



**Forestry Department**

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

**GLOBAL FOREST RESOURCES  
ASSESSMENT**

**COUNTRY REPORTS**

**MALTA**

FRA2010/126

Rome, 2010



## The Forest Resources Assessment Programme

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

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

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

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)

### DISCLAIMER

The designations employed and the presentation of material in this information product do not imply the expression of any opinion whatsoever on the part of the Food and Agriculture Organization of the United Nations concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries.

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.

## Contents

1	TABLE T1 – EXTENT OF FOREST AND OTHER WOODED LAND.....	5
2	TABLE T2 – FOREST OWNERSHIP AND MANAGEMENT RIGHTS.....	7
3	TABLE T3 – FOREST DESIGNATION AND MANAGEMENT.....	10
4	TABLE T4 – FOREST CHARACTERISTICS .....	13
5	TABLE T6 – GROWING STOCK.....	16
6	TABLE T7 – BIOMASS STOCK.....	18
7	TABLE T8 – CARBON STOCK.....	20
8	TABLE T9 – FOREST FIRES .....	22
9	TABLE T11 – WOOD REMOVALS AND VALUE OF REMOVALS .....	24

No information is available for tables: T5, T6b, T10, T12-T17.

## **Report preparation and contact persons**

Malta has not nominated a National Correspondent to FRA 2010 and no report has been received from the country.

This report is the result of a desk study prepared by the FRA 2010 secretariat in Rome, which summarizes 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 <i>in situ</i> . It does not include land that is predominantly under agricultural or urban land use.
Other wooded land	Land not classified as “Forest”, spanning more than 0.5 hectares; with trees higher than 5 meters and a canopy cover of 5-10 percent, or trees able to reach these thresholds <i>in situ</i> ; or with a combined cover of shrubs, bushes and trees above 10 percent. It does not include land that is predominantly under agricultural or urban land use.
Other land	All land that is not classified as “Forest” or “Other wooded land”.
Other land with tree cover (Subordinated to “Other land”)	Land classified as “Other land”, spanning more than 0.5 hectares with a canopy cover of more than 10 percent of trees able to reach a height of 5 meters at maturity.
Inland water bodies	Inland water bodies generally include major rivers, lakes and water reservoirs.

## 1.2 National data

### 1.2.1 Data sources

References to sources of information	Quality (H/M/L)	Variable(s)	Year(s)	Additional comments
UNECE/FAO, 2000. Forest Resources of Europe, CIS, North America, Australia, Japan and New Zealand		(Forest, OWL) Forest, OWL, Other land	(1993), 1996	Secondary data source. Origin of published data not documented.
FAOSTAT 2008.		Total area, Land area	All years	

### 1.2.2 Classification and definitions

National class	Definition
The classification and definitions used in the UNECE/FAO report are the same as those being used by FRA.	

### 1.2.3 Original data

Category	Area (1000 ha)	
	1993	1996
Forest	0.347	0.347
Other wooded land	0	0
<b>Sub-total Forest and Other wooded land</b>	<b>0.347</b>	<b>0.347</b>
Other land	31.6	31.6
<b>Sub-total Land area</b>	<b>32</b>	<b>32</b>
Inland water	0	0
<b>Total area</b>	<b>32</b>	<b>32</b>

Source: UNECE/FAO 2000, Reference year: 1993 and 1996

With the exception of a few clumps of oaks and Tamarix all woodland is man made or at the most regeneration of man-made woodlands.

### 1.3 Analysis and processing of national data

#### 1.3.1 Calibration

Not needed.

#### 1.3.2 Estimation and forecasting

UNECE reports no changes in area of forest and other wooded land between 1993 and 1996. No other source has been found indicating that any other change rate should be used. Hence, the change rate is assumed to be 0 percent, and the same figures are used for all reporting years.

#### 1.3.3 Reclassification into FRA 2010 categories

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

### 1.4 Data for Table T1

FRA 2010 categories	Area (1000 hectares)			
	1990	2000	2005	2010
Forest	0.347	0.347	0.347	0.347
Other wooded land	0	0	0	0
Other land	31.653	31.653	31.653	31.653
...of which with tree cover	n.a.	n.a.	n.a.	n.a.
Inland water bodies	0	0	0	0
<b>TOTAL</b>	<b>32</b>	<b>32</b>	<b>32</b>	<b>32</b>

### 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 <u>national forest inventory and/or RS survey / mapping</u>	
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 ( <i>sub-category of Private ownership</i> )	Forest owned by individuals and families.
Private business entities and institutions ( <i>sub-category of Private ownership</i> )	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 ( <i>sub-category of Private ownership</i> )	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 ( <i>sub-category of Private ownership</i> )	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
UNECE/FAO, 2000. Forest Resources of Europe, CIS, North America, Australia, Japan and New Zealand (TBFRA 2000)		Ownership	1996	Secondary data source. . Origin of published data not documented.

### 2.2.2 Classification and definitions

National class	Definition
	The definitions of public and private ownership according to UNECE/FAO 2000 are slightly different from those used by FRA 2010 since they do not specify if the ownership relates to the land or to the trees

### 2.2.3 Original data

Category	Forest	OWL
Public ownership	0.347	0
Private ownership	0	0

Source: UNECE/FAO 2000, Reference year 1996

Same figures are reported by the MCPFE 2003 and 2007 Report.

## 2.3 Analysis and processing of national data

### 2.3.1 Calibration

Not needed.

### 2.3.2 Estimation and forecasting

The UNECE reports figures on ownership only for the reference year 1996. No source of information has been found for other reference years, neither any information indicating any trends as regards ownership. Hence, the same figures have been used for all reporting years.

### 2.3.3 Reclassification into FRA 2010 categories

All the forests are 100% public forests.

## 2.4 Data for Table T2

**Table 2a - Forest ownership**

FRA 2010 Categories	Forest area (1000 hectares)		
	1990	2000	2005
Public ownership	0.347	0.347	0.347
Private ownership	0	0	0
...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
<b>TOTAL</b>	<b>0.347</b>	<b>0.347</b>	<b>0.347</b>

Does ownership of trees coincide with ownership of the land on which they are situated?	<input type="checkbox"/>	Yes
	<input type="checkbox"/>	No
If <b>No</b> 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	n.a.	n.a.	n.a.
Individuals	n.a.	n.a.	n.a.
Private corporations and institutions	n.a.	n.a.	n.a.
Communities	n.a.	n.a.	n.a.
Other	n.a.	n.a.	n.a.
<b>TOTAL</b>	<b>0.347</b>	<b>0.347</b>	<b>0.347</b>

## 2.5 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

### 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
UNECE/FAO, 2000. Forest Resources of Europe, CIS, North America, Australia, Japan and New Zealand (TBFRA 2000)		Conservation of biodiversity	1996	Secondary data source. . Origin of published data not documented.

##### 3.2.2 Classification and definitions

Not available.

### 3.2.3 Original data

UNECE/FAO reports that for 1996, out of the total area of Forest (347 ha), 0 hectares were available for wood supply and 347 hectares were not available for wood supply by reasons for non-availability for Conservation/protection reasons. Same figures are reported by the MCPFE 2007 Report.

## 3.3 Analysis and processing of national data

### 3.3.1 Calibration

No calibration has been made.

### 3.3.2 Estimation and forecasting

No estimation and forecasting have been done. The 1996 has been used for 1990, 2000, 2005 and 2010, assuming that no relevant changes occurred.

No estimation and forecasting have been done. The 1996 has been used for all the reporting years, assuming that no relevant changes occurred.

### 3.3.3 Reclassification into FRA 2010 categories

Not needed.

## 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	0	0	0
Conservation of biodiversity	0.347	0.347	0.347	0.347
Social services	0	0	0	0
Multiple use	0	0	0	0
Other (please specify in comments below the table)	0	0	0	0
No / unknown	0	0	0	0
<b>TOTAL</b>	<b>0.347</b>	<b>0.347</b>	<b>0.347</b>	<b>0.347</b>

**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	0.347	0.347	0.347	0.347
Forest area under sustainable forest management	n.a.	n.a.	n.a.	n.a.
Forest area with management plan	0.347	0.347	0.347	0.347

**3.5 Comments to Table T3**

Variable / category	Comments related to data, definitions, etc.	Comments on the reported trend
Production		
Protection of soil and water		
Conservation of biodiversity		
Social services		
Multiple use		
Other		
No / unknown designation		
Area of permanent forest estate		
Forest area within protected areas		
Forest area under sustainable forest management		
Forest area with management plan		

Other general comments to the table

## 4 Table T4 – Forest characteristics

### 4.1 FRA 2010 Categories and definitions

Term / category	Definition
Naturally regenerated forest	Forest predominantly composed of trees established through natural regeneration.
Introduced species	A species, subspecies or lower taxon, occurring <u>outside</u> its natural range (past or present) and dispersal potential (i.e. outside the range it occupies naturally or could occupy without direct or indirect introduction or care by humans).
<b>Characteristics categories</b>	
Primary forest	Naturally regenerated forest of native species, where there are no clearly visible indications of human activities and the ecological processes are not significantly disturbed.
Other naturally regenerated forest	Naturally regenerated forest where there are clearly visible indications of human activities.
Other naturally regenerated forest of introduced species (sub-category)	Other naturally regenerated forest where the trees are predominantly of introduced species.
Planted forest	Forest predominantly composed of trees established through planting and/or deliberate seeding.
Planted forest of introduced species (sub-category)	Planted forest, where the planted/seeded trees are predominantly of introduced species.
<b>Special categories</b>	
Rubber plantations	Forest area with rubber tree plantations.
Mangroves	Area of forest and other wooded land with mangrove vegetation.
Bamboo	Area of forest and other wooded land with predominant bamboo vegetation.

### 4.2 National data

#### 4.2.1 Data sources

References to sources of information	Quality (H/M/L)	Variable(s)	Year(s)	Additional comments
UNECE/FAO, 2000. Forest Resources of Europe, CIS, North America, Australia, Japan and New Zealand (TBFRA 2000)		Planted forest	1996	Secondary data source. . Origin of published data not documented.

#### 4.2.2 Classification and definitions

With the exception of a few clumps of oaks and Tamarix all woodland is man made or at the most regeneration of man-made woodlands.

### 4.2.3 Original data

UNECE/FAO reports the following figures for reference year 1995:

Category	Area
<b>Forests</b>	
Undisturbed by man	0
Semi-natural	0
Plantations	0.3
<b>Other wooded land</b>	
Undisturbed by man	0
Semi-natural	0

Same figures are reported in the MCPFE 2007 Report.

## 4.3 Analysis and processing of national data

### 4.3.1 Calibration

Not needed.

### 4.3.2 Estimation and forecasting

No estimation and forecasting have been done. The 1996 figures have been used for all the reporting years.

### 4.3.3 Reclassification into FRA 2010 categories

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	0	0	0	0
...of which of introduced species	n.a.	n.a.	n.a.	n.a.
Planted forest	0.347	0.347	0.347	0.347
...of which of introduced species	n.a.	n.a.	n.a.	n.a.
<b>TOTAL</b>	<b>0.347</b>	<b>0.347</b>	<b>0.347</b>	<b>0.347</b>

**Table 4b**

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

#### 4.5 Comments to Table T4

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

Other general comments to the table

## 5 Table T6 – Growing stock

### 5.1 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.

### 5.2 National data

#### 5.2.1 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	1996	Secondary data source. Growing stock information is a secretariat estimate based on different (unspecified) information sources.

#### 5.2.2 Classification and definitions

National class	Definition
Growing stock	The living tree component of the standing volume

#### 5.2.3 Original data

Growing stock on Forest	80 000 m3
-------------------------	-----------

Source: UNECE/FAO 2000 (secretariat estimate), reference year 1996

Same figures are reported in the MCPFE 2007 Report.

No volume figures have been found to support any estimate of the growing stock composition. In coastal areas, *Tamarix* is predominant while inland *Pinus halepensis* is dominant.

### 5.3 Analysis and processing of national data

#### 5.3.1 Calibration

Not needed.

### 5.3.2 Estimation and forecasting

No estimation and forecasting have been done. The 1996 figures have been used for all the reporting years.

### 5.3.3 Reclassification into FRA 2010 categories

No further reclassification is needed.

## 5.4 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	0.08	0.08	0.08	0.08	0	0	0	0
... of which coniferous	n.a.	n.a.	n.a.	n.a.	0	0	0	0
... of which broadleaved	n.a.	n.a.	n.a.	n.a.	0	0	0	0
Growing stock of commercial species	n.a.	n.a.	n.a.	n.a.	0	0	0	0

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

No data available.

**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)	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.	

## 5.5 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

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

## 6 Table T7 – Biomass stock

### 6.1 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.

### 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)			1996	Secondary data source. Growing stock information is a secretariat estimate based on different (unspecified) information sources

#### 6.2.2 Classification and definitions

National class	Definition
	The UNECE/FAO 2000 report distinguishes two categories of biomass: Above-stump biomass and Stump and root biomass. There is a small difference in the definitions of the biomass fractions as compared to FRA 2005 regarding the stump biomass. In UNECE/FAO 2000 the stump biomass is grouped together with the root biomass, while in FRA 2005 the above-ground portion of the stump belongs to Above-ground biomass.

#### 6.2.3 Original data

No data on biomass is presented in the data source. The data presented in this table has been derived from the available information on carbon for different biomass categories and applying a default carbon content of 50%. The original data will then be as follows:

Category	Tg biomass (Oven dry weight)
Above stump biomass	0.10
Stump and root biomass	0.02

Note that one Teragram (Tg) is  $1 \times 10^{12}$  g and equals one million metric tonne. The above data only refer to Forest. No information on biomass of dead wood has been found.

Same figures are reported in the MCPFE 2007 Report.

### 6.3 Analysis and processing of national data

#### 6.3.1 Calibration

Not needed.

#### 6.3.2 Estimation and forecasting

No time series of data is available, neither any other information that can constitute basis for a trend estimate. Hence, the 1995 figures have been used for all three reporting years.

#### 6.3.3 Reclassification into FRA 2010 categories

”Above-stump biomass” is considered to correspond to “Above-ground biomass” and “Stump and root biomass” is considered to correspond to “Below-ground biomass”.

### 6.4 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	0.10	0.10	0.10	0.10	0	0	0	0
Below-ground biomass	0.02	0.02	0.02	0.02	0	0	0	0
Dead wood	n.a.	n.a.	n.a.	n.a.	0	0	0	0
<b>TOTAL</b>	n.a.	n.a.	n.a.	n.a.	0	0	0	0

### 6.5 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

## 7 Table T8 – Carbon stock

### 7.1 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.

### 7.2 National data

#### 7.2.1 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)			1996	Secondary data source. Growing stock information is a secretariat estimate based on different (unspecified) information sources

#### 7.2.2 Classification and definitions

National class	Definition
	The UNECE/FAO 2000 report on two categories: Carbon in above-stump biomass and Carbon in stump and rood biomass. There is a small difference in the definitions of the biomass fractions as compared to FRA 2005 regarding the stump biomass. In UNECE/FAO 2000 the stump biomass is grouped together with the root biomass, while in FRA 2005 the above-ground portion of the stump belongs to Above-ground biomass.

#### 7.2.3 Original data

Category	Tg Carbon
Above stump biomass carbon store	0.05
Stump and rood biomass carbon store	0.01

Note that one Teragram (Tg) is  $1 \times 10^{12}$  g and equals one million metric tonne. The above data only refer to Forest. No information on biomass of dead wood has been found.

### 7.3 Analysis and processing of national data

#### 7.3.1 Calibration

Not needed.

#### 7.3.2 Estimation and forecasting

No time series of data is available, neither any other information that can constitute basis for a trend estimate. Hence, the 1996 figures have been used for all three reporting years.

#### 7.3.3 Reclassification into FRA 2010 categories

Above-stump biomass” is considered to correspond to “Above-ground biomass” and “Stump and root biomass” is considered to correspond to “Below-ground biomass”.

### 7.4 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	0.05	0.05	0.05	0.05	0	0	0	0
Carbon in below-ground biomass	0.01	0.01	0.01	0.01	0	0	0	0
<b>Sub-total: Living biomass</b>	<b>0.06</b>	<b>0.06</b>	<b>0.06</b>	<b>0.06</b>	0	0	0	0
Carbon in dead wood	n.a.	n.a.	n.a.	n.a.	0	0	0	0
Carbon in litter	n.a.	n.a.	n.a.	n.a.	0	0	0	0
<b>Sub-total: Dead wood and litter</b>	n.a.	n.a.	n.a.	n.a.	0	0	0	0
Soil carbon	n.a.	n.a.	n.a.	n.a.	0	0	0	0
<b>TOTAL</b>	n.a.	n.a.	n.a.	n.a.	0	0	0	0

Soil depth (cm) used for soil carbon estimates	n.a.
--	------

### 7.5 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**

## 8 Table T9 – Forest fires

### 8.1 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.

### 8.2 National data

#### 8.2.1 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	1990-1997	Secondary data source.

#### 8.2.2 Classification and definitions

National class	Definition
Forest Fire	<b>Fire which breaks out and spreads on forest and other wooded land or which breaks out on other land and spreads to forest and other wooded land.</b> <i>Excludes:</i> Prescribed or controlled burning, usually with the purpose of reducing or eliminating the quantity of accumulated fuel on the ground.

#### 8.2.3 Original data

Category	1990	1991	1992	1993	1994	1995	1996	1997
	<b>1000 hectares</b>							
Area of Forest burned	0	0	0	0	0	0	0.01	0.01
Area of Other wooded land burned	0	0	0	0	0	0	0	0
<b>Total area burned</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

Source: UNECE/FAO, 2000.

### 8.3 Analysis and processing of national data

#### 8.3.1 Calibration

Not needed.

#### 8.3.2 Estimation and forecasting

1996 and 1997 figures have been used for 2000. 2005 is assumed = 0.

#### 8.3.3 Reclassification into FRA 2010 categories

Not needed.

### 8.4 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	0	0.01	n.a.	0	0
... of which on other wooded land	0	0	0	0	0	0
... of which on other land	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

Table 9b

No data is available for this table.

### 8.5 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

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

### 9.1 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.

### 9.2 National data

#### 9.2.1 Data sources

References to sources of information	Quality (H/M/L)	Variable(s)	Year(s)	Additional comments
FAOSTAT, 2008		Industrial round wood, Fuel wood	all	

#### 9.2.2 Classification and definitions

National class	Definition
	FAOSTAT uses the same definition of the categories Industrial roundwood and Woodfuel as FRA 2005. It is assumed that the term “Production” used in FAOSTAT can be used as a good estimate of “Removal”, although these terms are not identical. FRA 2005 requests information on wood removal as volume over bark while the FAOSTAT figures refer to volume under bark. The figures are converted from volume under bark to volume over bark by application of a bark factor. The bark factor used is the “global” default conversion factor of 1.15

#### 9.2.3 Original data

Category	Volume m <sup>3</sup> under bark					
	1997	1998	1999	2000	2001	2002
Industrial roundwood	0	0	0	0	0	0
Woodfuel	0	0	0	0	0	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

Category	Volume m <sup>3</sup> under bark				
	2002	2003	2004	2005	2006
Industrial roundwood	0	0	0	0	0
Woodfuel	0	0	0	0	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

Source: FASOSTAT, 2008.

### 9.3 Analysis and processing of national data

No need to perform calibration, estimation and reclassification.

### 9.4 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.)	0	0	0	0	0	0
... of which from forest	0	0	0	0	0	0
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)	0	0	0	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.

	1990	2000	2005
Name of local currency	n.a.	n.a.	n.a.

### 9.5 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