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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 2005 (FRA 2005), which is the most comprehensive assessment to date. More than 800 people have been involved, including 172 national correspondents and their colleagues, an Advisory Group, international experts, FAO staff, consultants and volunteers. Information has been collated from 229 countries and territories for three points in time: 1990, 2000 and 2005.

The reporting framework for FRA 2005 is based on the thematic elements of sustainable forest management acknowledged in intergovernmental forest-related fora and includes more than 40 variables related to the extent, condition, uses and values of forest resources. More information on the FRA 2005 process and the results - including all the country reports - is available on the FRA 2005 Web site (www.fao.org/forestry/fra2005).

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The Global Forest Resources Assessment 2005 Country Report Series is designed to document and make available the information forming the basis for the FRA 2005 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 2005 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
Al Daqish, M, A and Nsour, M	M	Forest area , ownership and Characteristics	2005	A set of tables prepared for FRA 2005 project based on good estimates.
Ministry of Agriculture statistics, department of land and surveys	M	Forest Vegetation	1990	For state forests vegetation information were gathered from Ministry of Agriculture statistics, department of land and surveys
Ministry of Agriculture statistics, department of land and surveys	M	Privately owned land covered with forest trees	2000	Information from Ministry of Agriculture , owned land covered with forest trees converted to agriculture land

1.2.2 Classification and definitions

National class	Definition
Forest	Corresponds FRA 2005 definition.
Other wooded land	Corresponds FRA 2005 definition.

There is no classification system but lands with rainfall less than 200mm is considered as range land which occupies more than 90% of the total area of Jordan.

1.2.3 Original data

Data taken from the latest Ministry of Agriculture report, 2004.

1.3 Analysis and processing of national data

1.3.1 Calibration

Not necessary as the UN/FAOSTAT figures on country and land area have been used.

1.4 Data for National reporting table T1

FRA 2005 Categories	Area (1000 hectares)		
	1990	2000	2005
Forest	83	83	83
Other wooded land	55	54	52
Other land	8755	8756	8758
...of which with tree cover ¹⁾	214	219	222
Inland water bodies	28	28	28
TOTAL	8921	8921	8921

- 1) Area of “Other land with tree cover” is included in the area reported under “Other land” and should therefore be excluded when calculating the total area for the country.

1.5 Comments to National reporting table T1

Data is based on estimations. The decrease in other wooded land areas for the year 2005 occurred in private lands.

2 Table T2 – Ownership of Forest and Other wooded land

2.1 FRA 2005 Categories and definitions

Category	Definition
Private ownership	Land owned by individuals, families, private co-operatives, corporations, industries, religious and educational institutions, pension or investment funds, and other private institutions.
Public ownership	Land owned by the State (national, state and regional governments) or government-owned institutions or corporations or other public bodies including cities, municipalities, villages and communes.
Other ownership	Land that is not classified either as “Public ownership” or as “Private ownership”.

2.2 National data

2.2.1 Data sources

References to sources of information	Quality (H/M/L)	Variable(s)	Year(s)	Additional comments
Ministry of Agriculture statistics, department of land and surveys	M	Other wooded land and privately owned land.	1990	
Ministry of Agriculture statistics, department of land and surveys	M	Other wooded land and privately owned land	2000	

2.2.2 Classification and definitions

National class	Definition
Private ownership	Corresponds with the FRA 2005 definition
Public ownership	Corresponds with the FRA 2005 definition
Other ownership	Corresponds with the FRA 2005 definition

2.3 Reclassification into FRA 2005 classes

Land with a cover of forest trees where the ownership of this land is not determined (private, governmental, or municipal ownership) has been classified as “Other ownership”.

2.4 Data for National reporting table T2

FRA 2005 Categories	Area (1000 hectares)			
	Forest		Other wooded land	
	1990	2000	1990	2000
Private ownership	0	0	13	12
Public ownership	71	71	30	30
Other ownership	12	12	12	12
TOTAL	83	83	55	54

2.5 Comments to National reporting table T2

Other ownership: land with a cover of forest trees where the ownership of this land is not determined (private , governmental, or municipal ownership).

3 Table T3 – Designated function of Forest and Other wooded land

3.1 FRA 2005 Categories and definitions

Types of designation

Category	Definition
Primary function	A designated function is considered to be primary when it is significantly more important than other functions. This includes areas that are legally or voluntarily set aside for specific purposes.
Total area with function	Total area where a specific function has been designated, regardless whether it is primary or not.

Designation categories

Category / Designated function	Definition
Production	Forest / Other wooded land designated for production and extraction of forest goods, including both wood and non-wood forest products.
Protection of soil and water	Forest / Other wooded land designated for protection of soil and water.
Conservation of biodiversity	Forest / Other wooded land designated for conservation of biological diversity.
Social services	Forest / Other wooded land designated for the provision of social services.
Multiple purpose	Forest / Other wooded land designated to any combination of: production of goods, protection of soil and water, conservation of biodiversity and provision of social services and where none of these alone can be considered as being significantly more important than the others.
No or unknown function	Forest / Other wooded land for which a specific function has not been designated or where designated function is unknown.

3.2 National data

3.2.1 Data sources

References to sources of information	Quality (H/M/L)	Variable(s)	Year(s)	Additional comments
Al Daqish, M, A and Nsour, M	M	Forest area, ownership and Characteristics	2005	A set of tables prepared for FRA 2005 project based on good estimates.
Ministry of Agriculture	M		2000	Statistics
Ministry of Agriculture	M		1990	statistics

3.2.2 Original data

Expert estimates based on field experience.

3.2.3 Classification and definitions

National class	Definition
Protection of soil and water	Same as FRA 2005
Conservation of biodiversity	Same as FRA 2005

Social services	Same as FRA 2005
Multiple purpose	Same as FRA 2005
No or unknown function	Same as FRA 2005

3.3 Data for National reporting table T3

FRA 2005 Categories / Designated function	Area (1000 hectares)					
	Primary function			Total area with function		
	1990	2000	2005	1990	2000	2005
Forest						
Production	0	0	0			
Protection of soil and water	5	5	5			
Conservation of biodiversity	1	1	1			
Social services	1	1	1			
Multiple purpose	76	76	76	not appl.	not appl.	not appl.
No or unknown function	0	0	0	not appl.	not appl.	not appl.
Total - Forest	83	83	83	not appl.	not appl.	not appl.
Other wooded land						
Production	0	0	0			
Protection of soil and water	0	0	0			
Conservation of biodiversity	0	0	0			
Social services	3	3	3			
Multiple purpose	0	0	0	not appl.	not appl.	not appl.
No or unknown function	52	51	49	not appl.	not appl.	not appl.
Total – Other wooded land	55	54	52	not appl.	not appl.	not appl.

3.4 Comments to National reporting table T3

Expert estimates based on field experience.

4 Table T4 – Characteristics of Forest and Other wooded land

4.1 FRA 2005 Categories and definitions

Category	Definition
Primary	Forest / Other wooded land of native species, where there are no clearly visible indications of human activities and the ecological processes are not significantly disturbed.
Modified natural	Forest / Other wooded land of naturally regenerated native species where there are clearly visible indications of human activities.
Semi-natural	Forest / Other wooded land of native species, established through planting, seeding or assisted natural regeneration.
Productive plantation	Forest / Other wooded land of introduced species, and in some cases native species, established through planting or seeding mainly for production of wood or non wood goods.
Protective plantation	Forest / Other wooded land of native or introduced species, established through planting or seeding mainly for provision of services.

4.2 National data

4.2.1 Data sources

References to sources of information	Quality (H/M/L)	Variable(s)	Year(s)	Additional comments
Al Daqish, M, A and Nsour, M	M	Forest area , ownership and Characteristics	2005	A set of tables prepared for FRA 2005 project based on good estimates
<u>Ministry of Agriculture Statistics</u>	M	Other wooded land area	<u>2000</u>	Other wooded land converted to agriculture land
<u>Ministry of Agriculture Statistics</u>	M	Other wooded land area	<u>1990</u>	Other wooded land converted to agriculture land

4.2.2 Classification and definitions

National class	Definition
Primary	Corresponds the FRA 2005 definition
Modified natural	Corresponds the FRA 2005 definition
Semi-natural	Corresponds the FRA 2005 definition
Protective plantation	Corresponds the FRA 2005 definition

4.2.3 Original data

Expert estimates based on field experience.

4.3 Analysis and processing of national data

4.3.1 Calibration

Not needed.

4.4 Data for National reporting table T4

FRA 2005 Categories	Area (1000 hectares)					
	Forest			Other wooded land		
	1990	2000	2005	1990	2000	2005
Primary	0	0	0	0	0	0
Modified natural	37	37	37	50	46	42
Semi-natural	6.5	6.5	6.5	5	8	10
Productive plantation	0	0	0	0	0	0
Protective plantation	39.5	39.5	39.5	ID	ID	ID
TOTAL	83	83	83	55	54	52

4.5 Comments to National reporting table T4

The decrease in the other wooded land area in the years 2000 and 2005 is due to conversion of land from forest lands to agriculture land.

The afforestation activities started in the mid of the last century, and most the land was suitable for growing forest trees. Hence large areas were afforested with a high success rate. In the late 1980's the suitable land for growing forest plantations was used and afforestation took place in less suitable land with low precipitation rate and harsh climate which resulted in low success rate.

5 Table T5 – Growing stock

5.1 FRA 2005 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.
Commercial growing stock	The part of the growing stock of species that are considered as commercial or potentially commercial under current market conditions, and with a diameter at breast height of Z cm or more.

5.2 National data

5.2.1 Data sources

References to sources of information	Quality (H/M/L)	Variable(s)	Year(s)	Additional comments
Al Daqish, M, A and Nsour, M	M	Forest area , ownership and Characteristics	2005	A set of tables prepared for FRA 2005 project based on good estimates
Unfinished survey results , forestry department	M		2000	

5.2.2 Classification and definitions

National class	Definition
Growing stock	Corresponds with the FRA 2005

5.2.3 Original data

A partial forest survey was done in 1995, covering the species *Pinus halepensis* and Oak spp. This survey indicates an average growing stock of approximately 30 m³/ha. This is the only quantitative information available on growing stock and despite its weakness is considered to be a fairly representative and has therefore been applied to the total forest area of Jordan, as estimated in table T1.

5.3 Data for National reporting table T5

FRA 2005 Categories	Volume (million cubic meters over bark)					
	Forest			Other wooded land		
	1990	2000	2005	1990	2000	2005
Growing stock	2.5	2.5	2.5	ID	ID	ID
Commercial growing stock	ID	ID	ID	ID	ID	ID

Specification of country threshold values	Unit	Value	Complementary information
1. Minimum diameter at breast height of trees included in Growing stock (X)	cm	10	
2. Minimum diameter at the top end of stem (Y) for calculation of Growing stock	cm	—	
3. Minimum diameter of branches included in Growing stock (W)	cm	—	
4. Minimum diameter at breast height of trees in Commercial growing stock (Z)	cm	—	
5. Volume refers to “Above ground” (AG) or “Above stump” (AS)	AG / AS	AG	
6. Have any of the above thresholds (points 1 to 4) changed since 1990	Yes/No	No	
7. If yes, then attach a separate note giving details of the change	Attachment		

5.4 Comments to National reporting table T5

A partial forest survey was done in 1995, covering the species *Pinus halepensis* and Oak spp. This survey indicates a growing stock of approximately 30 m³/ha. This is the only quantitative information available on growing stock and despite its weakness is considered to be a fairly representative and has therefore been applied to the total forest area of Jordan, as estimated in table T1.

6 Table T6 – Biomass stock

6.1 FRA 2005 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 living 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 biomass	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
FAO. Working Paper 82. 2004. FAO/Forests department	M	Biomass expansion factor. Root-shoot ratio	2004	
FAO. Working Paper 81. 2004.FAO/ Forests department	H	Biomass expansion factor. Root-shoot ratio	2004	

6.2.2 Classification and definitions

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

6.2.3 Original data

The growing stock of forests in table T5 was used as input to calculate the forest biomass stock.

6.3 Analysis and processing of national data

The following conversion factors were used

For tropical arid zones deciduous and broadleaved forests:

Basic wood density for oak is 0.7 and for pine 0.5. The average was considered 0.65

Biomass Expansion Factor = 2.0

Root-Shoot ratio for tropical broadleaf forest with NS biomass/ha is =0.42.

Dead-live ratio = 0.14

Calculation of living biomass for forest

G. stock (Mill. m3)	Basic density (tons/m3)	Stem biomass (million tons)	Biomass Exp. Fact	AG biomass (mill. tons)	Root- Shoot ratio	BG biomass (mill.tons)	Dead- live ratio	DW biomass (mill.tons)
2.5	0.65	1.625	2.0	3.25	0.42	1.365	0.14	0.646

6.4 Data for National reporting table T6

FRA 2005 Categories	Biomass (million metric tonnes oven-dry weight)					
	Forest			Other wooded land		
	1990	2000	2005	1990	2000	2005
Above-ground biomass	3.25	3.25	3.25			
Below-ground biomass	1.36	1.36	1.36			
Dead wood biomass	0.65	0.65	0.65			
TOTAL	5.26	5.26	5.26			

7 Table T7 – Carbon stock

7.1 FRA 2005 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 living 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 biomass	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 a minimum diameter chose by the country for lying dead (for example 10 cm), in various states of decomposition above the mineral or organic soil. This includes the litter, fomic, and humic layers.
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
FAO. Working Paper 82. 2004. FAO/Forests department	M	Dry matter and biomass and root shoot ratio	2004	
FAO. Working Paper 81. 2004.FAO/ Forests department	H	Biomass expansion factor. Root-shoot ratio	2004	

7.2.2 Classification and definitions

National class	Definition
Carbon in above-ground biomass	It corresponds to FRA 2005 definition.
Carbon in below-ground biomass	It corresponds to FRA 2005 definition.
Carbon in dead wood biomass	It corresponds to FRA 2005 definition.

7.2.3 Original data

The final data for table T6 were used as input for the carbon estimations.

7.3 Analysis and processing of national data

The default global conversion factor 50% was used to convert biomass to carbon.

The carbon stock of litter in forest under subtropical climate is 2.8 tonnes C/ha for broadleaved and 4.1 for conifers (IBCC, good practice guidance for LULUCF). 3.0 tonnes/ha were used in the estimates which gives $3 \times 83000 = 249000$ tonnes Carbon in litter. Soil carbon was not estimated.

7.4 Data for National reporting table T7

FRA 2005 Categories	Carbon (Million metric tonnes)					
	Forest			Other wooded land		
	1990	2000	2005	1990	2000	2005
Carbon in above-ground biomass	1.625	1.625	1.625			
Carbon in below-ground biomass	0.682	0.682	0.682			
Sub-total: Carbon in living biomass	2.307	2.307	2.307			
Carbon in dead wood	0.323	0.323	0.323			
Carbon in litter	0.249	0.249	0.249			
Sub-total: Carbon in dead wood and litter	0.572	0.572	0.572			
Soil carbon to a depth of _____ cm						
TOTAL CARBON	2.879	2.879	2.879			

7.5 Comments to National reporting table T7

The estimates of total carbon do not include soil carbon, for which no information is available.

8 Table T8 – Disturbances affecting health and vitality

8.1 FRA 2005 Categories and definitions

Category	Definition
Disturbance by fire	Disturbance caused by wildfire, independently whether it broke out inside or outside the forest/OWL.
Disturbance by insects	Disturbance caused by insect pests that are detrimental to tree health.
Disturbance by diseases	Disturbance caused by diseases attributable to pathogens, such as a bacteria, fungi, phytoplasma or virus.
Other disturbance	Disturbance caused by other factors than fire, insects or diseases.

8.2 National data

8.2.1 Data sources

References to sources of information	Quality (H/M/L)	Variable(s)	Year(s)	Additional comments
Annual reports , Ministry of Agriculture	M	Disturbance by fire and other disturbances	1988-2002	Annual statistics

8.2.2 Classification and definitions

National class	Definition
Disturbance by fire	Same as FRA 2005
Other disturbance	Same as FRA 2005

8.2.3 Original data

Year	Disturbed area (1000 ha)	
	fire	Other disturbances
1988	0.37	0.18
1989	0.41	0.21
1990	0.36	0.23
1991	0.42	0.18
1992	0.44	0.2
1998	0.76	0.56
1999	0.82	0.65
2000	0.79	0.62
2001	0.84	0.59
2002	0.79	0.58

Other disturbances include grazing and drought.

8.3 Analysis and processing of national data

8.3.1 Estimation and forecasting

The five year average for the period 1988-1992 was used for reporting year 1990 and the five year average for the period 1998-2002 was used for reporting year 2000.

8.4 Data for National reporting table T8

FRA-2005 Categories	Average annual area affected (1000 hectares)			
	Forests		Other wooded land	
	1990	2000	1990	2000
Disturbance by fire	0.4	0.8	0	0
Disturbance by insects	0	0	0	0
Disturbance by diseases	0	0	0	0
Other disturbance	0.2	0.6	0	0

8.5 Comments to National reporting table T8

Other disturbances include grazing and drought.

9 Table T9 – Diversity of tree species

9.1 FRA 2005 Categories and definitions

Category	Definition
Number of native tree species	The total number of native tree species that have been identified within the country.
Number of critically endangered tree species	The number of native tree species that are classified as “Critically endangered” in the IUCN red list.
Number of endangered tree species	The number of native tree species that are classified as “Endangered” in the IUCN red list.
Number of vulnerable tree species	The number of native tree species that are classified as “Vulnerable” in the IUCN red list.

9.2 National data

9.2.1 Data sources

References to sources of information	Quality (H/M/L)	Variable(s)	Year(s)	Additional comments
Al Daqish, M, A and Nsour, M	M	Forest area, ownership and Characteristics	2005	A set of tables prepared for FRA 2005 project based on good estimates
Red Book	H	endangered tree species, vulnerable tree species	2004	Research Institute on Forests and Range Lands
IUCN Red Book				

9.2.2 Classification and definitions

National class	Definition
Native tree species	Corresponds FRA 2005 definition
Critically endangered tree species	Corresponds FRA 2005 definition
Endangered tree species	Corresponds FRA 2005 definition
Vulnerable tree species	Corresponds FRA 2005 definition

9.3 Data for National reporting table T9

FRA 2005 Categories	Number of species (year 2000)
Native tree species	25
Critically endangered tree species	0
Endangered tree species	0
Vulnerable tree species	0

9.4 Comments to National reporting table T9

The IUCN Red Book does not list any endangered or vulnerable tree species in Jordan.

However, information based on country reports lists the following:

Critically endangered tree species: *Pistacia atlantica* and *Celtis australis* .
 Endangered tree species: *Acacia seyal* , *Juniperus phoenicea* and *Pistacia palaestina*
 Vulnerable tree species *Quercus aegilops*

This information is based on country monitoring of natural species and their regeneration .

10 Table T10 – Growing stock composition

Only 2 species have been inventoried: *Quercus Calliprinos* and *Pinus halepensis* indicating a total growing stock of 1.75 and 0.85 million cubic meters respectively. This was not considered sufficient for providing any estimates on growing stock composition.

Other common species include the following : *Quercus aegilops* , *Juniperus phoenicea* , *Acacia seyal* and *Olea europea*.

11 Table T11 – Wood removal

11.1 FRA 2005 Categories and definitions

Category	Definition
Industrial wood removal	The wood removed (volume of roundwood over bark) for production of goods and services other than energy production (woodfuel).
Woodfuel removal	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
Ministry of Agriculture Reports	M	Volume of removals	1988-2002	Periodical reports

11.2.2 Classification and definitions

National class	Definition
Industrial wood removal	The same as FRA 2005
Woodfuel removal	The same as FRA 2005

11.2.3 Original data

Industrial wood and wood fuel production based on annual reports of (Forestry Department /Ministry of Agriculture) for cutting trees either in forest or other wooded lands (privately owned land).

Year	Production (1000 m ³)	
	Industrial wood	wood fuel
1988	1.35	3.85
1989	1.32	4.54
1990	1.38	4.93
1991	1.37	4.82
1992	1.48	4.98
1998	1.97	6.98
1999	2.11	7.46
2000	2.18	7.72
2001	2.13	8.12
2002	2.5	8.34

11.3 Analysis and processing of national data

11.3.1 Estimation and forecasting

The five year average for the period 1988-1992 was used for reporting year 1990 and the five year average for the period 1998-2002 was used for reporting year 2000. The values for 2005 were forecasted using linear extrapolation.

11.4 Data for National reporting table T11

FRA 2005 Categories	Volume in 1000 cubic meters of roundwood over bark		
	Forest and Other wooded land		
	1990	2000	2005
Industrial roundwood	1.38	2.18	2.58
Woodfuel	4.62	7.72	9.27
TOTAL for Country	6.00	9.90	11.85

11.5 Comments to National reporting table T11

The figures presented above refer to forest and other wooded land together

Data is extracted from the Jordanian Ministry of Agriculture Reports (MOA). These amounts are produced from governmental forests and privately owned lands.

The data were taken from annual reports of (Forestry Department /Ministry of Agriculture) for cutting trees either in forest or other wooded lands (privately owned land) .

12 Table T12 – Value of wood removal

12.1 FRA 2005 Categories and definitions

Category	Definition
Value of industrial wood removal	Value of the wood removed for production of goods and services other than energy production (woodfuel).
Value of woodfuel removal	Value of the wood removed for energy production purposes, regardless whether for industrial, commercial or domestic use.

12.2 National data

12.2.1 Data sources

References to sources of information	Quality (H/M/L)	Variable(s)	Year(s)	Additional comments
Al Daqish, M, A and Nsour, M	M	Forest area , ownership and Characteristics	2005	A set of tables prepared for FRA 2005 project based on good estimates
Ministry of Agriculture	M	Volume of removals	1990 &2000	Periodical reports

12.2.2 Original data

A value of 70 USD per cubic meter has been used (expert estimate) and applied to the removed volumes presented in table T11.

12.3 Data for National reporting table T12

FRA 2005 Categories	Value of roundwood removal (1000 USD)		
	Forest and other wooded land		
	1990	2000	2005
Industrial roundwood	97	153	181
Woodfuel	323	540	649
TOTAL for Country	420	693	830

12.4 Comments to National reporting table T12

The figures presented above refer to forest and other wooded land together

13 Table T13 – Non-wood forest product removal

No data available for this reporting table

14 Table T14 – Value of non-wood forest product removal

No data available for this reporting table

15 Table T15 – Employment in forestry

15.1 FRA 2005 Categories and definitions

Category	Definition
Primary production of goods	Employment in activities related to primary production of goods, like industrial roundwood, woodfuel and non-wood forest products.
Provision of services	Employment in activities directly related to services from forests and woodlands.
Unspecified forestry activities	Employment in unspecified forestry activities.

15.2 National data

15.2.1 Data sources

References to sources of information	Quality (H/M/L)	Variable(s)	Year(s)	Additional comments
Ministry of Agriculture	M	Statistics on forestry sector	1990 & 2000	Periodical reports

15.2.2 Classification and definitions

National class	Definition
Unspecified forestry activities	It corresponds the FRA2005 definition

Note: If different national data sources use different classes and definitions, a table such as above is needed for each relevant data source.

15.2.3 Original data

Collected figures were based on Forestry Department budget.

Casual labour (workers) employed in certain seasons don't exceed 5 months per year with daily payment and no contracts.

Official employees working all the year and with official contracts.

15.3 Reclassification into FRA 2005 classes

Due to lack of additional information, all employment figures have been reclassified as "unspecified".

15.4 Data for National reporting table T15

FRA 2005 Categories	Employment (1000 person-years)	
	1990	2000
Primary production of goods		
Provision of services		
Unspecified forestry activities	1.26	1.64
TOTAL	1.26	1.64

15.5 Comments to National reporting table T15

Collected figures were based on Forestry Department budget. Casual labour (workers) employed in certain seasons don't exceed 5 months per year with daily payment and no contracts. Official employees working all the year and with official contracts.