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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).

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 2005 is:

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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
Ziad Jibawi	H	Forest area	2004	A set of tables prepared for FRA 2005 by Dr. Ziad Jibawi, Ministry of Agriculture and Agrarian Reform.
Ziad Jebawi - Ministry of Forestry. Country submission to FRA 2000.		Forest area	1992	
Ziad Jebawi. 1999. Forest and Plantations in Syria. Department of Forestry. Ministry of Agriculture and Agrarian Reform (1999)		Plantation area	1998	

1.2.2 Classification and definitions

National class	Definition
Forest	It corresponds with the FRA 2005 definition

1.2.3 Original data

1992 data

	Closed forests (000 ha)	Open forests (000 ha)	Shrubs (000 ha)	Forest fallow (000 ha)	TOTAL (000 ha)
Al-					
Qunaitra	0.6	0.07	0.03	0	0.7
Aleppo	0.03	11.8	0.3	0	12.13
Al-Hasakka	0	0	4.2	0	4.2
Al-Rekka	0	0	1.9	0	1.9
Al-Sweida	0	0.9	2.5	0	3.4
Damascus	0	0	0	0	0
Deer Alzoor	0	0	0.4	0	0.4
Deraa	0	0	0	0	0
Gab	28.1	0	0	0	28.1
Hama	3.1	0	12.5	0	15.6
Homs	4.5	0	13.6	0	18.1
Idleb	33.7	8.4	0	0	42.1
Lattakia	67.4	0	0	0	67.4
Rural					
Damascus	13.2	8.8	0	0	22
Sinjar	0	0	0	0	0
Tartous	13.5	3.4	0	0	16.9
TOTAL	164.13	33.37	35.43	0	232.93

1998 data

Plantation area: 222 291 ha.

Primary purposes are wind breaks, highway protection and agroforestry systems

2004

Total forest area is estimated to be 491 000 ha: Natural forest: 233 000 ha and plantations: 258 000 ha.

1.3 Analysis and processing of national data

1.3.1 Estimation and forecasting

The area of natural forest (the 3 classes above) is considered to have remained more or less constant since 1992 and has been used for all 3 reporting years due to lack of other information.

The area of plantations is estimated by linear inter and extrapolation based on the 1998 and 2004 estimates.

	1990 (000 ha)	2000 (000 ha)	2005 (000 ha)
Open and closed forest	197.50	197.50	197.50
Shrubs	35.43	35.43	35.43
Plantations	174.68	234.19	263.95

1.4 Reclassification into FRA 2005 classes

All open and closed forests and forest plantations have been reclassified as forests. All shrubs have been reclassified as other wooded land.

1.5 Data for National reporting table T1

FRA 2005 Categories	Area (1000 hectares)		
	1990	2000	2005
Forest	372	432	461
Other wooded land	35	35	35
Other land	17971	17911	17882
...of which with tree cover ¹⁾	-	262	231
Inland water bodies	140	140	140
TOTAL	18518	18518	18518

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.

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
Ziad Jibawi	H	Forest Ownership Public Ownership	2005	A set of tables prepared for FRA 2005 by Dr. Ziad Jibawi, Ministry of Agriculture and Agrarian Reform.

2.2.2 Classification and definitions

National class	Definition
Public ownership	It corresponds with the FRA 2005 definition

2.2.3 Original data

All forests are publicly owned.

2.3 Data for National reporting table T2

FRA 2005 Categories	Area (1000 hectares)			
	Forest		Other wooded land	
	1990	2000	1990	2000
Private ownership	-	-	-	-
Public ownership	372	432	35	35
Other ownership	-	-	-	-
TOTAL	372	432	35	35

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
Ziad Jibawi	H	Forest functions Multi purpose		A set of tables prepared for FRA 2005 project by Dr. Ziad Jibawi, Ministry of Agriculture and Agrarian Reform.

3.2.2 Classification and definitions

National class	Definition
Multiple purpose	Corresponds with the FRA 2005

3.2.3 Original data

Table T1 has been used as input to this table.

3.3 Reclassification into FRA 2005 classes

The role of all forests include more than two designated functions, so all forests and other wooded land have been classified as Multiple purpose.

3.4 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						
Protection of soil and water						
Conservation of biodiversity						
Social services						
Multiple purpose	372	432	461	not appl.	not appl.	not appl.
No or unknown function				not appl.	not appl.	not appl.
Total – Forest	372	432	461	not appl.	not appl.	not appl.
Other wooded land						
Production						
Protection of soil and water						
Conservation of biodiversity						
Social services						
Multiple purpose	35	35	35	not appl.	not appl.	not appl.
No or unknown function				not appl.	not appl.	not appl.
Total – Other wooded land	35	35	35	not appl.	not appl.	not appl.

3.5 Comments to National reporting table T3

The roles of all forests include more than two designated functions.

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
Ziad Jibawi	H	Forest properties	2004	A set of tables prepared for FRA 2005 by Dr. Ziad Jibawi, Ministry of Agriculture and Agrarian Reform.

4.2.2 Classification and definitions

National class	Definition
Primary	The same as FRA
Productive plantation	The same as FRA
Protective plantation	The same as FRA

4.2.3 Original data

Table T1 has been used an input to this table.

4.3 Reclassification into FRA 2005 classes

All plantations have been reclassified as protective plantations. All the remaining forests and other wooded land have been classified as modified natural forests.

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						
Modified natural	197.5	197.5	197.5	35	35	35
Semi-natural	-	-	-			
Productive plantation	-	-	-			
Protective plantation	174.7	234.2	264.0			
TOTAL	372	432	461	35	35	35

5 Table T5 – Growing stock

No data available for this reporting table

6 Table T6 – Biomass stock

No data available for this reporting table

7 Table T7 – Carbon stock

No data available for this reporting table

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
Ziad Jibawi	H	Disturbance by fire inside the forest	2004	A set of tables prepared for FRA 2005 by Dr. Ziad Jibawi, Ministry of Agriculture and Agrarian Reform.

8.2.2 Classification and definitions

National class	Definition
Disturbance by fire	Same as FRA 2005 definition

8.2.3 Original data

An estimated 707.2 hectares of forest were affected by fire in 1990 and 174.1 hectares in 2000.

8.3 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	0.7072	0.1741		
Disturbance by insects				
Disturbance by diseases				
Other disturbance				

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
Red Book	H	endangered tree species, vulnerable tree species	2004	Research Institute on Forests and Range Lands
IUCN Red List		Endangered and vulnerable plant species.		

9.3 Data for National reporting table T9

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

9.4 Comments to National reporting table T9

The IUCN Red List does not contain information on any endangered or vulnerable species in the Syrian Arab Republic.

10 Table T10 – Growing stock composition

The names of the ten most common species are listed below, but no quantitative data on their share of the growing stock are available.

Pinus brutea

Pinus pinea

Pinus halepensis

Cupressus arizonica

Cupressus semperarinens

Quercus calliprinos

Pistacia atlantica

Quercus pseudo cerris

Cedrus atlantica

Abies silícica

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
Ziad Jibawi	H	Wood removal 14325/ton	2004	A set of tables prepared for FRA 2005 by Dr. Ziad Jibawi, Ministry of Agriculture and Agrarian Reform.

11.2.2 Classification and definitions

National class	Definition
Industrial wood removal	Same as FRA 2005 definition
Woodfuel removal	Same as FRA 2005 definition

11.3 Data for National reporting table T11

FRA 2005 Categories	Volume in 1000 cubic meters of roundwood over bark					
	Forest			Other wooded land		
	1990	2000	2005	1990	2000	2005
Industrial roundwood	5.21	4.12	ID			
Woodfuel	1.25	1.17	ID			
TOTAL for Country	6.46	5.29				

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
Ziad Jibawi	H	Wood value Industrial: 3500/sp Woodfuel: 2000/sp	2004	A set of tables prepared for FRA 2005 by Dr. Ziad Jibawi, Ministry of Agriculture and Agrarian Reform.

12.2.2 Original data

1US\$ =11.23 SP (source: Guidelines for country reporting to FRA 2005)

12.3 Data for National reporting table T12

FRA 2005 Categories	Value of roundwood removal (1000 USD)					
	Forest			Other wooded land		
	1990	2000	2005	1990	2000	2005
Industrial roundwood	340	202	ID			
Woodfuel	ID	ID	ID			
TOTAL for Country						

13 Table T13 – Non-wood forest product removal

Below is a list of the most important NWFP species and products in Syria. No quantitative information is available on the removals of NWFP.

Capparis spinosa
Laurus nobilis
Thymus syriacus
Rhus coriaria
Myrtus communis
London pride
Liquorice
Fern
Pinus pinea
Ceratonia siliqua

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
Ziad Jibawi	H	Employees	2005	A set of tables prepared for FRA 2005 by Dr. Ziad Jibawi, Ministry of Agriculture and Agrarian Reform.

15.2.2 Classification and definitions

National class	Definition
Primary production of goods	It corresponds with the FRA 2005 definitions.
Provision of services	It corresponds with the FRA 2005 definitions
Unspecified forestry activities	It corresponds with the FRA 2005 definitions

15.3 Data for National reporting table T15

FRA 2005 Categories	Employment (1000 person-years)	
	1990	2000
Primary production of goods	0.8	1.0
Provision of services	10.0	13.0
Unspecified forestry activities	1.0	1.5
TOTAL	11.8	15.5

15.4 Comments to National reporting table T15

Number of employees in 2005: 21968