



Forestry Department

Food and Agriculture Organization of the United Nations

GLOBAL FOREST RESOURCES
ASSESSMENT

COUNTRY REPORTS

BAHRAIN

FRA2005/075
Rome, 2005



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:

Mette Løyche Wilkie
Senior Forestry Officer
FAO Forestry Department
Viale delle Terme di Caracalla
Rome 00100, Italy

E-mail: Mette.LoycheWilkie@fao.org

Readers can also use the following e-mail address: fra@fao.org

DISCLAIMER

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

The Global Forest Resources Assessment 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.

Report preparation and contact person

No official report has been received from the country.

This report is the result of a desk study prepared by the FRA 2005 secretariat in Rome, which summarizes existing available information using the established format for FRA 2005 country reports.

This report comprises only the reporting tables T1 to T4. For the remaining reporting tables there is no information available to support any estimates.

Contents

1	TABLE T1 – EXTENT OF FOREST AND OTHER WOODED LAND	5
1.1	FRA 2005 CATEGORIES AND DEFINITIONS.....	5
1.2	NATIONAL DATA.....	5
1.3	ANALYSIS AND PROCESSING OF NATIONAL DATA.....	5
1.4	DATA FOR NATIONAL REPORTING TABLE T1	5
1.5	COMMENTS TO NATIONAL REPORTING TABLE T1	5
2	TABLE T2 – OWNERSHIP OF FOREST AND OTHER WOODED LAND	5
2.1	FRA 2005 CATEGORIES AND DEFINITIONS.....	5
2.2	NATIONAL DATA.....	5
2.3	ANALYSIS AND PROCESSING OF NATIONAL DATA.....	5
2.4	RECLASSIFICATION INTO FRA 2005 CLASSES	5
2.5	DATA FOR NATIONAL REPORTING TABLE T2	5
3	TABLE T3 – DESIGNATED FUNCTION OF FOREST AND OTHER WOODED LAND	5
3.1	FRA 2005 CATEGORIES AND DEFINITIONS.....	5
3.2	NATIONAL DATA.....	5
3.3	ANALYSIS AND PROCESSING OF NATIONAL DATA.....	5
3.4	RECLASSIFICATION INTO FRA 2005 CLASSES	5
3.5	DATA FOR NATIONAL REPORTING TABLE T3	5
4	TABLE T4 – CHARACTERISTICS OF FOREST AND OTHER WOODED LAND	5
4.1	FRA 2005 CATEGORIES AND DEFINITIONS.....	5
4.2	NATIONAL DATA.....	5
4.3	ANALYSIS AND PROCESSING OF NATIONAL DATA.....	5
4.4	RECLASSIFICATION INTO FRA 2005 CLASSES	5
4.5	DATA FOR NATIONAL REPORTING TABLE T4	5

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
Ahmed, J. H and Ayoub, M. 1998. Rationalizing water Resources for greening of areas in Bahrain. Plant Wealth Directorate, Ministry of Agriculture.	M	Plantation area, annual planting rate	1998	
Al-Hindy, M. Ali and Ahmed, J. Habib. 2000 . Forest plantations in the State of Bahrain. National report prepared for FRA 2000 project. Plant wealth Directorate, Ministry of Agriculture. Bahrain.	M	Annual planting rate	2000	

1.2.2 Classification and definitions

National class	Definition
Forest	The same as FRA

1.2.3 Original data

Area of forest plantations, reference year: 1998

Type	Ownership	Area (ha)
Protective plantations	Public sector	340

Annual planting rate =15.5 ha.

1.3 Analysis and processing of national data

1.3.1 Estimation and forecasting

Planted area in 1998 (ha)	Annual planting rate (ha)	Estimated area (ha)		
		1990	2000	2005
340	15.5	216	371	448

1.4 Data for National reporting table T1

FRA 2005 Categories	Area (1000 hectares)		
	1990	2000	2005
Forest	0.216	0.371	0.448
Other wooded land	0	0	0
Other land	70.784	70.629	70.552
...of which with tree cover ¹⁾			
Inland water bodies	0	0	0
TOTAL	71	71	71

1.5 Comments to National reporting table T1

There is no natural forest cover in Bahrain. The woody cover present in the country is being planted by the government through an afforestation program.

Annual forest change rate refers to the afforestation provided by the Government. Since there is no other information available for the country, the afforestation rate has been assumed to be constant during the period 1990 – 2005.

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
Ahmed, J. H and Ayoub, M. 1998. Rationalizing water Resources for greening of areas in Bahrain. Plant Wealth Directorate, Ministry of Agriculture.	M	Plantation area, annual planting rate	1998	
Al-Hindy, M. Ali and Ahmed, J. Habib. 2000 . Forest plantations in the State of Bahrain. National report prepared for FRA 2000 project. Plant wealth Directorate, Ministry of Agriculture. Bahrain.	M	Annual planting rate	2000	

2.2.2 Classification and definitions

National class	Definition
Public ownership	The same as FRA2005.

2.2.3 Original data

The original data provided in chapter 1.2.3 were used for this reporting table.

2.3 Analysis and processing of national data

2.3.1 Estimation and forecasting

The estimated and forecasted data as presented in chapter 1.3.1 were used.

2.4 Reclassification into FRA 2005 classes

In Bahrain, all forest plantations are publicly owned.

2.5 Data for National reporting table T2

FRA 2005 Categories	Area (1000 hectares)			
	Forest		Other wooded land	
	1990	2000	1990	2000
Private ownership	0	0		
Public ownership	0.216	0.371		
Other ownership	0	0		
TOTAL	0.216	0.371	0	0

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
Ahmed, J. H and Ayoub, M. 1998. Rationalizing water Resources for greening of areas in Bahrain. Plant Wealth Directorate, Ministry of Agriculture.	M	Plantation area, annual planting rate	1998	
Al-Hindy, M. Ali and Ahmed, J. Habib. 2000 . Forest plantations in the State of Bahrain. National report prepared for FRA 2000 project. Plant wealth Directorate, Ministry of Agriculture. Bahrain.	M	Annual planting rate	2000	

3.2.2 Classification and definitions

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

3.2.3 Original data

The original data provided in chapter 1.2.3 were used for this reporting table.

3.3 Analysis and processing of national data

3.3.1 Estimation and forecasting

The estimated and forecasted data as presented in chapter 1.3.1 were used.

3.4 Reclassification into FRA 2005 classes

In Bahrain, all plantations are primarily designated for the protection of soil and water.

3.5 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	0.216	0.371	0.448	0.216	0.371	0.448
Conservation of biodiversity						
Social services						
Multiple purpose				not appl.	not appl.	not appl.
No or unknown function				not appl.	not appl.	not appl.
Total - Forest	0.216	0.371	0.448	not appl.	not appl.	not appl.
Other wooded land						
Production						
Protection of soil and water						
Conservation of biodiversity						
Social services						
Multiple purpose				not appl.	not appl.	not appl.
No or unknown function				not appl.	not appl.	not appl.
Total – Other wooded land	0	0	0	not appl.	not appl.	not appl.

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
Ahmed, J. H and Ayoub, M. 1998. Rationalizing water Resources for greening of areas in Bahrain. Plant Wealth Directorate, Ministry of Agriculture.	M	Plantation area, annual planting rate	1998	
Al-Hindy, M. Ali and Ahmed, J. Habib. 2000 . Forest plantations in the State of Bahrain. National report prepared for FRA 2000 project. Plant wealth Directorate, Ministry of Agriculture. Bahrain.	M	Annual planting rate	2000	

4.2.2 Classification and definitions

National class	Definition
Protective plantation	Same as FRA 2005

4.2.3 Original data

The original data provided in chapter 1.2.3 were used for this reporting table.

4.3 Analysis and processing of national data

4.3.1 Estimation and forecasting

The estimated and forecasted data as presented in chapter 1.3.1 were used.

4.4 Reclassification into FRA 2005 classes

In Bahrain, all plantations are protective plantations.

4.5 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						
Semi-natural						
Productive plantation						
Protective plantation	0.216	0.371	0.448			
TOTAL	0.216	0.371	0.448	0	0	0