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

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ASSESSMENT**

**COUNTRY REPORTS**

**NIUE**

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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.

## **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.

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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
Oliver, W. 1999. An update of plantation forestry in the South Pacific RAS/97/330 Working Paper, UNDP/FAO, Rome	M	Percentage of forest cover	1966, 1981, 1994	Secondary data source

#### 1.2.2 Original data

	1966	1981	1994
Total Forest area (%)	86	71	64

### 1.3 Analysis and processing of national data

#### 1.3.1 Calibration

No calibration was necessary

#### 1.3.2 Estimation and forecasting

Using the percentage forest cover given by the data source, the forest area was calculated based on the total land area (The total land area according to FAOSTAT is 26000ha). The resulting table for the three original data years is shown below.

	1966		1981		1994	
<b>Total Area (ha) according to FAOSTAT</b>	%	<b>Area (ha)</b>	%	<b>Area (ha)</b>	%	<b>Area (ha)</b>
26 000	86	22 360	71	18 460	66	17 160

Linear interpolation was then used to estimate the values for all three reporting years.

#### 1.4 Reclassification into FRA 2005 classes

Total forest area = 100% forests

#### 1.5 Data for National reporting table T1

FRA 2005 Categories	Area (1000 hectares)		
	1990	2000	2005
Forest	17.2	15.1	14.1
Other wooded land	NDA	NDA	NDA
Other land	8.8	10.9	11.9
...of which with tree cover <sup>1)</sup>			
Inland water bodies	0	0	0
<b>TOTAL</b>	<b>26.0</b>	<b>26.0</b>	<b>26.0</b>

- 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.

#### 1.6 Comments to National reporting table T1

According to the source, the 1994 estimate was based on a map analysis and was not supported by on-site survey. Hence it may not be directly comparable with the other reported years.

No data were available for other wooded land.

## 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
Oliver, W. 1999. An update of plantation forestry in the South Pacific RAS/97/330 Working Paper, UNDP/FAO, Rome	H	Customary ownership	1994	Secondary data source

#### 2.2.2 Original data

According to the source, most of the land in Niue is under customary ownership

### 2.3 Analysis and processing of national data

#### 2.3.1 Estimation and forecasting

Forest land (as classified in T1) is considered to be customary land. And hence privately owned

### 2.4 Reclassification into FRA 2005 classes

Customary land = 100% Private land

## 2.5 Data for National reporting table T2

FRA 2005 Categories	Area (1000 hectares)			
	Forest		Other wooded land	
	1990	2000	1990	2000
Private ownership	17.2	15.1		
Public ownership				
Other ownership				
<b>TOTAL</b>	<b>17.2</b>	<b>15.1</b>		

## 2.6 Comments to National reporting table T2

According to the source, most of the land in Niue is under customary ownership. For this reason, all forest land (as classified in T1) is assumed to be customary land. And Customary land is reclassified as 100% Private land.



### 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

Table T1

##### 3.3 Reclassification into FRA 2005 classes

Forest area = 100% no or unknown function

##### 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
<b>Forest</b>						
Production						
Protection of soil and water						
Conservation of biodiversity						
Social services						
Multiple purpose				not appl.	not appl.	not appl.
No or unknown function	17.2	15.1	14.1	not appl.	not appl.	not appl.

<b>Total - Forest</b>	<b>17.2</b>	<b>15.1</b>	<b>14.1</b>	<b>not appl.</b>	<b>not appl.</b>	<b>not appl.</b>
<b>Other wooded land</b>						
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.
<b>Total – Other wooded land</b>				<b>not appl.</b>	<b>not appl.</b>	<b>not appl.</b>

### 3.5 Comments to National reporting table T3

## 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
Oliver, W. 1999. An update of plantation forestry in the South Pacific RAS/97/330 Working Paper, UNDP/FAO, Rome	H	Planted area	1990-1998	Secondary data source

#### 4.2.2 Original data

	1990	1991	1992	1993	1994	1995	1996	1997	1998
Planted area	12	18	76	113	145	174	245	275	288

### 4.3 Analysis and processing of national data

#### 4.3.1 Estimation and forecasting

The planted area for 1990 was reported as the estimate of productive plantations for that year.

According to the source, the original aim of a plantation estate of 4000 ha established over a 40-year period was scaled down a great deal. From 100 ha/year to 50 ha / year. No new

plantings were established in 1998 apart from the beating up of some blocks due to the 1997 review that recommended stopping the large scale planting of exotics.

For this reason, the planted area in 1998 is reported as the estimate of productive plantations for 2000 and 2005.

#### 4.4 Reclassification into FRA 2005 classes

Planted area = 100% Productive plantations.

All other forests have been classified as 100% modified natural

#### 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	17.15	14.82	13.79			
Semi-natural						
Productive plantation	0.01	0.29	0.29			
Protective plantation						
<b>TOTAL</b>	<b>17.2</b>	<b>15.1</b>	<b>14.1</b>			

#### 4.6 Comments to National reporting table T4

It is assumed that in case of any harvesting, this is insignificant to affect the classification of the planted area as forests.

According to the source, the original aim of a plantation estate of 4000 ha established over a 40-year period was scaled down a great deal. From 100 ha/year to 50 ha / year. No new plantings were established in 1998 apart from the beating up of some blocks due to the 1997 review that recommended stopping the large scale planting of exotics.

## **5 Table T5 – Growing stock**

No information available.

## **6 Table T6 – Biomass stock**

No information available.

## **7 Table T7 – Carbon stock**

No information available.

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

Cyclone damage is one of the major problems faced by Niue forests<sup>1</sup>. However, no information could be found on the forest area affected.

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<sup>1</sup> **Oliver, W.** 1999. An update of plantation forestry in the South Pacific RAS/97/330 Working Paper, UNDP/FAO, Rome

## 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
IUCN Redlist				

#### 9.2.2 Original data

*Aglaia saltatorum* is classified by IUCN as a vulnerable tree specie

### 9.3 Data for National reporting table T9

FRA 2005 Categories	Number of species (year 2000)
Native tree species	
Critically endangered tree species	
Endangered tree species	
Vulnerable tree species	1

### 9.4 Comments to National reporting table T9

*Aglaia saltatorum* is classified by IUCN as a vulnerable tree specie.

### **10 Table T10 – Growing stock composition**

No information available.

### **11 Table T11 – Wood removal**

No information available.

### **12 Table T12 – Value of wood removal**

No information available.

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

No information available.

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

No information available.

### **15 Table T15 – Employment in forestry**

No information available.