australia, Japan and New Zealand		Forest, OWL, Other land	1988, 1997	Secondary data source.
FAO, 2001. Global Forest Resources Assessment 2000. FAO Forestry Paper 140.			1990, 2000	Secondary data source.
Statistica Moldovei, 2008. National Bureau of Statistics of the Republic of Moldova, Statistical Yearbook of the Republic of Moldova 2008, Chisinau, 2008		Forest and Other Wooded Land, Other land	2001-2008	
Grubii G., 2008. Assessment and preservation of national forest resources. Republic of Moldova. (Учет и сохранение национальных лесных ресурсов, Геннадий Грубый, Республика Молдова)		Forest, Other Wooded Land	2003, 2005	Presentation given by Ghenadie Grubii, the FRA National Correspondent for the Republic of Moldova at the Workshop for FRA National Correspondents, held on 3-5 November, in Budapest, Hungary.

The UNECE/FAO 2000 data background material are the data from the State Forestry inventory of 1988 and national report on the state of Moldovan forests (1997), yearly data from the land register and forest monitoring exercise, the national report of the state of the environment in the Republic of Moldova in 1997.

The FAO 2001 report mainly used data published by UNECE/ FAO 2000.

1.2.2 Classification and definitions

National class	Definition
Forest fund	
Forest fund covered with forest	
Inland water	

1.2.3 Original data

Category	Area (1000 ha)	
	1988	**1997**
Forest	318	324
Other wooded land	31	31
Sub-total Forest and Other wooded land	**349**	**355**
Other land	NDA	2954
Sub-total Land area	**NDA**	**3309**
Inland water	NDA	76
Total area	**NDA**	**3385**

Source: UNECE/FAO 2000, Reference years: 1988 and 1997

Category	Area (1000 ha)							
	2001	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**
Forest	354.6	356.2	388.3	405.8	428.5	432.3	439	444.1
Other wooded land	0	0	0	0	0	355.1	0	362.7
Sub-total Forest and Other wooded land	354.6	356.2	388.3	405.8	428.5	432.3	439	444.1
Other land	2995.2	2971	2922.1	2897.6	2872.7	2868.6	2860.8	2855.3
Sub-total Land area	3349.8	3327.2	3310.4	3303.4	3301.2	3300.9	3299.8	3299.4
Inland water	34.4	57.1	74	81.2	83.4	83.7	84.8	85.2
Total area	3384.2	3384.3	3384.4	3384.6	3384.6	3384.6	3384.6	3384.6

Source: Statistica Moldovei, 2008. Reference years: 2001 -2008

1.3 Analysis and processing of national data

1.3.1 Calibration

The total land area figure reported by UNECE/FAO 2000 is larger than the FAOSTAT land area as well as the total area of the country. Hence calibration for 1988 and 1997 is applied: The forest and OWL areas are assumed to be correct and the Other land class is adjusted so that the total land area figure will match the FAOSTAT land area (3288). Also. for the Inland water area. the FAOSTAT

estimate (96) is applied. This calibration is applied to the Other land category in the National reporting table.

Calibrated national data

Category	**Area (1000 ha)**	
	1988	**1997**
Forest and OWL	**349**	**355**
Other land	NDA	2933
Sub-total Land area	**NDA**	**3288**
Inland water	NDA	96
Total area	**NDA**	**3384**

For years 2001 and 2002, FAOSTAT 2000 data for Total area, Inland water and Land area were applied, for years 2003-2008 data from FAOSTAT 2005 was applied for those categories. National data on Forest and OWL was directly inserted (rounded up to full 1000 ha). Values of other land was calculated by subtracting area of Forest and OWL from Land area.

Category	**Area (1000 ha)**							
	2001	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**
Forest and OWL	355	356	388	406	429	432	439	444
Other land	2933	2932	2899	2881	2858	2855	2848	2843
Sub-total Land area	**3288**	**3288**	**3287**	**3287**	**3287**	**3287**	**3287**	**3287**
Inland water	96	96	97	97	97	97	97	97
Total area	**3384**	**3384**	**3384**	**3384**	**3384**	**3384**	**3384**	**3384**

1.3.2 Estimation and forecasting

The average annual change in Forest and OWL area between during the period 1988-1997 (UNECE/FAO 2000) is used for interpolation of 1990 figure. Value for 2000 was calculated through interpolation of 1997 and 2001 data, value for 2010 was obtained through and extrapolation (2006 - 2008). The Other land area for is estimated to be the remaining land.

Category	**Area (1000 ha)**								
	1988	**1990**	1997	**2000**	2001	**2005**	2006	2008	**2010**
Forest	349	**350**	355	**355**	355	**429**	432	444	**456**

Forest and OWL defined according to national standards consists of forest land (fund) covered with forest (Forest) and other forest land (OWL). National data for those categories is available for 1998, 1997, 2005 and 2008. Basing on this values, data for FRA reporting years was generated for 1990 and 2000, data for 2010 was calculated with the use of proportions reported for 2005.

Category	**Area (1000 ha)**								
	1988	**1990**	1997	**2000**	2003	**2005**	2006	2008	**2010**
Forest	318	319	324	324	355	363			386
OWL	31	31	31	31	33	66			70
Forest and OWL	349	**350**	355	**355**	388	**429**	432	444	**456**

1.3.3 Reclassification into FRA 2010 categories

No further reclassification is needed. as the national data already are presented according to the FRA 2005 categories.

1.4 Data for Table T1

FRA 2010 categories	Area (1000 hectares)			
	1990	2000	2005	2010
Forest	319	324	363	386
Other wooded land	31	31	66	70
Other land	2938	2933	2858	2831
...of which with tree cover	n.a.	n.a.	n.a.	n.a.
Inland water bodies	96	96	97	97
TOTAL	**3384**	**3384**	**3384**	**3384**

1.5 Comments to Table T1

Variable / category	Comments related to data. definitions. etc.	Comments on the reported trend
Forest		
Other wooded land		
Other land		
Other land with tree cover		
Inland water bodies		

Other general comments to the table

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.
Categories related to the holder of management rights of public forest resources	
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
UNECE/FAO, 2000. Forest Resources of Europe, CIS, North America, Australia, Japan and New Zealand (TBFRA 2000)		Ownership (forest)	1997	Secondary data source.
Grubii G., 2008. Assessment and preservation of national forest resources. Republic of Moldova. (Учет и сохранение национальных лесных ресурсов, Геннадий Грубый, Республика Молдова)		Forest, Ownership	2005	Presentation given by Ghenadie Grubii, the FRA National Correspondent for the Republic of Moldova at the Workshop for FRA National Correspondents, held on 3-5 November, in Budapest, Hungary.

2.2.2 Classification and definitions

National class	Definition
State owned forest	Lands of Forest Fund owned by state, covered by forest
Forest owned by local public administration	Lands of Forest Fund owned by the local public administration
Privately owned forest	Lands of Forest Fund owned by private owners, covered by forest

Definitions compiled basing on **Grubii G., 2008.**

2.2.3 Original data

Category	Forest area (1000 hectares)			
	2005			
	State owned	Owned by local public administration	Privately Owned	Total
Forest land covered with forest	328.8	33.4	0.5	362.7

Grubii G., 2008.

2.3 Analysis and processing of national data

2.3.1 Calibration

Not needed

2.3.2 Estimation and forecasting

The ownership percentage for the year 1997 in UNECE/FAO 2000 is applied to all the FRA reporting years 1990 and 2000

2.3.3 Reclassification into FRA 2010 categories

Not needed

2.4 Data for Table T2

Table 2a - Forest ownership

FRA 2010 Categories	Forest area (1000 hectares)		
	1990	2000	2005
Public ownership	319	324	362
Private ownership	0	0	1
...of which owned by individuals	n.a.	n.a.	n.a.
...of which owned by private business entities and institutions	n.a.	n.a.	n.a.
...of which owned by local communities	n.a.	n.a.	n.a.
...of which owned by indigenous / tribal communities	n.a.	n.a.	n.a.
Other types of ownership	0	0	0
TOTAL	**319**	**324**	**363**

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?		Yes
		No
If **No** above. please describe below how the two differ:		
No information		

Table 2b - Holder of management rights of public forests

FRA 2010 Categories	Forest area (1000 hectares)		
	1990	2000	2005
Public Administration	319	324	329
Individuals	0	0	0
Private corporations and institutions	0	0	0
Communities	0	0	33
Other	0	0	0
TOTAL	**319**	**324**	**362**

Comments to Table T2

Variable / category	Comments related to data, definitions. etc.	Comments on the reported trend
Public ownership		
Private ownership		
Other types of ownership		
Management rights		

Other general comments to the table
As the changes in the economies of countries in transition are going on rapidly and the information in Table T2 for 2000 is based on the secondary data, reported numbers might probably do not reflect correctly the real situation with the ownership of Forest in that year.

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.
Categories of primary designated functions	
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.
Special designation and management categories	
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 sustain-able 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
UNECE/FAO, 2000. Forest Resources of Europe, CIS, North America, Australia, Japan and New Zealand (TBFRA 2000)		Areas available for wood supply, Areas not available for wood supply, IUCN protected area categories, soil protection management areas	1997	Secondary data source.

SUMMARY ENVIRONMENT STATE IN THE REPUBLIC OF MOLDOVA. Ecological Monitoring Centre of the National Institute of Ecology, Republic of Moldova. 1998. http://enrin.grida.no/htmls/moldova/soe/index.htm		Protected areas	1996	Secondary data source.
Grubii G., 2008. Assessment and preservation of national forest resources. Republic of Moldova. (Учет и сохранение национальных лесных ресурсов, Геннадий Грубый, Республика Молдова)		Protective forest categories	2005	Presentation given by Ghenadie Grubii, the FRA National Correspondent for the Republic of Moldova at the Workshop for FRA National Correspondents, held on 3-5 November, in Budapest, Hungary.

3.2.2 Classification and definitions

The original data is assumed to follow the definitions of UNECE/FAO 2000.

3.2.3 Original data

Data for 1990 and 2000

Protected areas

According to *Summary Environment state* (1998), the protected areas covered 1.42 % (of the Republic territory (assumable land area 3288 000 ha), of which Strict Nature Reserves cover about 0.58%. Four out of the five strictly protected areas (scientific reserves) were effectively subordinated to 'Moldsilva' because they were mostly forest zones. The draft law (1995) on protected areas and the draft national biodiversity strategy foresaw the extension of protected areas to 2%, accordingly in IUCN classes 194 km2 (I), 31 km2 (III), 77 km2 (IV), 350 km2 (V) (*Summary Environment state,* 1998). UNECE/FAO 2000 reports that for 1997 the IUCN categories I and II area was 44 000 ha.

Areas where forest and OWL is managed primarily for soil protection.

UNECE/FAO (TBFRA 2000) reports that for 1988, areas of forest and OWL managed primarily for soil protection were 0 and 31 000 ha, correspondingly. In 1997 the corresponding figures were 22 000 ha and 31 000 ha.

TBFRA 2000 class	**Forest area (1000 ha), 1988**	**Forest area (1000 ha), 1997**
Forest managed primarily for soil protection	0	22
Area where public access legally not allowed *)	44.1	44.1
Area not available wood supply	113	113
IUCN I & II classes	NDA	44

*) forest and OWL

Data for 2005

Original table

Леса, выполняющие водоохранные функции	5.8
Поле- и почвозащитные леса	28.5
Леса, выполняющие защитные функции от вредных климатических и промы	171.9
Рекреационные леса	95.9
Леса, имеющие значение для науки, сохранения лесного гено- и экофонда	60.6

Translated table

National class	Area (1000 hectares) 2005
Water-protective forests	5.8
Soil-protective forests	28.5
Protective forests against harmful, climatic and industrial factors	171.9
Recreational forests	95.9
Forests important for science and protection of forest genetic and ecological resources	60.6

3.3 Analysis and processing of national data

3.3.1 Calibration

The calibrated forest areas from National reporting table T1 are used.

3.3.2 Estimation and forecasting

No estimation and forecasting have been done, since there is no reliable basis to do it. The UNECE/FAO (TBFRA 2000) 1988 figures are used to report year 1990 and the 1997 figures to report 2000. 2005 data was used for reporting status in 2005 and for calculation figures for 2010.

3.3.3 Reclassification into FRA 2010 categories

Forest Designated functions for years 1990 and 2000

TBFRA 2000 class	FRA 2005 Designated function
Forest managed primarily for soil protection	100% Protection of soil and water
Area where public access legally not allowed	100% Conservation of biodiversity
Area available for wood supply	100 % Production/Multiple use
other	100% No or unknown function

Forest Designated functions for years 1990 and 2000

TBFRA 2000 class	FRA 2005 Designated function
Water-protective forests	100% Protection of soil and water
Soil-protective forests	100% Protection of soil and water
Protective forests against harmful, climatic and industrial factors	100% Multiple use
Recreational forests	100 % Social services
Forests of importance for science and protection of forest genetic and ecological resources	100% Conservation of biodiversity

3.4 Data for Table T3

Table 3a – Primary designated function

FRA 2010 Categories	Forest area (1000 hectares)			
	1990	2000	2005	2010
Production	0	0	0	0
Protection of soil and water	0	22	34	37
Conservation of biodiversity	44.1	44.1	61	64
Social services	0	0	96	102
Multiple use	211	211	172	183
Other (please specify in comments below the table)	0	0	0	0
No / unknown	63.9	46.9	0	0
TOTAL	**319**	**324**	**363**	**386**

Table 3b – Special designation and management categories

FRA 2010 Categories	Forest area (1000 hectares)			
	1990	2000	2005	2010
Area of permanent forest estate	n.a.	n.a.	n.a.	n.a.
Forest area within protected areas	44.1	44.1	61	64
Forest area under sustainable forest management	n.a.	n.a.	n.a.	n.a.
Forest area with management plan	n.a.	n.a.	n.a.	n.a.

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	For 1990 and 2000 area of IUCN categories I and II was reported. For 2005 and 2010, area of national category “Forests important for science and protection of forest genetic and ecological resources” was reported under this FRA category.	
Forest area under sustainable forest management		
Forest area with management plan		

Other general comments to the table
Data sources for 2005 and the previous years, does not provide sufficient basis for consistent reporting on trends of reported categories. Several assumptions had to be made in order to maintain basic consistency when reclassifying national categories to the FRA ones. Assuming that 2005 data provides the most reliable description of situation, this data was used as a reference for evaluation of 2010 structure. In order to maintain consistency between 2005 and previous years, original assignation of forests available for wood supply as productive forests was changed from Production into Multiple use. It is very probable that reported changes in significant extent result from reclassification of forests, and not reflect fully the real trends.

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 outside its natural range (past or present) and dispersal potential (i.e. outside the range it occupies naturally or could occupy without direct or indirect introduction or care by humans).
Characteristics categories	
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.
Special categories	
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
UNECE/FAO, 2000. Forest Resources of Europe, CIS, North America, Australia, Japan and New Zealand (TBFRA 2000)		Forest by categories of "naturalness"	1997	Secondary data source.
Statistica Moldovei, 2008. National Bureau of Statistics of the Republic of Moldova, Statistical Yearbook of the Republic of Moldova 2008, Chisinau, 2008		Forest and Other Wooded Land	2001-2008	
Grubii G., 2008. Assessment and preservation of national forest resources. Republic of Moldova. (Учет и сохранение национальных лесных ресурсов, Геннадий Грубый, Республика Молдова)		Forest	2003, 2005	See comment for Table 1

4.2.2 Classification and definitions

Terms and definitions applied in the UNECE/FAO 2000 were used for reporting original data.

4.2.3 Original data

Category of Forest	1997, Area (1000ha)	1997, %
Forest:		
Undisturbed by man	0	0
Semi-natural	322.8	99.6
Plantations	1.3	0.4

4.3 Analysis and processing of national data

4.3.1 Calibration

The calibrated forest areas from National reporting table T1 are used.

4.3.2 Estimation and forecasting

In the Notes and comments related to "naturalness" of forest figures for Moldova in UNECE/FAO 2000, there was a table of trends in forest and OWL by "naturalness" classes until year 1990. However, the changes in classes are small and do not seem to give basis for estimation and forecasting. Hence, the percentages found in the TBFRA 2000 will be applied to the estimated forest area from T1 to obtain the Category areas for the 1990, 2000 and 2005.

Category	1990, Area	2000, Area	2005, Area	2010, Area
	(1000ha)			
Forests				
Undisturbed by man	0	0	0	0
Semi-natural	318	323	362	384
Plantations	1	1	1	2

4.3.3 Reclassification into FRA 2010 categories

In order to reclassify the national data for the category "semi-natural" into the FRA 2005 categories, some knowledge on regeneration methods used is indispensable. Since this information is lacking, all the area reported by UNECE/FAO 2000 as "semi-natural" has been assigned to the "Other naturally regenerated forest" category. Likewise, all area reported as "plantations" has been assigned to the "Planted forest" category.

4.4 Data for Table T4

Table 4a

FRA 2010 Categories	Forest area (1000 hectares)			
	1990	2000	2005	2010
Primary forest	0	0	0	0
Other naturally regenerated forest	318	323	362	384
...of which of introduced species	n.a.	n.a.	n.a.	n.a.
Planted forest	1	1	1	2
...of which of introduced species	n.a.	n.a.	n.a.	n.a.
TOTAL	**319**	**324**	**363**	**386**

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
Molodva reports on intensive work done on afforestation and reforestation (see Table 5), thus area the real are of plated forest is bigger than reported in this report. due to lack of historical source data reporting on the real extent of planted forest is not possible.

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
Statistica Moldovei, 2008. National Bureau of Statistics of the Republic of Moldova, Statistical Yearbook of the Republic of Moldova 2008, Chisinau, 2008		Afforestation	2000-2007	

5.2.2 Original data

	Area (1000 ha)							
	2000	2001	2002	2003	2004	2005	2006	2007
Forest planting	0,8	1,0	1,2	1,0	1,0	1,0	1,0	1,0

Source : **Statistica Moldovei, 2008**.

5.3 Analysis and processing of national data

5.3.1 Estimation and forecasting

2000-2002 data was used for calculation of the average value for 2000, while 2003-2007 figures were taken for calculation the average value for 2005

5.4 Data for Table T5

FRA 2010 Categories	Annual forest establishment (hectares/year)			...of which of introduced species [1)] (hectares/year)		
	1990	2000	2005	1990	2000	2005
Afforestation	n.a.	1000	1000	n.a.	n.a.	n.a.
Reforestation	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
...of which on areas previously planted	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Natural expansion of forest	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

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
Data reported in the national statistical yearbook *Statistica Moldovei, 2008* was presented in the Table 4.9, however reporting on forest area dynamics (Table T1) and other sources indicate much higher values for this variable. For example report on United Nations Development Programme, Republic of Moldova provides information that the total area of forest resources was extended by 37.5 thousand ha in the period 2002 and 2006. Also other information sources on afforestation projects carried out in Moldova (e.g. Moldova Soil Conservation Project, (http://www.ieta.org/ieta/www/pages/getfile.php?docID=1355) confirm the higher values.

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
UNECE/FAO, 2000. Forest Resources of Europe, CIS, North America, Australia, Japan and New Zealand (TBFRA 2000)		Growing stock	1988, 1997	Secondary data source.
Grubii G., 2008. Assessment and preservation of national forest resources. Republic of Moldova. (Учет и сохранение национальных лесных ресурсов, Геннадий Грубый, Республика Молдова)		Growing stock, Species composition	2005	Presentation given by Ghenadie Grubii, the FRA National Correspondent for the Republic of Moldova at the Workshop for FRA National Correspondents, held on 3-5 November, in Budapest, Hungary.

6.2.2 Classification and definitions

National class	Definition
Growing stock	The living tree component of the standing volume (FAO/FRA2000 definition)

6.2.3 Original data

Category	1988	1997	2005
Growing stock on Forest (1000 m3)	35 290	41 600	45 290
Growing stock on OWL (1000 m3)	NDA	1 600[1)]	NDA

Source: UNECE/FAO 2000 (secretariat estimate), reference years 1997.

6.3 Analysis and processing of national data

6.3.1 Calibration

No calibration was needed.

6.3.2 Estimation and forecasting

Category	1988	**1990**	1997	**2000**	**2005**	**2010**
Growing stock on Forest (1000 m3)	35 290	**43002**	41600	**42984**	**45290**	**47596**
Growing stock on OWL (1000 m3) 1)	NDA	**1600**	1600	**1600**	**3400**	**3600**

[1)] Volume of growing stock estimated for 1997 was used as basis for estimation of this variable for other reporting years (proportionally to OWL area)

6.3.3 Reclassification into FRA 2010 categories

The volumes of Growing Stock for "... of which coniferous", "... of which broadleaved" and for the Table 6b were calculated with the use of information on species composition of the growing stock in 2005, proportionally to the total volumes calculated for the respective years.

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	36.7	43.0	45.3	47.6	1.6	1.6	3.4	3.6
... of which coniferous	0.7	0.9	0.9	1.0	n.a.	n.a.	n.a.	n.a.
... of which broadleaved	36.0	42.1	44.4	46.6	n.a.	n.a.	n.a.	n.a.
Growing stock of commercial species	n.a.	n.a.	n.a.	n.a.	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**
1st	Quercus spp.	Oak	15.6	18.3	19.3
2nd	Robinia spp.	Robinia	14.2	16.7	17.6
3rd	Fraxinus spp.	Ash	1.9	2.2	2.4
4th	Carpinus spp.	Hornbeam	1.1	1.3	1.4
5th		Other hardwood broadleaved	1.8	2.1	2.2
6th		Other softwood broadleaved	1.2	1.5	1.5
7th		Conifers	0.7	0.9	0.9
8th			0.0	0.0	0.0
9th			0.0	0.0	0.0
10th			0.0	0.0	0.0
Remaining			0.0	0.0	0.0
TOTAL			**36.7**	**43.0**	**45.3**

Note: Rank refers to the order of importance in terms of growing stock. i.e. 1st 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[1] of trees included in growing stock (X)	n.a.	
Minimum diameter (cm) at the top end of stem for calculation of growing stock (Y)	n.a.	
Minimum diameter (cm) of branches included in growing stock (W)	n.a.	
Volume refers to "above ground" (AG) or "above stump" (AS)	n.a.	

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		

Other general comments to the table

[1] 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
National reporting table T6		Above and below ground biomass	1990,2000, 2005, 2010	

7.3 Analysis and processing of national data

7.3.1 Calibration

Calibration was not necessary

7.3.2 Estimation and forecasting

The following coefficient factors, from those recommended by Guidelines for County Reporting to FRA2010 were accepted:

Coefficient	Forest	OWL	Comment
BCEF	1.05	1.4	1.05 for temperate hardwoods 100-200 m3/ha, forest and 1.4 (41-100 m3/h) for OWL
Ratio of above ground biomass to below ground biomass	0.23	0.46	Other broadleaved (temperate)
Dead wood contents	n.a.	n.a.	

7.3.3 Reclassification into FRA 2010 categories

Reclassification was not necessary

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	38.5	45.1	47.6	50.0	2.2	2.2	4.8	5.0
Below-ground biomass	8.9	10.4	10.9	11.5	1.0	1.0	2.2	2.3
Dead wood	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
TOTAL	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
National reporting tables T6 and T7		Carbon in above and below ground biomass	1990, 2000, 2005, 2010	

8.2.2 Classification and definitions

FRA 2010 definitions were applied for reporting.

8.2.3 Estimation and forecasting

Basic coefficient of carbon fraction of above (and below) ground biomass (0.47 tonne C/ tonne d.m.) was applied for this table.

8.3 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	18.11	21.21	22.35	23.49	1.05	1.05	2.24	2.37
Carbon in below-ground biomass	4.16	4.88	5.15	5.41	0.48	0.48	1.03	1.09
Sub-total: Living biomass	***22.27***	***26.09***	***27.50***	***28.90***	***1.54***	***1.54***	***3.27***	***3.46***
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.
Sub-total: Dead wood and litter	***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.
TOTAL	***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.

8.4 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
UNECE/FAO, 2000. Forest Resources of Europe, CIS, North America, Australia, Japan and New Zealand (TBFRA 2000)		Forest fire, OWL fire	1993-1997	Secondary data source. Data on fires based on the questionnaire prepared by national expert.
Statistica Moldovei, 2008. National Bureau of Statistics of the Republic of Moldova, Statistical Yearbook of the Republic of Moldova 2008, Chisinau, 2008		Area of forest affected by fires, numbers of fires	2001-2008	

9.2.2 Classification and definitions

Not available

9.2.3 Original data

Category	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
	1000 hectares									
Area of Forest burned	0.007	0.028	0.121	0.02	0.032	0.002	0.216	0.002	0.00	0.07
Area of Other wooded land burned	0	0	0	0	0	0	0	0	0	0
Total area burned	0.007	0.028	0.121	0.02	0.032	0.002	0.216	0.002	0.00	0.07

Source: UNECE/FAO 2000, original questionnaires received from Moldova.

Category	2001	2002	2003	2004	2005	2006	2007
Forest area affected by fires, ha	41,6	12,5	10,5	42,0	5,5	32,6	683,3
Number of forest fires, cases	11	7	3	12	2	3	90

Source: **Statistica Moldovei, 2008**.

9.3 Analysis and processing of national data

9.3.1 Estimation and forecasting

The Area affected by fire is reported for forest and OWL applying the mean of 1988-1992 for year 1990. The year 2000 data was generated basing on information on 2001 and 2002, for the year 2005, the averages were calculated for 2003-2008 period.

9.3.2 Reclassification into FRA 2010 categories

For the reporting years 1990 area affected by fire is reported for forest and other wooded land separately. For the remaining periods no specific information is available, thus data reported for forest could include burnt OWL as well.

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	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
... of which on forest	0.04	n.a.	0.03	9	0.16	22
... of which on other wooded land	0.00	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	n.a	n.a	n.a
Planned fire	n.a	n.a	n.a

9.5 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
UNECE/FAO, 2000. Forest Resources of Europe, CIS, North America, Australia, Japan and New Zealand (TBFRA 2000)		Fire,	1993-1997	Secondary data source.
G. Allard, J. Ghent, I. Mironic and L. Spitoc. 2004. Technology and information transfer: improving capability to fight defoliating insects in the Republic of Moldova. *Unasylva* 55(2).		Insects	1993-1999	Secondary data source.
Statistica Moldovei, 2008. National Bureau of Statistics of the Republic of Moldova, Statistical Yearbook of the Republic of Moldova 2008, Chisinau, 2008		Forest and Other Wooded Land, Other land	2001-2008	

10.2.2 Classification and definitions

Not available

10.2.3 Original data

"At the beginning of 1999, an estimated 95 700 ha of the country's forest were affected by leaf-eating pests: *Tortrix viridana* (green oak tortrix); *Erannis defoliaria* (mottled umber moth); *Operophtera brumata* (winter bud moth); and *Lymantria dispar* (European gypsy moth). Moldovan researchers estimated that the damage caused by leaf-eating pests could result in up to 60 to 90 percent losses of annual growth in standing trees, i.e. about 200 000 m3. Since 1993 the average annual area infested with leaf-eating pests has been 50 000 to 70 000 ha (16 to 22 percent of wooded land), of which 30 000 to 40 000 ha are forests that warrant aerial treatment owing to their high economic or genetic value and high level of infestation" (*Allard et. al*. 2004).

Area of damage to forest and other wooded land:

Category	**Per year 1993-97**	**1999**
	1000 hectares	**1000 hectares**
Insects and disease	61.2	96
Wildlife and grazing	0	ID
Known local pollution source	0	ID
Storm, wind, snow or other identifiable abiotic factor	0	ID

Source: UNECE/FAO 2000, Allard et. al. 2004.

FOREST PROTECTION ACTIVITIES

Category	2000	2001	2002	2003	2004	2005	2006	2007
	thousand hectares							
Area of natural focuses of plant pests and diseases of forest (end-year)	88,0	82,2	111,5	101,6	89,9	82,4	36,5	30,4
including the focuses that require diseases fighting methods	57,3	56,0	98,4	90,9	64,6	45,1	1,2	1,7

Source: Statistica Moldovei, 2008

10.3 Analysis and processing of national data

10.3.1 Estimation and forecasting

The yearly averages of 1993-1997 are used for other damages for the reporting the year 1990. The 1999 estimate of leaf eating pests is used to estimate the Damage by Insects for year 2000. The damages are assumed to be on forest. For the period 2002-2007 the average area affected by plant pests and diseases that required application of fighting methods was reported.

Reclassification into FRA 2010 categories
Reclassification was done as follows for 1990 estimates:

National Category\FRA category	Insects	Diseases	Other disturbances
Insects and disease	50 %	50 %	
Wildlife and grazing			100 %
Known local pollution source			100 %
Storm, wind, snow or other identifiable abiotic factor			100 %

The exact area affected by insects and diseases in the period 2002 and 2007 is not known. The total area was split among those categories in even shares, the real distribution could significantly differ for the reported one.

10.4 Data for Table T10

Table 10a – Disturbances

FRA 2010 category	Affected forest area (1000 hectares)		
	1990	2000	2005
Disturbance by insects	30.6	96	41.5
Disturbance by diseases	30.6	n.a.	41.5
Disturbance by other biotic agents	0	n.a.	n.a.
Disturbance caused by abiotic factors	0	n.a.	n.a.
Total area affected by disturbances	**61.2**	**n.a.**	**n.a.**

Notes: 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)
Outbreak of leaf-eating insects	*Tortrix viridana* (green oak tortrix); *Erannis defoliaria* (mottled umber moth); *Operophtera brumata* (winter bud moth); and *Lymantria dispar* (European gypsy moth).	1999	95.7	-

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)
n.a.	
Total forest area affected by woody invasive species	

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
National Bureau of Statistics. 2002. *Statistical Yearbook of the Republic of Moldova 2002*. Chisinau, Republic of Moldova. Available at: *http://www.statistica.md*	H	Total fellings	1990	Official statistics
State Forest Agency "Moldsilva", in Country report for the Workshop on Forest Product Statistics, Moscow, 2009 (proceedings in press)	H	Industrial roundwood and woodfuel fellings	1992-2007	Official statistics

11.2.2 Classification and definitions

11.2.3 Original data

Fellings (merchantable wood in 1000 m³ over bark, official statistics)

Year	Total roundwood	Industrial roundwood	Woodfuel
1990	330	n.a.	n.a.
1992	208.6	28.7	179.9
1993	202.8	29.5	173.3
1994	247.8	30.8	217.0
1995	408.4	39.9	368.5
1996	372.6	35.2	337.4
1997	395.8	41.7	354.1
1998	343.1	34.9	308.2
1999	334.1	38.8	295.3
2000	320.7	39.4	281.3
2001	314.2	37.2	277.0
2002	345.4	50.4	295.0
2003	375.9	47.0	328.9
2004	357.7	43.4	314.3
2005	341.1	40.1	301.0
2006	371.1	44.7	326.4
2007	345.9	42.9	303.0

Source: State Forestry Agency "Moldsilva"

11.3 Analysis and processing of national data

11.3.1 Calibration

It was assumed that removals account for 95% of felling volume (merchantable wood). For the year 1990 original figure of total removals in 1990 was used, and for 2000 and 2005 averages for 1998-2002 and 2003-2007 respectively.

11.3.2 Estimation and forecasting

1990 numbers for industrial roundwood and woodfuel were estimated using ratio in 1992.

11.3.3 Reclassification into FRA 2010 categories

11.4 Data for Table T11

FRA 2010 Category	Industrial roundwood removals			Woodfuel removals		
	1990	2000	2005	1990	2000	2005
Total volume (1000 m^3 o.b.)	43	38	41	270	277	299
... of which from forest	n.a	n.a	n.a	n.a	n.a	n.a
Unit value (local currency / m^3 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 1999 refer to 1990, while 2000 and 2005 refer to the averages for the 5-year periods 1998-2002 and 2003-2007 respectively.

	1990	2000	2005
Name of local currency			

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

No information for this 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 wage or salary in cash or in kind.
Self-employment	Persons who during a specified reference period performed some work for profit or family gain 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
ILO. 2003. *Employment trends and prospects in the European forest sector*. By Peter Blombäck, Peter Poschen, Mattias Lövgren. Discussion paper ECE/TIM/DP/29, Geneva, Switzerland. Available at: http://www.unece.org/timber/docs/dp/dp-29.pdf	H	Employment in forestry, logging and related services	1990, 2000	Statistics collected through the questionnaire officially submitted to ILO
National Bureau of Statistics. 2009. *Labour market in the Republic of Moldova, in 2008.* Chisinau, Republic of Moldova. Available at: *http://www.statistica.md/public/files/publicatii_electronice/piata_fortei_de_munca/Piata_Muncii_2009.pdf*	H	Total employment in forestry and related service activities	2005	Official statistics

13.2.2 Original data

Number of employees
(thousand persons)

	1990	2000	2002	2003	2004	2005	2006	2007	2008
Forestry, logging and related services	4.6	3.2	3.4	3.6	3.6	3.8	3.9	4.3	4.8

13.3 Data for Table T13

FRA 2010 Category	Employment (1000 FTE)		
	1990	2000	2005
Employment in primary production of goods	4.6	3.2	3.8
...of which paid employment	n.a.	n.a.	n.a.
...of which self-employment	n.a.	n.a.	n.a.
Employment in management of protected areas	n.a.	n.a.	n.a.

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

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)			
Forest policy statement with national scope		X	Yes
			No
If Yes above. provide:	Year of endorsement	2001	
	Reference to document	Strategy of the Sustainable Development of the Forest Fund (adopted by the Parliament)	
National forest programme (nfp)			Yes
			No
If Yes above. provide:	Name of nfp in country		
	Starting year		
	Current status		In formulation
			In implementation
			Under revision
			Process temporarily suspended
	Reference to document or web site		
Law (Act or Code) on forest with national scope		X	Yes. specific forest law exists
			Yes. but rules on forests are incorpo-rated in other (broader) legislation
			No. forest issues are not regulated by national legislation
If Yes above. provide:	Year of enactment	1996	
	Year of latest amendment	2003	
	Reference to document	Forest Code (FAOLEX : http://faolex.fao.org/docs/html/mol70978.htm)	

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.		
Sub-national forest policy statements		Yes
	X	No
If Yes above. indicate the number of regions/states/provinces with forest policy statements		
Sub-national Laws (Acts or Codes) on forest		Yes
	X	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 objectives of the *Strategy of the Sustainable Development of the Forest Fund* are to: • Improve existing forests. • Conserve biodiversity in forests. • Enlarge forest areas. • Improve protection of forests. and • Integrate forest management with other sectors. It set the ambitious objective to increase forests to cover 15 per cent of the land from the previous level of 10.7 per cent. This would include tree planting on 25.000 ha. facilitation of natural regeneration on 39.000 ha and natural regeneration on 32.000 ha until 2020. According to the Strategy a total of 128.000 ha of land will be afforested. Based on the 2001 *National Strategy and Action Plan on Biodiversity Conservation* and the 2001 *Strategy for Sustainable Development of the Forestry Fund*. the *General Action Plan on Introduction of the Strategy for Sustainable Development of Forestry Fund* and the *State Programme on Forest Fund Areas Regeneration and Forestation for 2003-2020* were approved by the government in 2003.
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 Ecology and Natural Resources (Agency for Forestry "Moldsilva")	
Level of subordination of Head of Forestry within the Ministry		1st level subordination to Minister
		2nd level subordination to Minister
		3rd level subordination to Minister
		4th or lower level subordination to Minister
Other public forest agencies at national level	Agency for Forestry "Moldsilva". Institute for Forestry Research and Planning (under Moldsilva)	
Institution(s) responsible for forest law enforcement	The State Ecological Inspectorate under the Ministry of Ecology and Natural Resources	

Table 15b – Human resources

FRA 2010 Category	Human resources within public forest institutions					
	2000		2005		2008	
	Number	%Female	Number	%Female	Number	%Female
Total staff	n.a	n.a	n.a	n.a	n.a	n.a
...of which with university degree or equivalent	n.a	n.a	n.a	n.a	n.a	n.a

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	The Division on Natural Resources and Biodiversity within the Ministry of Ecology and Natural Resources develops and promotes State policy on conservation and sustainable use of natural resources. It develops the legislation on forest protection. hunting. fishing and land resources and implements programmes and plans on protection and conservation of natural heritage. It coordinates the activities connected with biological diversity conservation and protected areas management. and develops related legislation.	
Level of subordination of Head of Forestry within the Ministry	No indication on who is the Head of Forestry and its level of subordination.	
Other public forest agencies at national level	The Agency for Forestry Moldsilva is in charge of regulating. coordinating and controlling the management of 89% of the *forest fund* (about 360 000 hectares of State-owned forests; local authorities and other landowners manage the remaining eleven per cent of the *forest fund*). Moldsilva's office in Chisinau supervises 18 forest companies. four forestry-hunting companies. and four offices for protected areas. The central office in Chisinau is also responsible for monitoring forest resources. Decision for forest cutting are taken in cooperation with the State Ecological Inspectorate of the Ministry of Environment and Natural Resources. The Agency for Forestry "Moldsilva" is not under the authority of the Ministry of Ecology and Natural Resources but directly supervised by the Government. The Institute for Forestry Research and Planning is under Moldsilva's authority. It is responsible for the development of ten-year forestry management plans for forest companies (these are not assessed by outside authorities). It is also responsible for statistics on forests and forestry.	
Institution(s) responsible for forest law enforcement	The State Ecological Inspectorate is responsible for the enforcement of environmental policies and laws. including those related to forest protection. It is in charge of issuing licenses. inspecting forest cuttings. and making sure that afforestation programmes are implemented. One inspector in each regional agency of the State Ecological Inspectorate. mostly with training in forestry. is responsible for forestry protection and the permitting/inspection of cuttings.	
Human resources within public forest institutions		

Other general comments to the table

16 Table T16 – Education and research

No information is available for this reporting table.

17 Table T17 – Public revenue collection and expenditure

No information is available for this reporting table.