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Food and Agriculture Organization of the United Nations

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ASSESSMENT

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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](http://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
Forestry department Fiji. NFI Report 1993	H	Natural Forest Plantations Coconut Mangroves	1991	1991 National Forest Inventory Report
Forestry Department Annual Reports	H	Pine Plantation areas  Mahogany Plantation areas	1990 1991 1992 1996 1997 1998 2000	Appendix 1 of the Report Pines (Plantation lease in T2) Mahogany (Crown lease in T2)
Ministry of Agriculture. 1998. GTZ Pacific regional forestry project	H	Forest Statistics Areas Volumes Fires Imports Exports Workforce	1998	Forestry Facts and Figures Basic forest statistics
Fiji Pine Limited. Annual Report. Chief Executive Officers Report	H	Plantations	1999 2002	
Forestry department Fiji. 2002. Unpublished NFI report.	H	Natural forest, plantation	2002	Forest Area Calculations stored in Excel spreadsheet (NFI Summary.xls)

#### 1.2.2 Classification and definitions

National class	Definition
----------------	------------

Dense Natural Forest	Crown density by trees and/ or ferns 75-100% and ground coverage by grass, palm and/ or bamboo 0-25%
Medium Dense Natural Forest	Crown density by trees and/ or ferns 45-80% and ground coverage by grass, palm and/ or bamboo 20-50%
Scattered Natural Forest	Shrub forest (including scattered coconut stands) dense bush land (thickets) with single trees. Crown density by trees and/ or ferns 15-20% and ground coverage by grass; palm and/ or bamboo 50-85%
Non-Forest	Is comprised of barren land
Mangrove forest	Forest occurring below the high tide water mark
Plantations	Man made forests, Pine and Mahogany plantations.

### 1.2.3 Original data

National class (1000 ha)	1990	1991	1992	1996	1997	1998	2002
Dense natural forest		284.329					251.385
Medium dense natural forest		420.527					399.243
Scattered natural forest		152.665					206.893
Mangroves		42.000					
Pine plantations	43.630	49.620	51.560	51.380	51.380	52.880	48.590
Hardwood plantations	36.240	39.220	41.640	50.230	50.690	51.400	52.330
Coconut plantations		34.560					58.870
Non forests							

#### Comments:

Data for pine and mahogany plantation areas for each year are extracted from appendix 1 of the Forestry Department's annual reports. Coconut areas are digitised from the Ministry of agriculture 1991 maps, and in the latest Coconut Areas.

In calculating the 2000 forest area data, logging activities is responsible for the reduction of areas in the dense and medium dense, for example, logging in dense forest areas will reduce the density of dense forest to medium dense, so as medium dense is reduced to scattered, but scattered remains scattered, so in the end dense and medium dense will decrease while scattered increases. No area calculations was done for non-forest.

### 1.3 Analysis and processing of national data

The 1991 figures for: Dense natural forest, Medium dense natural forest, Scattered natural forest and Coconut plantations are used for reporting year 1990 and the same applies to the 2002 figures which are used for reporting year 2000.

#### 1.3.1 Calibration

Not needed, the total land area corresponds with FAOSTAT figures.

Total land area for the country, matches the official land area figure.

### 1.3.2 Estimation and forecasting

National class	1990	2000	Difference (10yrs)	Annual Rate	2005 forecast
	ha	ha	ha	Ha	ha
Dense natural forest	284.329	251.385	-32.944	-3.294	234.913
Medium dense natural forest	420.527	399.243	-21.284	-2.128	388.601
Scattered natural forest	152.665	206.893	54.228	5.423	234.007
Mangroves	42.000	42.000	0	0	42.000
Pine plantation	43.630	48.590			48.590
Hardwood plantation	36.240	52.330			52.330
Coconut plantations	34.560	58.870			58.870
Non-forest	813.000	767.689			767.689

#### Comments:

There has been no foreseen plantation expansion between 2000 and 2005.

### 1.4 Reclassification into FRA 2005 classes

National classes	Forest	OWL	Other Land	OLWTC
	Dense natural forest	100%		
Medium dense natural forest	100%			
Scattered natural forest	100%			
Mangrove	100%			
Pine plantation	100%			
Hardwood plantation	100%			
Coconut Plantation				100%
Non Forest			100%	

#### Comments:

Dense, medium-dense, and scattered forests fall straight into the FRA 2005 categories. As coconut plantations falls under agricultural areas it is listed under OLWTC in this table. In the FRA 2000, FAO classified the “scattered forests” as forest fallow, and included the dense, medium dense, and mangroves, under one forest definition “closed forests” thus the re-classification of scattered forest into the “forest category” and the expanding pine plantation areas accounts for the increase in forest areas from 1990 to 2000.

### 1.5 Data for National reporting table T1

FRA 2005 Categories	Area (1000 hectares)		
	1990	2000	2005
Forest	979	1000	1000
Other wooded land	NDA	NDA	NDA
Other land	848	827	827
...of which with tree cover	35	59	59
Inland water bodies	0	0	0
<b>TOTAL</b>	<b>1,827</b>	<b>1,827</b>	<b>1,827</b>

#### Comments:

At this stage, there is no possibility of calculating deforestation, as the only base data in this report is the 1991 NFI data. Until the next NFI which will begin in 2005, the next set of base data will be available, then the new forest cover can be calculated, from which the 2005 total forest and non forest areas can be calculated.

### 1.6 Comments to National reporting table T1

## 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
Forestry Department Annual Report - 1990	H	Forest Areas by land ownership Mangrove areas	1990	Appendix 1
Forestry Department Annual Report - 1991	H	Forest Areas by land ownership Mangrove areas	1991	Appendix 1
Forestry Department Annual Report - 1992	H	Forest Areas by land ownership Mangrove areas	1992	Appendix 1
Forestry Department Annual Report - 1996	H	Forest Areas by land ownership Mangrove areas	1996	Appendix 1
Forestry Department Annual Report - 1997	H	Forest Areas by land ownership Mangrove areas	1997	Appendix 1
Forestry Department Annual Report - 1998	H	Forest Areas by land ownership Mangrove areas	1998	Appendix 1
Forestry Department Annual Report - 2000	H	Forest Types by Division Forest Areas by land ownership Mangrove areas	2000	Appendix 1
Statutory Section, Fiji Department of Lands and Surveys, 2002.	H	Land Ownership Types and Areas	2002	Fiji Land Statistics

#### 2.2.2 Classification and definitions

National Class	Definition
Private Ownership	Freehold- Lands bought from the native owners. Native land- Lands that are neither crown nor the subject of Crown grant which are communally owned by Native Owners. Includes Forest Reserves, and corporate plantation leases
Public Ownership	Crown land- Lands owned by the government either bought from original land owning units or purchased from freehold owners. Includes crown lands and crown leases
Other	There are only two types of land ownership classification as note above.

### 2.2.3 Original data

National Class		Area (1000 hectares)						
		1990	1991	1992	1996	1997	1998	2000
Private Ownership	Freehold	73.920	59.510	59.600	58.680	58.960	60.890	58.510
	Forest Reserve	7.040	7.020	7.020	7.020	7.020	7.020	7.020
	Plantation lease	43.630	49.620	51.560	51.380	51.380	52.880	48.590
	Native land	678.600	669.700	668.060	652.610	652.070	664.900	634.670
Public Ownership	Crown land	51.050	47.510	50.730	50.090	50.340	52.260	50.170
	Crown lease	36.240	39.220	41.640	50.230	50.690	51.400	52.330
Other Ownership								

## 2.3 Analysis and processing of national data

### 2.3.1 Calibration

Calibration of areas to match forest areas from T1

National Category	Area (Hectares)	
	1990	2000
Freehold	73.920	58.510
Forest Reserve	7.040	7.020
Plantation lease	43.630	48.590
Native land	678.600	634.670
Crown land	51.050	50.170
Crown lease	36.240	52.330
<b>Total Forest Area</b>	<b>890.480</b>	<b>851.290</b>

### 2.3.2 Calculating the calibration factor:

1990 total forest area from T1: 979,391 hectares  
 Calibration factor: (= 979,391/890,480) 1.0998462

2000 total forest area from T1: 1000,441 hectares  
 Calibration factor: (= 1000,441/851,290) 1.1752059

### Calibrated national data:

National Category	Area (Hectares)	
	1990	2000
Freehold	81.301	68.761
Forest Reserve	7.743	8.250
Plantation lease	47.986	57.103
Native land	746.356	745.868
Crown land	56.147	58.960
Crown lease	39.858	61.499
<b>Total Forest Area</b>	<b>979.391</b>	<b>1000.441</b>

### 2.3.3 Estimation and forecasting

(No Forecasting for T2)

### 2.4 Reclassification into FRA 2005 classes

National Class	FRA 2005 Classes		
	Private	Public	Other
Crown land		100%	
Forest Reserve	100%		
Crown lease	100%		
Native land	100%		
Freehold	100%		

Forest reserves are under the private ownership even though the government sets the requirements of the reserves.

### 2.5 Data for National reporting table T2

FRA 2005 Categories	Area Hectares (000 ha)	
	1990	2000
Private ownership	920	932
Public ownership	60	68
Other ownership	0	0
<b>Total</b>	<b>980</b>	<b>1000</b>

### 2.6 Comments to National reporting table T2

In Fiji, there are only 2 status of land ownership; a piece of land is will either fall under public or private land.

## 3 Table T3 – Designated function of Forest and Other wooded Land

### 3.1 FRA 2005 Categories and definitions

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 functions	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)	Variables(s)	Year(s)	Additional Comments
Forestry Department Fiji 1991 National Forest Inventory	H	Forest Areas	1991	Total forest area for the different forest functions
Forestry Department Fiji. 2002.	H	Forest plantation	2002	Forest area calculations stored in Excel Spreadsheet (NFI Summary.xls)
FIJI'S RAINFORESTS Our Heritage our future: Proceedings Vol.2 by Drysdale, P.J.	H	Forest Areas	1988	A general description of the nature and extent of Fiji's forests and plantation forests.
Forestry Department Annual Reports	H	Pine Plantation areas Mahogany Plantation areas	1990 2000	Appendix 1 of the Report

### Classification and definitions

National Class	Definition
Plantation forest	There is no other specific function that befits this forest area but planting and re-cultivating of forest areas for timber production.
Preserved Forest	Areas of natural forest to be maintained in an undisturbed natural condition and for the preservation of biological values. It includes the Forestry Department Nature Reserves, other legally established reserves and other areas of known unique, rare character under consideration for formal preservation. This includes formal proposals or recommendations for world heritage, National Reserves or National Park status. This is then sub-divided into Preserved Dense, Preserved Medium Dense and Preserved Scattered Forest areas.
Protection Forest	Areas of high sensitive native forest by virtue of their topography, climate, soil type or combinations of those factors. Timber harvesting or other forestry operations would be restricted to minor forest products or to manual or non-mechanized timber extraction. Such operations should have negligible effect on forest cover, stand composition or hydrological condition. This is then sub-divided into Protected Dense, Protected Medium Dense and Protected Scattered Forest areas.
Multiple Use Natural Forest	Areas carrying indigenous forest vegetation to be maintained under forest cover and to be used for timber production, catchment protection, wildlife habitat, forest recreation and amenity uses and for minor forest products. This is then sub-divided into Multiple Use Natural Forest Dense, Multiple Use Natural Forest Medium Dense and Multiple Use Natural Forest Scattered Forest areas.

### 3.2.2 Original Data

(Area units:1000hectares)

Category		National Class	1990	1991	2002
Primary Function	Production	Plantation	79.87	88.84	100.92
	Protection of Soil and Water	Protection natural forest areas		251.26	260.34
	Conservation of Biodiversity	Preserved natural forest areas		56.87	56.87
	Multiple purpose	Multiple use forest		434.97	374.29
	No or unknown function				
<b>Total Forest Areas</b>			<b>831.94</b>	<b>792.42</b>	

### 3.3 Analysis and Processing of National data

The 1991 figures for: Protection natural forest areas, Preserved natural forest areas and Multiple use forest are used for reporting year 1990. The 2002 figures are used for reporting year 2000.

#### 3.3.1 Calibration

There is no need to calibrate the area of plantations. The total of Protection natural forest areas, Preserved natural forest areas and Multiple use forest is calibrated with the T1 forest area less area of plantations.

#### Calculating the calibration factor:

Total forest area T1 1990: 979.391 (1000 hectares)

Total forest area T1 2000: 1000.441 (1000 hectares)

Total forest area less plantations T1 1990: **899.52 (1000 hectares)**

Calibration factor: (=899.52/743.1) **1.2105**

Total forest area less plantations T1 2000: **899.52 (1000 hectares)**

Calibration factor: (=899.52/691.5) **1.3008**

#### Calibrated national data:

(Area:1000 hectares)

National Class	1990	2000
Plantation	79.9	100.9
Protection Natural Forest Areas	304.2	338.7
Preserved Natural Forest Areas	68.8	74.0
Multiple Use Forest	527.7	486.9
<b>Total Forest Area</b>	<b>980.6</b>	<b>1000.5</b>

### 2.3.2 Estimation and forecasting

There is no estimation and forecasting for the forest areas will stay the same.

### 3.4 Reclassification into FRA 2005 Classes

National class	Primary function				
	Prod.	Prot. soil & water	Cons. biodiv.	Soc. Ser.	Mult. Purp.
Plantation Area	100%				
Multiple Use Natural Forest					100%
Protected Natural Forest		100%			
Preserved Natural Forest			100%		

National class	Total area with function			
	Prod.	Prot. soil & water	Cons. biodiv.	Soc. Ser.
Plantation Area	100%			
Multiple Use Natural Forest	100%			100%
Protected Natural Forest		100%	40%	
Preserved Natural Forest		40%	100%	40%

#### Comments:

The two forest categories of Protection and Preserved Natural forest areas are restricted from any logging activities these due to their environmental characteristics for protection of soil and water, protection of endemic and endangered flora and fauna.

The plantation forest areas are solely for timber production, thus it is totally committed to primary function as production.

### 3.5 Data for National Reporting Table T3

FRA 2005 Categories	Area (1000 hectares)					
	Primary function			Total Area with function		
	1990	2000	2005	1990	2000	2005
Production	80	101	101	608	588	588
Protection of soil and water	304	339	339	332	368	368
Conservation and biodiversity	69	74	74	190	209	209
Social Services	0	0	0	555	517	517
Multiple purpose	527	487	487	Not appl.	Not appl.	Not appl.
No or unknown function	0	0	0	Not appl.	Not appl.	Not appl.
<b>Total</b>	<b>981</b>	<b>1001</b>	<b>1001</b>			

## 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
Forestry Department 1990 Annual Report	H	Forest Areas	1990	Appendix 1
Forestry Department 1991 Annual Report	H	Forest Areas	1991	Appendix 1
Forestry Department 1992 Annual Report	H	Forest Areas	1992	Appendix 1
Forestry Department 1996 Annual Report	H	Forest Areas	1996	Appendix 1
Forestry Department 1997 Annual Report	H	Forest Areas	1997	Appendix 1
Forestry Department 1980 Annual Report	H	Forest Areas	1998	Appendix 1
Forestry Department 2000 Annual Report	H	Forest areas	2000	Appendix 1

#### 4.2.2 Classification and definitions

National class	Definition
Indigenous native forests	Area, which contains indigenous forest species native to Fiji.
Plantation forests	Pine and Mahogany plantations.
Protection forest areas	These are forest areas recommended for protection by virtue of its rough terrain. Such operations should have negligible effect on forest cover, stand composition or hydrological condition.

### 4.2.3 Original data

(Area:1000 hectares)

National class	Area (1000 hectares)						
	1990	1991	1992	1996	1997	1998	2002
Indigenous native forests	786.58	776.43	774.99	757.98	757.97	774.65	739.95
Logged Forest Areas				6.628	5.429	10.972	4.248
Pine plantations	43.63	49.62	51.56	51.38	51.38	52.88	48.59
Hardwood plantations	36.24	39.22	41.64	50.23	50.69	51.40	52.33
Total area	866.45						845.12

### 4.3 Analysis and processing of national data

The 2002 figures are used for 2000 and 2005. Due to insufficient data, the 2002 figure of logged forest area is used for all reporting years.

#### 4.3.1 Calibration

There is no need to calibrate the area of plantations. The Indigenous native forests and Logged forest is calibrated with the T1 forest area less area of plantations.

##### Calculating the calibration factor:

Total forest area T1 1990: 979.391 (1000 hectares)

Total forest area T1 2000: 1000.441 (1000 hectares)

Total forest area less plantations T1 1990: **899.52 (1000 hectares)**

Calibration factor:  $(=899.52/786.58)$  **1.1436**

Total forest area less plantations T1 2000: **899.52 (1000 hectares)**

Calibration factor:  $(=899.52/744.20)$  **1.2087**

#### 4.3.2 Calibration and forecasting

National class	1990	2000	2005
Indigenous native forests	894.77	894.38	894.38
Logged natural forest	4.76	4.76	4.76
Plantation forests	79.87	100.92	100.92
Total Forest Area	979.40	1000.06	1000.06

### 4.4 Reclassification into FRA 2005 classes

National Class	Primary	Modified natural	Semi-natural	Productive plantation	Protective plantation
	Indigenous native forests	100%			
Plantation forests				100%	
Logged natural forest		100%			

#### 4.5 Data for National reporting table T4

FRA 2005 Categories	Area (1000 hectares)		
	Forest		
	1990	2000	2005
Primary	895	894	894
Modified-natural	5	5	5
Semi Natural			
Productive plantation	80	101	101
Protective Plantations			
<b>TOTAL</b>	<b>980</b>	<b>1000</b>	<b>1000</b>

#### 4.6 Comments to National reporting table T4

**5 Table T5 – Growing stock**

No information has been found to support estimates of Growing stock.

**6 Table T6 – Biomass stock**

No information has been found to support estimates of Biomass stock.

**7 Table T7 – Carbon stock**

No information has been found to support estimates of Carbon stock.

**8 Table T8 – Disturbances affecting health and vitality**

No information has been found to support estimates of Disturbances affecting health and vitality.

**9 Table T9 – Diversity of tree species**

No information has been found to support estimates of Diversity of tree species.

**10 Table T10 – Growing stock composition**

No information has been found to support estimates of Growing stock composition.

## 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
DOF Annual Report	H	Log Volumes	1990,2000	Appendix III Timber Production Statistics – 1990 to 2000
Divisional Reports	H	Minor forest produce & Commercial undertaking	1990,2000	Annual Report

#### 11.2.2 Classification and definitions

National class	Definition
Industrial wood removal	Includes all round wood removals from indigenous, plantation softwood and plantation hardwood forests (under bark) excluding fuelwood removal for domestic and commercial consumptions
Woodfuel removal	Includes all fuelwood removals for commercial and domestic consumptions and excluding charcoal and mangroves removals

No calibration was implemented on Log removals from the classification table above

#### 11.2.3 Original data

(1000 m<sup>3</sup>)

National Class	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Indigenous	153.820	120.077	108.991	129.674	135.954	129.506	149.821	151.941	134.327	80.320	106.672
Softwood	100.803	126.075		114.393	130.202	123.783	121.698	115.310	128.768		155.226
Hardwood	2.331	2.742	102.129	3.653	2.762	1.637	0.247				0.169
Wood Fuel	22.509	15.372	5.394	4.320	3.546	1.362		1.472		0.863	1.513

### 11.3 Analysis and processing of national data

The average of 1990, 1991 and 1992 is used for reporting year 1990. For reporting year 2000 the average 1998, 1999 and 2000 are used. The forecast for 2005 for Plantation softwood and Indigenous is made by linear extrapolation of 1990 and 2000 averages. The 2000 values for Plantation hardwood and wood fuel are used for reporting year 2005.

**11.3.1 Estimation and forecasting**

National Class	1990	2000	2005
Indigenous	127.629	107.106	96.84
Plantation Softwood	113.439	141.997	156.276
Plantation Hardwood	35.734	0.169	0.169
Wood Fuel	14.425	1.188	1.188

**11.4 Reclassification into FRA 2005 classes**

National Class	Industrial wood removal	Wood fuel removal
Indigenous	100%	
Plantation Softwood	100%	
Plantation Hardwood	100%	
Wood Fuel		100%

**11.5 Data for National reporting table T11**

FRA 2005 Categories	Volume in 1000 cubic meters of round wood over bark					
	Forest			Other wooded land		
	1990	2000	2005	1990	2000	2005
Industrial round wood	276.802	249.272	253.285	NDA	NDA	NDA
Wood fuel	14.425	1.188	1.188	NDA	NDA	NDA

**11.6 Comments to National reporting table 11**

## 12 Table 12 – 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

#### 12.1.1 National Definition

Category	Definition
Indigenous and Plantation removals	Total Revenues includes timber royalties and fees on removals from indigenous and plantation forests excluding fuelwood, inland poles & mangrove poles
Inland Fuelwood removal	Total Revenues includes all fees derived from the sale of fuelwood for commercial and domestic consumption excluding mangroves and charcoal.

### 12.2 National Data

#### 12.2.1 Data sources

References to sources of information	Quality (H/M/L)	Variables(s)	Year(s)	Additional comments
DOF Annual Report	H		1990 to 2000	Forest Produce Statistics Appendix II

#### 12.2.2 Original Data

National Class	1990	1992	1994	1996	1998	2000
Indigenous Forest	1,542,092	1,471,398	1,981,840	3,815,354.85	4,154,912.66	2,768,571
Plantation Forest	1,061,846	354,183	739,584	83,615	493,130.12	2,933,454
Wood fuel	7,429	4,359	7,800	8,823	7,211	3,559

### 12.3 Analysis and processing of national data

The value for 1990 is the average of 1990 and 1992. The value of 2000 is the average of 1998 and 2000.

#### 12.3.1 Estimation and forecasting

National Class	Value in USD		
	1990	2000	2005
Indigenous Forest	1506745	3461742	4439241
Plantation Forest	708015	1713292	2215930
Wood fuel	5894	5385	5385

## 12.4 Reclassification into FRA 2005 classes

National Class	Industrial round wood	Wood fuel
Indigenous	100%	
Plantation Softwood	100%	
Plantation Hardwood	100%	
Wood Fuel		100%

## 12.5 Data for National reporting table T12

FRA 2005 Categories	Wood Value in 1000\$					
	Forest			Other wooded land		
	1990	2000	2005	1990	2000	2005
Industrial round wood	2214.76	5175.03	6655.17	NDA	NDA	NDA
Wood fuel	5.89	5.39	5.39	NDA	NDA	NDA

## 12.6 Comments to National reporting table T12

### **13 Table T13 – Non-wood forest product removal**

**No information has been found to support estimates of Non-wood forest product removal.**

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

**No information has been found to support estimates of Value of non-wood forest product removal.**

## 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
Forestry Facts & Figures (GTZ)1998	H		1999	Forestry Facts & Figures Fiji 1998
Bureau of Statistics	H		1986-1990 1993-1996	Employment in the Forestry sector

#### 15.2.2 Classification and definitions

National Class	Definitions
Forestry	Includes all Forestry technical staff
Logging	Includes employees in the logging industry, excluding owners

#### 15.2.3 Original data

National Class	1986	1987	1988	1989	1990	1993	1996	1997	1998
Forestry	206	203	188	185	199	226	191	140	118
Logging	56	105	119	101	104	147	147	160	112
<b>Total</b>	<b>262</b>	<b>308</b>	<b>307</b>	<b>286</b>	<b>303</b>	<b>373</b>	<b>338</b>	<b>300</b>	<b>230</b>

### 15.3 Analysis and processing of national data

#### 15.3.1 Estimation and forecasting

National Class	1990	1998	2000	2005 Forecast
Forestry	199	118	118	128
Hardwood Plantations		81	81	81
Softwood Plantations		47	47	47
Logging	104	112	114	200
<b>Total</b>	<b>303</b>	<b>311</b>	<b>360</b>	<b>456</b>

Growth in employment from 2004 to 2005 is expected due to the harvesting of mahogany plantations  
 Forestry – 20 more posts on 2 new schools Forestry Training Center, & WISDEC  
 Logging – More jobs when mahogany is harvested from 2003 onwards

**15.4 Reclassification into FRA 2005 classes****15.5 Data for National reporting table T15**

FRA 2005 Categories	Employment (1000 person-years)	
	1990	2000
Primary production of goods	.303	.360
Provision of services		
Unspecified forestry activities		
<b>TOTAL</b>	<b>0.303</b>	<b>0.360</b>

**15.6 Comments to National reporting table T15**

## **16 Thematic reporting tables**

If countries would like to submit additional reporting tables, these should be included here.  
(See the chapter on thematic reporting in the Guidelines for Country Reporting).