



**Forestry Department**

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

**GLOBAL FOREST RESOURCES  
ASSESSMENT 2010**

**COUNTRY REPORT**

**SAUDI ARABIA**

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## The Forest Resources Assessment Programme

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

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

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

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

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

### 1.1 FRA 2010 Categories and definitions

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

### 1.2 National data

#### 1.2.1 Data sources

References to sources of information	Quality (H/M/L)	Variable(s)	Year(s)	Additional comments
Reports of Dept. of Range and Forestry.	L	Forest Cover	1996	Estimate is based on reports sent by the regions.
Agriculture Statistics	H	Agricultural Land	2003	
Reports of Dept. of Natural Resources	H	Forest Cover	2008	Estimate is based on reports of National Forest Inventory by using GIS
Agriculture Statistics	H	Agricultural Land	2008	
National Forest Inventory ( NFI )	H	Diversity of tree spp., Growing stock.	2008	NFI started in 2001 and finished in 2009.

#### 1.2.2 Classification and definitions

National class	Definition
Forest	It corresponds to FRA but minimum area not stated.

Riyad, Fiads and Valleys	It corresponds to FRA (Other wooded Land )
Oasis	Predominantly planted date palms ( <b>Other land</b> ).
Rangeland	Corresponds to FRA ( <b>Other land, Other land with tree cover</b> ).
Agricultural Land	Rainfed or irrigated land ( <b>Other land</b> ).
Parks and Gardens	Corresponds to FRA ( <b>Other wooded land</b> ).
Others	Cities, Roads, bare hills etc ( <b>Other land</b> ).

### 1.2.3 Original data

National class	Area (1000 hectares)		
	1996	2003	2008
Forests	2,728	2,728	977
Riyad, Fiads and Valleys	280	280	959
Oasis	250	250	250
Rangelands	170,000	170,000	170,000
Agricultural lands	1,131	1,216	1,075
Parks and gardens	11	11	11
Others	40,569	40,569	26,023
	<b>214,969</b>	<b>214,969</b>	<b>200,000</b>

The forest inventory realized and finished in 2009 generated new data on forest and rangeland resources based on remote sensing studies. The new data is considered more accurate and reliable than the 1996 data.

## 1.3 Analysis and processing of national data

### 1.3.1 Calibration

The area of the Kingdom of Saudi Arabia has changed according to the convention on the borders with the Republic of Yemen to become 200.000.000 hectares. For the purpose of this report, adjustments have been made to the Other Land category and will not affect the area of forest/other wooded land.

### 1.3.2 Estimation and forecasting

### 1.3.3 Reclassification into FRA 2010 categories

National class	FRA Categories				
	Forest	OWL	Other land	Total	OLWTC
Forests	100%			100%	0%
Riyad Fiad and valleys		100%		100%	0%
Oasis			100%	100%	0%
Rangelands			100%	100%	0%
Agricultural lands			100%		0%
Parks and Gardens			100%		0%
Others			100%		0%

The reclassification % for OWL are based on that Riyad, Fiad and Valleys are wooded areas, while 20% of Rangelands are considered to be covered with natural forests.

## 1.4 Data for Table T1

FRA 2010 categories	Area (1000 hectares)			
	1990	2000	2005	2010
Forest	977	977	977	977
Other wooded land	1117	1117	1117	1117
Other land	212875	212875	197906	197906
...of which with tree cover	0	0	705	705
Inland water bodies	0	0	0	0
<b>TOTAL</b>	<b>214969</b>	<b>214969</b>		

## 1.5 Comments to Table T1

Variable / category	Comments related to data, definitions, etc.	Comments on the reported trend
Forest		The forest inventory realized and finished in 2009 generated new data on forest and rangeland resources based on remote sensing studies. The new reported data is considered more accurate and reliable than the 1996 data.
Other wooded land	Includes 158,000 ha of mangroves (see table 6). Compared with FRA 2005, the Other wooded land figure has been corrected. In FRA 2005 20% of the range lands were considered OWL, this has been corrected in FRA 2010 100% of the rangelands are now considered Other land.	
Other land		
Other land with tree cover		
Inland water bodies		

### Other general comments to the table

The total area of the Kingdom of Saudi Arabia changed after the new agreement on the borders between the Kingdom and the Republic of Yemen. **The new area is 2,000,000 ha instead of 214,969,000 ha.**  
The Data for the year 2010 is based on a national forest inventory started in 2001 and was completed in 2009. It Provides reliable and accurate data.

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

Field inventory	Completed in 2009
Remote sensing survey / mapping	Completed in 2009

## 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
Dept. of Natural Resources	H	Forest ownership	2009	

### 2.2.2 Classification and definitions

National class	Definition
Private ownership	It corresponds to FRA 2010 definition
Public ownership	It corresponds to FRA 2010 definition

## 2.3 Data for Table T2

**Table 2a - Forest ownership**

FRA 2010 Categories	Forest area (1000 hectares)		
	1990	2000	2005
Public ownership	958	958	958
Private ownership	19	19	19
...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>977</b>	<b>977</b>	<b>977</b>

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

Does ownership of trees coincide with ownership of the land on which they are situated?	<input checked="" type="checkbox"/>	Yes
	<input type="checkbox"/>	No
If No above, please describe below how the two differ:		

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

FRA 2010 Categories	Forest area (1000 hectares)		
	1990	2000	2005
Public Administration	958	958	958
Individuals	na	na	na
Private corporations and institutions	na	na	na
Communities	na	na	na
Other	na	na	na
<b>TOTAL</b>	<b>958</b>	<b>958</b>	<b>958</b>

## 2.4 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
Dept. of Range and Forestry Reports.	M	Forest functions	1996	
Dept. of Natural Resources	H	Forest functions	2009	

### 3.2.2 Classification and definitions

National class	Definition
Multiple use	Same as FRA

There is data for permanent forests. National Forest Parks are considered a part of the Permanent Forests.

### 3.2.3 Original data

Table 1 has been used as input to this table

## 3.3 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	0	0	0
Social services	0	0	0	0
Multiple use	977	977	977	977
Other (please specify in comments below the table)	0	0	0	0
No / unknown	0	0	0	0
<b>TOTAL</b>	<b>977</b>	<b>977</b>	<b>977</b>	<b>977</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	n.a	n.a	n.a	3
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

## 3.4 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	All the forests and other wood land in Saudi Arabia are considered protective or have a multiple purpose, including recreation and therefore they are classified as multiple use forests.	
Other		
No / unknown designation		
Area of permanent forest estate	There is data for permanent forests. National Forest Parks are considered a part of the Permanent Forests	
Forest area within protected areas		
Forest area under sustainable forest management		
Forest area with management plan		

<b>Other general comments to the table</b>
-

## 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
Dept. of Natural Resources	H	Naturalness	1996	

#### 4.2.2 Classification and definitions

National class	Definition
Permanent Forests (primary)	It corresponds to FRA 2010 definition.
Protective plantation	It corresponds to FRA 2010 definition.

### 4.3 Data for Table T4

**Table 4a**

FRA 2010 Categories	Forest area (1000 hectares)			
	1990	2000	2005	2010
Primary forest	360	360	360	360
Other naturally regenerated forest	617	617	617	617
...of which of introduced species	n.a.	n.a.	n.a.	n.a.
Planted forest	0	0	0	0
...of which of introduced species	n.a.	n.a.	n.a.	n.a.
<b>TOTAL</b>	<b>977</b>	<b>977</b>	<b>977</b>	<b>977</b>

**Table 4b**

FRA 2010 Categories	Area (1000 hectares)			
	1990	2000	2005	2010
Rubber plantations (Forest)	0	0	0	0
Mangroves (Forest and OWL)	158	158	158	158
Bamboo (Forest and OWL)	0	0	0	0

### 4.4 Comments to Table T4

Variable / category	Comments related to data, definitions, etc.	Comments on the reported trend
Primary forest	The <i>Juniperus</i> forest was considered as a primary forest. The area was estimated based on the comment mentioned under comments for table 6 regarding the growing stock of broadleaved / coniferous	
Other naturally regenerating forest		
Planted forest	Data not available. Areas of planted forest are included under the other categories.	
Rubber plantations		
Mangroves	However “The world’s mangroves 1980- 2005 report” indicates 20,000 ha in 2005.	
Bamboo		

Other general comments to the table

## 5 Table T5 – Forest establishment and reforestation

### 5.1 FRA 2010 Categories and definitions

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

### 5.2 National data

#### 5.2.1 Data sources

References to sources of information	Quality (H/M/L)	Variable(s)	Year(s)	Additional comments
Dept. Of Natural Resources	H	Establishment of forest through planting	2010	
Ministry of Rural Affairs	L	Trees established through planting	2010	
Ministry of Transportation	L	Trees established through planting	2010	

#### 5.2.2 Classification and definitions

National class	Definition
Afforestation	Same as FRA
Reforestation	Same as FRA

### 5.3 Data for Table T5

FRA 2010 Categories	Annual forest establishment (hectares/year)			...of which of introduced species <sup>1)</sup> (hectares/year)		
	1990	2000	2005	1990	2000	2005
Afforestation	n. a	n. a	152	n. a	n. a	152
Reforestation	n. a	n. a	196	n. a	n. a	196
...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

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

### 5.4 Comments to Table T5

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

Other general comments to the table
-

## 6 Table T6 – Growing stock

### 6.1 FRA 2010 Categories and definitions

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

### 6.2 National data

#### 6.2.1 Data sources

References to sources of information	Quality (H/M/L)	Variable(s)	Year(s)	Additional comments
Dept. of Range and Forestry	L	Forest area	1994	
Partial forest inventory carried out by Attalah in (1984), Natural Forests in Saudi Arabia, and the possibility to exploit it economically.	M	Growing stock	1984	
National Forest Inventory ( NFI ) (Ongoing)	L	Diversity of tree spp., Growing stock.	2005	
Dept. of Range and forestry, Ministry of Agriculture.	M	Growing stock composition	2000	

#### 6.2.2 Classification and definitions

National class	Definition
Growing stock	Same as FRA

#### 6.2.3 Original data

National class (Broad classes of forest types )	Volume (m3/ha)
Natural Forest (NF)	8.4
OWL	5.0

The above figures are expert estimates based on a partial inventory undertaken in 1984 and some preliminary findings from the ongoing NFI.

For growing stock composition no National Forest Inventory has been carried out to estimate the volume for each species. All the figures presented in the final table are rough estimates based on experience.

### 6.3 Analysis and processing of national data

#### 6.3.1 Estimation and forecasting

The above average volumes per hectare were applied to the area of forest and other wooded land from Table 1. The **growing stock/hectare** was estimated at 4.86 and 1.5 m<sup>3</sup>/ha for Forest and Other Wooded Land respectively in 1984. It was then refined to **8.40 and 5 m<sup>3</sup>/ha respectively** based on some results of the on-going forest inventory. This is still a very low figure, but it is the best estimate we have until more results from the ongoing NFI become available.

The area of forest is 977455 ha, the area of mangroves was added to the area of OWL to be: 959460 + 158000 = 1 17460 ha

### 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	8.21	8.21	8.21	8.21	5.6	5.6	5.6	5.6
... of which coniferous	3.0	3.0	3.0	3.0	2.1	2.1	2.1	2.1
... of which broadleaved	5.21	5.21	5.21	5.21	3.5	3.5	3.5	3.5
Growing stock of commercial species	0	0	0	0	0	0	0	0

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

FRA 2010 category / Species name			Growing stock in forest (million cubic meters)		
Rank	Scientific name	Common name	1990	2000	2005
1 <sup>st</sup>	<i>Juniperus procera</i>	Arar	n. a	n. a	n. a
2 <sup>nd</sup>	<i>Acacia</i> spp.	Akasiat	n. a	n. a	n. a
3 <sup>rd</sup>	<i>Ziziphus spina-christi</i>	Al sidir	n. a	n. a	n. a
4 <sup>th</sup>	<i>Olea europaea</i>	Zaitoon bari	n. a	n. a	n. a
5 <sup>th</sup>	<i>Prosopis juliflora</i>	Miskeet	n. a	n. a	n. a
6 <sup>th</sup>	<i>Tamarix</i> spp.	Al tarfa	n. a	n. a	n. a
7 <sup>th</sup>	<i>Avicennia marina</i>	Mangroves	n. a	n. a	n. a
8 <sup>th</sup>	<i>Hyphaene thebaica</i>	Al dom	n. a	n. a	n. a
9 <sup>th</sup>	<i>Capparis decidua</i>	Tontob	n. a	n. a	n. a
10 <sup>th</sup>	<i>Ficus</i> spp.	Al labakh	n. a	n. a	n. a
Remaining			n. a	n. a	n. a
<b>TOTAL</b>			n. a	n. a	n. a

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

**Table 6c – Specification of threshold values**

Item	Value	Complementary information
Minimum diameter (cm) at breast height <sup>1</sup> of trees included in growing stock (X)	7.5 – 14	
Minimum diameter (cm) at the top end of stem for calculation of growing stock (Y)	7.5	
Minimum diameter (cm) of branches included in growing stock (W)	3	
Volume refers to “above ground” (AG) or “above stump” (AS)		

### 6.5 Comments to Table T6

Variable / category	Comments related to data, definitions, etc.	Comments on the reported trend
Total growing stock	The data for the year 2010 is more reliable. It is based on GIS survey	
Growing stock of broadleaved / coniferous	Expert estimate – the <i>juniperus</i> growing stock (coniferous) is about 37 % of the total GS – reported to all categories and years.	
Growing stock of commercial species		
Growing stock composition		

#### Other general comments to the table

-The weakness of this data is that only one and rough estimation of the growing stock was done in 1984, so the dynamics and productive capacity of forests and other wooded land cannot be accounted for.

-There is no industrial wood production and legal removals of firewood were stopped since three years ago and for the two coming years, so officially there is no wood production during these five years.

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

## 7 Table T7 – Biomass stock

### 7.1 FRA 2010 Categories and definitions

Category	Definition
Above-ground biomass	All living biomass above the soil including stem, stump, branches, bark, seeds, and foliage.
Below-ground biomass	All biomass of live roots. Fine roots of less than 2mm diameter are excluded because these often cannot be distinguished empirically from soil organic matter or litter.
Dead wood	All non-living woody biomass not contained in the litter, either standing, lying on the ground, or in the soil. Dead wood includes wood lying on the surface, dead roots, and stumps larger than or equal to 10 cm in diameter or any other diameter used by the country.

### 7.2 National data

Data of table 6 was used as input to this table.

#### 7.2.1 Data sources

References to sources of information	Quality (H/M/L)	Variable(s)	Year(s)	Additional comments
FAO, Guidelines for country reporting to FRA 2010 Working Paper 143. Rome 2008	H	Biomass expansion factor. Basic density of woods Root-shoot ratio	2008	

#### 7.2.2 Classification and definitions

National class	Definition
Above-ground biomass	Same as FRA
Below-ground biomass	Same as FRA
Dead wood	Same as FRA

### 7.3 Analysis and processing of national data

#### 7.3.1 Estimation and forecasting

The following conversion factors were used (tropical Asia, deciduous and broadleaved forests)

Basic wood density for *Zizyphus Spina-christi* is 0.76 and for *Ficus* spp is 0.4, the average was considered 0.6

Biomass Expansion Factor = 2

Root-shoot ratio for broadleaf forest < 20 ton/hectare = 0.28

Dead-live ratio = 0.14

#### 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	9.85	9.85	9.85	9.85	6.7	6.7	6.7	6.7
Below-ground biomass	2.76	2.76	2.76	2.76	1.88	1.88	1.88	1.88
Dead wood	1.76	1.76	1.76	1.76	1.20	1.20	1.20	1.20
<b>TOTAL</b>	<b>14.37</b>	<b>14.37</b>	<b>14.37</b>	<b>14.37</b>	<b>9.78</b>	<b>9.78</b>	<b>9.78</b>	<b>9.78</b>

#### 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
The data for the year 2010 is more accurate because it is based on actual remote sensing survey and ground truth

## 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

The data of table 7 was used as input to this table

#### 8.2.1 Data sources

References to sources of information	Quality (H/M/L)	Variable(s)	Year(s)	Additional comments
FAO, Guidelines for country reporting to FRA 2010 Working Paper 143. Rome 2008	H	Carbon Fraction, carbon in litter 2008 and soil	2008	

#### 8.2.2 Classification and definitions

National class	Definition
Carbon in above-ground biomass	Same as FRA
Carbon in below-ground biomass	Same as FRA
Carbon in dead wood	Same as FRA
Carbon in litter	Same as FRA
Soil carbon	Same as FRA

### 8.3 Analysis and processing of national data

#### 8.3.1 Estimation and forecasting

The default factor of 0.47 was used to convert the biomass stock to carbon stock according to 2006 IPCC guidelines.

The soil carbon was calculated for LAC soils (35 ton/ha)

The default value for carbon stock of litter in tropical forests (2.1 ton C/ha) has been used.

#### 8.4 Data for Table T8

FRA 2010 Category	Carbon (Million metric tonnes)							
	Forest				Other wooded land			
	1990	2000	2005	2010	1990	2000	2005	2010
Carbon in above-ground biomass	4.63	4.63	4.63	4.63	3.15	3.15	3.15	3.15
Carbon in below-ground biomass	1.3	1.3	1.3	1.3	0.88	0.88	0.88	0.88
<b>Sub-total: Living biomass</b>	<b>5.93</b>	<b>5.93</b>	<b>5.93</b>	<b>5.93</b>	<b>4.03</b>	<b>4.03</b>	<b>4.03</b>	<b>4.03</b>
Carbon in dead wood	0.83	0.83	0.83	0.83	0.56	0.56	0.56	0.56
Carbon in litter	2.05	2.05	2.05	2.05	2.47	2.47	2.47	2.47
<b>Sub-total: Dead wood and litter</b>	<b>2.88</b>	<b>2.88</b>	<b>2.88</b>	<b>2.88</b>	<b>3.03</b>	<b>3.03</b>	<b>3.03</b>	<b>3.03</b>
Soil carbon	34.21	34.21	34.21	34.21	41.11	41.11	41.11	41.11
<b>TOTAL</b>	<b>43.02</b>	<b>43.02</b>	<b>43.02</b>	<b>43.02</b>	<b>48.17</b>	<b>48.17</b>	<b>48.17</b>	<b>48.17</b>

Soil depth (cm) used for soil carbon estimates	30 cm
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#### 8.5 Comments to Table T8

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

Other general comments to the table

## 9 Table T9 – Forest fires

### 9.1 FRA 2010 Categories and definitions

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

### 9.2 National data

#### 9.2.1 Data sources

References to sources of information	Quality (H/M/L)	Variable(s)	Year(s)	Additional comments
Dept. of Natural Resources	M	Burned area	1988-2007	

#### 9.2.2 Classification and definitions

National class	Definition
vegetation fires	It corresponds to FRA 2010 definition.

#### 9.2.3 Original data

Data were collected from scattered reports.

### 9.3 Data for Table T9

Table 9a

FRA 2010 category	Annual average for 5-year period					
	1990		2000		2005	
	1000 hectares	number of fires	1000 hectares	number of fires	1000 hectares	number of fires
Total land area affected by fire	0.6	na	0.6	na	4.53	63
... of which on forest	0.5	na	0.5	na	4.53	63
... of which on other wooded land	0.1	na	0.1	na	0	0
... of which on other land	0	0	0	0	0	0

**Table 9b**

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

**9.4 Comments to Table T9**

Variable / category	Comments related to data, definitions, etc.	Comments on the reported trend
Area affected by fire	No reliable and systematic recorded data is available. The figures are rough estimates reflecting the present position.	
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
National Forest Inventory (NFI)	H	Area affected by insects and diseases	2007	

#### 10.2.2 Classification and definitions

National class	Definition
Disturbance by insects	Same as FRA
Disturbance by diseases	Same as FRA

### 10.3 Data for Table T10

**Table 10a – Disturbances**

FRA 2010 category	Affected forest area (1000 hectares)		
	1990	2000	2005
Disturbance by insects	4	4	4
Disturbance by diseases	2.5	2.5	2.5
Disturbance by other biotic agents	na	na	na
Disturbance caused by abiotic factors	na	na	na
<b>Total area affected by disturbances</b>	<b>6.5</b>	<b>6.5</b>	<b>6.5</b>

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

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

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

Description / name	Tree species or genera affected (scientific name)	Year(s) of latest outbreak	Area affected (1000 hectares)	If cyclic, approx. cycle (years)
<i>Rotylenchus</i>	<i>Juniperus sp., Acacia sp.</i>	2008	n. a	n. a
<i>Scutellonema</i>	<i>Juniperus sp., Acacia sp.</i>	2008	n. a	n. a
<i>Meloidogyne</i> spp	<i>Acacia sp., Dodonea sp., Zizipus sp., Melia sp.</i>	2008	n. a	n. a
<i>Phloeosinus aubei</i> Perris	<i>Juniperus sp.</i>	2008	n. a	n. a
<i>Bruchidius arabicus</i> Decelle	<i>Acacia sp.</i>	2008	n. a	n. a
<i>Schizomyia</i> sp	<i>Acacia sp.</i>	2008	n. a	n. a

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

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

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

#### 10.4 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	<i>Argemone maxican, Opuntia stricta, Nicotina glucam</i>	
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 round wood removals	The wood removed (volume of round wood over bark) for production of goods and services other than energy production (wood fuel).
Wood fuel 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
King Abdul Aziz City for Science & Technology	H		2007	

#### 11.2.2 Classification and definitions

National class	Definition
Wood fuel removals	Same as FRA

### 11.3 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	na	na	7.629
... of which from forest	0	0	0	na	na	na
Unit value (local currency / m <sup>3</sup> o.b.)	na	na	na	na	na	4000
Total value (1000 local currency)	na	na	na	na	na	30516

	1990	2000	2005
Name of local currency	Saudi Riyal	Saudi Riyal	Saudi Riyal

### 11.4 Comments to Table T11

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

Other general comments to the table

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

### 12.1 FRA 2010 Categories and definitions

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

### NWFP categories

Category
<p><b><u>Plant products / raw material</u></b></p> <ol style="list-style-type: none"> <li>1. Food</li> <li>2. Fodder</li> <li>3. Raw material for medicine and aromatic products</li> <li>4. Raw material for colorants and dyes</li> <li>5. Raw material for utensils, handicrafts &amp; construction</li> <li>6. Ornamental plants</li> <li>7. Exudates</li> <li>8. Other plant products</li> </ol> <p><b><u>Animal products / raw material</u></b></p> <ol style="list-style-type: none"> <li>9. Living animals</li> <li>10. Hides, skins and trophies</li> <li>11. Wild honey and bee-wax</li> <li>12. Wild meat</li> <li>13. Raw material for medicine</li> <li>14. Raw material for colorants</li> <li>15. Other edible animal products</li> <li>16. Other non-edible animal products</li> </ol>

### 12.2 National data

#### 12.2.1 Data sources

References to sources of information	Quality (H/M/L)	Variable(s)	Year(s)	Additional comments
Many scattered Reports	L	values		insufficient data

**Note: the data is insufficient**

#### 12.2.2 Classification and definitions

National class	Definition
Wild honey and bee-wax	It corresponds to FRA 2010 definition

**Note: data is not recorded**

**12.3 Data for Table T12**

Rank	Name of product	Key species	Unit	NWFP removals 2005		NWFP category
				Quantity	Value (1000 local currency)	
1 <sup>st</sup>	Wild honey and bee-wax		Ton	60	8000	11
2 <sup>nd</sup>	na	na	na	na	na	
3 <sup>rd</sup>						
4 <sup>th</sup>						
5 <sup>th</sup>						
6 <sup>th</sup>						
7 <sup>th</sup>						
8 <sup>th</sup>						
9 <sup>th</sup>						
10 <sup>th</sup>						
All other plant products						
All other animal products						
<b>TOTAL</b>						

	2005
Name of local currency	Saudi Riyal

**12.4 Comments to Table T12**

Variable / category	Comments related to data, definitions, etc.
10 most important products	Data on living animals in forest lands is not available
Other plant products	
Other animal products	
Value by product	
Total value	

Other general comments to the table

## 13 Table T13 – Employment

### 13.1 FRA 2010 Categories and definitions

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

### 13.2 National data

#### 13.2.1 Data sources

References to sources of information	Quality (H/M/L)	Variable(s)	Year(s)	Additional comments
Dep. of natural resources	H	Number of employee	2000	

#### 13.2.2 Classification and definitions

National class	Definition
Provision of services	It corresponds to FRA 2010 definition

### 13.3 Data for Table T13

FRA 2010 Category	Employment (1000 years FTE)		
	1990	2000	2005
Employment in primary production of goods	1.36	1.36	1.36
...of which paid employment	0.905	0.905	0.905
...of which self-employment	0.455	0.455	0.455
Employment in management of protected areas	0.006	0.006	0.006

### 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	The figure was estimated based on the number of human resources within public forest institutions in table 15.	
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)			
<b>Forest policy statement with national scope</b>	<input checked="" type="checkbox"/>	Yes	
	<input type="checkbox"/>	No	
If Yes above, provide:	Year of endorsement	2005	
	Reference to document	Strategy and National Programs of Forests in KSA	
<b>National forest programme (nfp)</b>	<input checked="" type="checkbox"/>	Yes	
	<input type="checkbox"/>	No	
If Yes above, provide:	Name of nfp in country	Strategy and National Programs of Forests in KSA	
	Starting year	2006	
	Current status	<input type="checkbox"/>	In formulation
		<input checked="" type="checkbox"/>	In implementation
		<input type="checkbox"/>	Under revision
Reference to document or web site	<a href="http://egov-server/public/portal">http://egov-server/public/portal</a>		
<b>Law (Act or Code) on forest with national scope</b>	<input checked="" type="checkbox"/>	Yes, specific forest law exists	
	<input type="checkbox"/>	Yes, but rules on forests are incorporated in other (broader) legislation	
	<input type="checkbox"/>	No, forest issues are not regulated by national legislation	
If Yes above, provide:	Year of enactment	2004	
	Year of latest amendment		
	Reference to document	Ministry of Agriculture, KSA	

In case the responsibility for forest policy- and/or forest law-making is decentralized, please indicate the existence of the following and explain in the comments below the table how the responsibility for forest policy- and law-making is organized in your country.	
<b>Sub-national forest policy statements</b>	Yes
	√ No
If Yes above, indicate the number of regions/states/provinces with forest policy statements	
<b>Sub-national Laws (Acts or Codes) on forest</b>	Yes
	√ 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	
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	<i>Dr. Fahd Ben Abderrahman Bel Ghunaim Minister of Agriculture</i>	
Level of subordination of Head of Forestry within the Ministry		1 <sup>st</sup> level subordination to Minister
		2 <sup>nd</sup> level subordination to Minister
	√	3 <sup>rd</sup> level subordination to Minister
		4 <sup>th</sup> or lower level subordination to Minister
Other public forest agencies at national level		
Institution(s) responsible for forest law enforcement		

Table 15b – Human resources

FRA 2010 Category	Human resources within public forest institutions					
	2000		2005		2008	
	Number	%Female	Number	%Female	Number	%Female
Total staff	1376	na	1376	na	1400	0
...of which with university degree or equivalent	500	na	500	na	600	0

Notes:

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

### 15.3 Comments to Table T15

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

Other general comments to the table

## 16 Table T16 – Education and research

### 16.1 FRA 2010 Categories and definitions

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

### 16.2 National data

#### 16.2.1 Data sources

References to sources of information	Quality (H/M/L)	Variable(s)	Year(s)	Additional comments
Department of Natural Resources	M	Numbers	2008	These numbers are estimations

### 16.3 Data for Table T16

FRA 2010 Category	Graduation <sup>1)</sup> of students in forest-related education					
	2000		2005		2008	
	Number	%Female	Number	%Female	Number	%Female
Master's degree (MSc) or equivalent	na	na	na	na	16	0
Bachelor's degree (BSc) or equivalent	na	na	na	na	9	0
Forest technician certificate / diploma	na	na	na	na	60	0
FRA 2010 Category	Professionals working in publicly funded forest research centres <sup>2)</sup>					
	2000		2005		2008	
	Number	%Female	Number	%Female	Number	%Female
Doctor's degree (PhD)	na	na	na	na	20	0
Master's degree (MSc) or equivalent	na	na	na	na	20	5%
Bachelor's degree (BSc) or equivalent	na	na	na	na	30	0

Notes:

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

#### 16.4 Comments to Table T16

Variable / category	Comments related to data, definitions, etc.	Comments on the reported trend
Graduation of students in forest-related education		
Professionals working in public forest research centres		

Other general comments to the table

## 17 Table T17 – Public revenue collection and expenditure

### 17.1 FRA 2010 Categories and definitions

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

### 17.2 National data

#### 17.2.1 Data sources

References to sources of information	Quality (H/M/L)	Variable(s)	Year(s)	Additional comments
Natural resources Department of MOA	H	Funds (Reyal)		

#### 17.2.2 Classification and definitions

National class	Definition
Public expenditure	same as FRA
Operational expenditure (sub-category to Public expenditure)	same as FRA

### 17.3 Data for Table T17

**Table 17a - Forest revenues**

FRA 2010 Categories	Revenues (1000 local currency)	
	2000	2005
Forest revenue	n.a.	n.a.

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

FRA 2010 Categories	Domestic funding (1000 local currency)		External funding (1000 local currency)		Total (1000 local currency)	
	2000	2005	2000	2005	2000	2005
Operational expenditure	na	31000	na	na	na	31000
Transfer payments	na	40000	na	na	na	40000
<b>Total public expenditure</b>	na	71000	na	na	na	71000
If transfer payments are made for forest management and conservation, indicate for what specific objective(s) - Please tick all that apply.	<input checked="" type="checkbox"/>	Reforestation				
	<input checked="" type="checkbox"/>	Afforestation				
	<input checked="" type="checkbox"/>	Forest inventory and/or planning				
	<input checked="" type="checkbox"/>	Conservation of forest biodiversity				
	<input checked="" type="checkbox"/>	Protection of soil and water				
	<input checked="" type="checkbox"/>	Forest stand improvement				
	<input checked="" type="checkbox"/>	Establishment or maintenance of protected areas				
	<input type="checkbox"/>	Other, specify below				

### 17.4 Comments to Table T17

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

Other general comments to the table