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

# GLOBAL FOREST RESOURCES ASSESSMENT 2010

# COUNTRY REPORT

# UGANDA

FRA2010/218
Rome, 2010

## 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 2010 (FRA 2010).

The reporting framework for FRA 2010 is based on the thematic elements of sustainable forest management acknowledged in intergovernmental forest-related fora and includes variables related to the extent, condition, uses and values of forest resources, as well as the policy, legal and institutional framework related to forests. More information on the FRA 2010 process and the results - including all the country reports - is available on the FRA Web site (www.fao.org/forestry/fra ).

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 2010 is:

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# 1 Table T1 – Extent of Forest and Other wooded land

## 1.1 FRA 2010 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 *in situ*. 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 *in situ*; 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 |
|---|---|---|---|---|
| National Biomass Technical Report: 2003 | H | Forest Cover | 1989-1992 | It is considered that the reference year is 1990. |
| National Forest Authority GIS & mapping | H | Forest Cover | 2005 | Forest cover from satellite imagery of 2005. Revised land cover coverage for whole country. National Forest Authority (Mapping and Inventory Centre). Classification and definition of 1990 remain similar for 2005. |

### 1.2.2 Classification and definitions

| National class | Definition |
|---|---|
| Hardwood Plantations | Mainly Eucalyptus sp. And indigenous sp. E.g. *Maesopsis eminii* |
| Softwood Plantations | Comprising of Pinus and Cypress |
| Tropical High Forest normally stocked | Without human interference |
| Tropical High Forest depleted or degraded | affected by human influence |
| Woodland | More open and single storied than the tropical high forest normally above 5m |
| Bushland | Crown cover over 40% and below 5m |

| | |
|---|---|
| Grassland | Dominant vegetation type is grass but occasionally there could be scattered trees |
| Wetland | Permanent covered by wetland grass e.g. papyrus or seasonal |
| Subsistence farmland | Areas with settlement |
| Commercial Farmland | Large scale farms e.g. sugarcane and tea plantation |
| Built-up areas | Urban centres, trading centres etc. |
| Water bodies | Lakes, ponds and rivers |
| Impediment areas | Where no biomass is expected such as rock outcrops and bare lands |

### 1.2.3 Original data

Source 1 : National Biomass Technical Report: 2003, Reference year = 1990

| National Classes | Gross Area by Land Cover/Use | Public | Private |
|---|---|---|---|
| Plantations Hardwoods | 18 682 | 6 658 | 12 024 |
| Plantations Softwoods | 16 384 | 15 693 | 690 |
| THF- Normal | 650 150 | 477 068 | 173 083 |
| THF - Degraded | 274 058 | 97 011 | 177 047 |
| Woodlands | 3 974 102 | 875 854 | 3 098 248 |
| Bushlands | 1 422 395 | 296 111 | 1 126 285 |
| Grasslands | 5 115 266 | 1 149 967 | 3 965 299 |
| Wetlands | 484 037 | 32 598 | 451 439 |
| Subsistence Farmlands | 8 400 999 | 137 931 | 8 263 068 |
| Commercial Farmlands | 68 446 | 1 287 | 67 159 |
| Built up areas | 36 571 | 1 982 | 34 589 |
| Impediments | 3 713 | 745 | 2 968 |
| **Total** | **20 464 804** | **3 092 905** | **17 371 899** |

Source 2 : National Forest Authority GIS & mapping, Reference year =2005

| Land cover classes | Area in ha |
|---|---|
| Broad leaved plantations | 14 592.63 |
| Conifer plantations | 17 173.58 |
| THF well stocked | 616 306.91 |
| THF low stocked | 187 419.51 |
| Wood land | 2 719 101.65 |
| Bush | 2 985 919.87 |
| Grassland | 4 055 999.68 |
| Wetland | 754 515.43 |
| Small scale farmland | 8 881 585.64 |
| Large scale farmland | 97 187.76 |
| Built up area | 97 356.18 |
| Open Water | 3 720 511.24 |
| Impediments (e.g rocks) | 7 674.65 |
| Total | 24 155 344.75 |
| Total land area | 20 434 833.51 |

## *1.3 Analysis and processing of national data*

### 1.3.1 Calibration

**Calibrating 1990 data**

| | |
|---|---|
| National land area in ha | 20 464 804 |
| FAO/STATS land area | 19 710 000 |
| Calibrating Factor | 0.963116981 |

| **Land Cover/Use** | **Calibrated 1990 data in ha** |
|---|---|
| Plantations Hardwoods | 17 993 |
| Plantations Softwoods | 15 780 |
| THF- Normal | 626 171 |
| THF - Degraded | 263 949 |
| Woodlands | 3 827 526 |
| Bushlands | 1 369 933 |
| Grasslands | 4 926 599 |
| Wetlands | 466 184 |
| Subsistence Farmlands | 8 091 145 |
| Commercial Farmlands | 65 922 |
| Built up areas | 35 222 |
| Impediments | 3 576 |
| **Total** | 19 710 000 |

**Calibrating 2005 data**

| | |
|---|---|
| National land area in ha | 20 434 833.51 |
| FAO/STATS land area | 19 710 000.00 |
| Calibrating Factor | 0.964529512 |

| **Land Cover Classes** | **Calibrated 2005 data in ha** |
|---|---|
| Broad leaved plantations | 14 075.02 |
| Conifer plantations | 16 564.42 |
| THF well stocked | 594 446.20 |
| THF low stocked | 180 771.65 |
| Wood land | 2 622 653.79 |
| Bush | 2 880 007.84 |
| Grassland | 3 912 131.39 |
| Wetland | 727 752.40 |
| Small scale farmland | 8 566 551.46 |
| Large scale farmland | 93 740.46 |
| Built up area | 93 902.91 |
| Impediments (e.g rocks) | 7402.43 |
| Total | 19 710 000 |

### 1.3.2 Reclassification into FRA 2010 categories

Reclassification of 1990 and 2005 data

| **Land Cover/Use** | Forests | OWL | OL |
|---|---|---|---|
| Plantations Hardwoods | 100% | | |
| Plantations Softwoods | 100% | | |
| THF- Normal | 100% | | |
| THF - Degraded | 100% | | |
| Woodlands | 100% | | |
| Bushlands | | 100% | |
| Grasslands | | | 100% |
| Wetlands | | | 100% |
| Subsistence Farmlands | | | 100% |
| Commercial Farmlands | | | 100% |
| Built up areas | | | 100% |
| Water | | | |
| Impediments | | | 100% |

Results after reclassifying 1990 data

| | **Calibrated Area in hectares** | | |
|---|---|---|---|
| **Land Cover/Use** | **Forests** | **OWL** | **OL** |
| Plantations Hardwoods | 17 993 | | |
| Plantations Softwoods | 15 780 | | |
| THF- Normal | 626 171 | | |
| THF - Degraded | 263 949 | | |
| Woodlands | 3 827 526 | | |
| Bushlands | | 1369933 | |
| Grasslands | | | 4 926 599 |
| Wetlands | | | 466 184 |
| Subsistence Farmlands | | | 8 091 145 |
| Commercial Farmlands | | | 65 922 |
| Built up areas | | | 35 222 |
| Impediments | | | 3 576 |
| Total | **4 751 418** | **1 369 933** | **13 588 649** |

Results after reclassifying 2005 data

| | **Calibrated Area in hectares** | | |
|---|---|---|---|
| **Land Cover Classes** | **Forests** | **OWL** | **OL** |
| Broad leaved plantations | 14 075.02 | | |
| Conifer plantations | 16 564.42 | | |
| THF well stocked | 594 446.20 | | |
| THF low stocked | 180 771.65 | | |
| Wood land | 2 622 653.79 | | |
| Bush | | 2 880 007.84 | |
| Grassland | | | 3 912 131.39 |
| Wetland | | | 727 752.40 |
| Small scale farmland | | | 8 566 551.46 |
| Large scale farmland | | | 93 740.46 |

| | | | |
|---|---|---|---|
| Built up area | | | 93 902.91 |
| Impediments (e.g rocks) | | | 7 402.43 |
| **Total** | **3 428 511.08** | **2 880 007.84** | **13 401 481.05** |

Therefore, the results could be summarized, as follows

| | **Area in hectares** | |
|---|---|---|
| **National Classes** | **1990** | **2005** |
| Forests | 4 751 418 | 3 428 511.08 |
| OWL | 1 369 933 | 2 880 007.84 |
| OL | 13 588 649 | 13 401 481.05 |
| ***Total land area*** | ***19 710 000*** | ***19 710 000*** |
| Inland Water | 4 394 000 | 4 394 000 |
| **Total country area** | **24 104 000** | **24 104 000** |

### 1.3.3 Estimation and forecasting

Based on the 1990 and 2005 data, estimations have been done, through linear inter and extrapolation, for 2000 and 2010.

| | **Area in hectares** | | | |
|---|---|---|---|---|
| **FRA Categories** | **1990** | **2000** | **2005** | **2010** |
| **Forests** | 4 751 418 | 3 869 480 | 3 428 511 | 2 987 542 |
| OWL | 1 369 933 | 2 376 650 | 2 880 008 | 3 383 366 |
| OL | 13 588 649 | 13 463 870 | 13 401 481 | 13 339 092 |
| Inland Water | 4 394 000 | 4 394 000 | 4 394 000 | 4 394 000 |
| **Total** | **24 104 000** | **24 104 000** | **24 104 000** | **24 104 000** |

## *1.4 Data for Table T1*

| | **Area (1000 hectares)** | | | |
|---|---|---|---|---|
| **FRA 2010 categories** | **1990** | **2000** | **2005** | **2010** |
| Forest | 4 751 | 3 869 | 3 429 | 2 988 |
| Other wooded land | 1 370 | 2 377 | 2 880 | 3 383 |
| Other land | 13 589 | 13 464 | 13 401 | 13 339 |
| ...of which with tree cover | n/a | n/a | n/a | n/a |
| Inland water bodies | 4 394 | 4 394 | 4 394 | 4 394 |
| **TOTAL** | **24 104** | **24 104** | **24 104** | **24 104** |

## *1.5 Comments to Table T1*

| Variable / category | Comments related to data, definitions, etc. | Comments on the reported trend |
|---|---|---|
| Forest | | The trend of deforestation (88 193.79 ha/y) matches the assumption and knowledge of national experts. |
| Other wooded land | | Increase of OWL could be explained be the reduction of human activities in North due to war situation. Whereby abandoned settlements and agricultural lands reverted to bush land and woodlands |
| Other land | | |
| Other land with tree cover | | |
| Inland water bodies | | |

| Other general comments to the table |
|---|
| |

| Expected year for completion of ongoing/planned national forest inventory and/or RS survey / mapping | |
|---|---|
| Field inventory | 2010 |
| Remote sensing survey / mapping | 2012 |

# 2 Table T2 – Forest ownership and management rights

## 2.1 FRA 2010 Categories and definitions

| Category | Definition |
|---|---|
| Public ownership | Forest owned by the State; or administrative units of the public administration; or by institutions or corporations owned by the public administration. |
| Private ownership | Forest owned by individuals, families, communities, private co-operatives, corporations and other business entities, private religious and educational institutions, pension or investment funds, NGOs, nature conservation associations and other private institutions. |
| Individuals *(sub-category of Private ownership)* | Forest owned by individuals and families. |
| Private business entities and institutions *(sub-category of Private ownership)* | Forest owned by private corporations, co-operatives, companies and other business entities, as well as private non-profit organizations such as NGOs, nature conservation associations, and private religious and educational institutions, etc. |
| Local communities *(sub-category of Private ownership)* | Forest owned by a group of individuals belonging to the same community residing within or in the vicinity of a forest area. The community members are co-owners that share exclusive rights and duties, and benefits contribute to the community development. |
| Indigenous / tribal communities *(sub-category of Private ownership)* | Forest owned by communities of indigenous or tribal people. |
| Other types of ownership | Other kind of ownership arrangements not covered by the categories above. Also includes areas where ownership is unclear or disputed. |
| **Categories related to the holder of management rights of public forest resources** | |
| Public Administration | The Public Administration (or institutions or corporations owned by the Public Administration) retains management rights and responsibilities within the limits specified by the legislation. |
| Individuals/households | Forest management rights and responsibilities are transferred from the Public Administration to individuals or households through long-term leases or management agreements. |
| Private institutions | Forest management rights and responsibilities are transferred from the Public Administration to corporations, other business entities, private co-operatives, private non-profit institutions and associations, etc., through long-term leases or management agreements. |
| Communities | Forest management rights and responsibilities are transferred from the Public Administration to local communities (including indigenous and tribal communities) through long-term leases or management agreements. |
| Other form of management rights | Forests for which the transfer of management rights does not belong to any of the categories mentioned above. |

## *2.2 National data*

### 2.2.1 Data sources

| References to sources of information | Quality (H/M/L) | Variable(s) | Year(s) | Additional comments |
|---|---|---|---|---|
| National Biomass Technical Report: 2003 | H | Forest Cover | 1989-1992 | It is considered that the reference year is 1990. |
| National Forest Authority GIS & mapping | H | Forest Cover | 2005 | |

### 2.2.2 Original data

Source 1 : National Biomass Technical Report: 2003, Reference year = 1990

| Land Cover/Use | Gross Area by Land Cover/Use | Public | Private |
|---|---|---|---|
| Plantations Hardwoods | 18 682 | 6 658 | 12 024 |
| Plantations Softwoods | 16 384 | 15 693 | 690 |
| THF- Normal | 650 150 | 477 068 | 173 083 |
| THF - Degraded | 274 058 | 97 011 | 177 047 |
| Woodlands | 3 974 102 | 875 854 | 3 098,248 |
| **Forests (1)** | **4 933 376** | **1 472 284** | **3 461 092** |

Notes: (1). 30% Public and 70% Private

Source 2 : National Forest Authority GIS & mapping, Reference year =2005

| Land Cover/Use | Gross Area by Land Cover/Use | Public | Private |
|---|---|---|---|
| Plantations Hardwoods | 14 593 | 5 172 | 9 420 |
| Plantations Softwoods | 17 174 | 15 507 | 1 666 |
| THF- Normal | 616 307 | 525 381 | 90 926 |
| THF - Degraded | 187 420 | 40 382 | 147 037 |
| Woodlands | 2 719 102 | 553 361 | 2165 740 |
| **Forests (1)** | **3 554 596** | **1 139 803** | **2 414 789** |

Notes: (1). 32% Public and 68% Private

## *2.3 Analysis and processing of national data*

### 2.3.1 Estimation and forecasting

It is known that

for 1990, forest ownership is : 30% Public and 70% Private;
for 2005, forest ownership is 32% Public and 68% Private;

It is assumed that :

for 2000, the forest ownership will follow the trend between 1990 and 2005, which means: 31.33% Public and 68.66% Private;

However this assumption might be misleading. Because the loss or gain in Public Forest Cover or Private Forest Cover is not correlated.. Because increase in Forest cover in the Gazetted areas could mean improved management

services but not necessarily having been curved out more forest from the private forest land. On the other hand loss of forest cover in the private lands does not also mean that it has been added to the public land. Instead it has turned into other lands. Essentially what I mean is that in terms of area (not forest cover only), the public land which is the gazetted area has not changed much because there was no major degazettement done during the reporting period.

## *2.4 Data for Table T2*

### Table 2a - Forest ownership

| FRA 2010 Categories | Forest area (1000 hectares) | | |
|---|---|---|---|
| | 1990 | 2000 | 2005 |
| Public ownership | 1 425 | 1 212 | 1 097 |
| Private ownership | 3 326 | 2 657 | 2 332 |
| ...of which owned by individuals | n/a | n/a | n/a |
| ...of which owned by private business entities and institutions | n/a | n/a | n/a |
| ...of which owned by local communities | n/a | n/a | n/a |
| ...of which owned by indigenous / tribal communities | n/a | n/a | n/a |
| Other types of ownership | 0 | 0 | 0 |
| **TOTAL** | **4 751** | **3 869** | **3 429** |

Note: If other types of ownership is reported, please specify details in comment to the table.

| | | |
|---|---|---|
| Does ownership of trees coincide with ownership of the land on which they are situated? | | Yes |
| | X | No |
| If **No** above, please describe below how the two differ: | | |
| Some private farmers have permits to grow trees in gazetted area. There is 5 000ha planted in this category. | | |

### Table 2b - Holder of management rights of public forests

| FRA 2010 Categories | Forest area (1000 hectares) | | |
|---|---|---|---|
| | 1990 | 2000 | 2005 |
| Public Administration | n/a | n/a | n/a |
| Individuals | n/a | n/a | n/a |
| Private corporations and institutions | n/a | n/a | n/a |
| Communities | n/a | n/a | n/a |
| Other | n/a | n/a | n/a |
| **TOTAL** | **1 425** | **1 212** | **1 097** |

## *2.5 Comments to Table T2*

| Variable / category | Comments related to data, definitions, etc. | Comments on the reported trend |
|---|---|---|
| Public ownership | | The predictions based on Business as Usual Scenario might be not correct, because if the three institutions embark on serious protection, conservation and reforestation of harvested areas, then there will be an increase in forest cover rather than decrease, |
| Private ownership | | For the private ownership, this negative trend is likely going to continue well beyond into the future. |
| Other types of ownership | | |
| Management rights | | |

| Other general comments to the table |
|---|
| |

# 3 Table T3 – Forest designation and management

## 3.1 FRA 2010 Categories and definitions

| Term | Definition |
|---|---|
| Primary designated function | The primary function or management objective assigned to a management unit either by legal prescription, documented decision of the landowner/manager, or evidence provided by documented studies of forest management practices and customary use. |
| Protected areas | Areas especially dedicated to the protection and maintenance of biological diversity, and of natural and associated cultural resources, and managed through legal or other effective means. |
| **Categories of primary designated functions** | |
| Production | Forest area designated primarily for production of wood, fibre, bio-energy and/or non-wood forest products. |
| Protection of soil and water | Forest area designated primarily for protection of soil and water. |
| Conservation of biodiversity | Forest area designated primarily for conservation of biological diversity. Includes but is not limited to areas designated for biodiversity conservation within the protected areas. |
| Social services | Forest area designated primarily for social services. |
| Multiple use | Forest area designated primarily for more than one purpose and where none of these alone is considered as the predominant designated function. |
| Other | Forest areas designated primarily for a function other than production, protection, conservation, social services or multiple use. |
| No / unknown | No or unknown designation. |
| **Special designation and management categories** | |
| Area of permanent forest estate (PFE) | Forest area that is designated to be retained as forest and may not be converted to other land use. |
| Forest area within protected areas | Forest area within formally established protected areas independently of the purpose for which the protected areas were established. |
| Forest area under sustainable forest management | To be defined and documented by the country. |
| Forest area with management plan | Forest area that has a long-term (ten years or more) documented management plan, aiming at defined management goals, which is periodically revised. |

## 3.2 National data

### 3.2.1 Data sources

| References to sources of information | Quality (H/M/L) | Variable(s) | Year(s) | Additional comments |
|---|---|---|---|---|
| F. I. B. Kayanja* and D. Byarugaba 1999, Disappearing forests of Uganda: The way forward. Mbarara University of Science and Technology | M | Designation | 1999 | |
| Forest Conservation Master Plan (2000) | M | Designation | 2000 | |

### 3.2.2 Original data

According to the forest policy, Uganda's Permanent Forest Estate is around 1.9 million ha which consists of all the Gazetted Central Forest Reserve land and all the forested areas in the National Parks.

Based on the document "Disappearing forests of Uganda: the way forward" (1999), national parks and wildlife reserves account for about 731 000 ha.

Then, the Forest Conservation Master Plan (2000) considers that the total conservation area (gazetted forest reserves) of 1 1169 700 ha is subdivided as follows:

- 356 600 ha for production,
- 348 600 ha for strict nature conservation, and
- 460 500 ha for Buffer zone (social services).

## *3.3 Analysis and processing of national data*

### 3.3.1 Estimation and forecasting

Based on the above data, the following tables haves been filed.

Conservation of biodiversity = all the forested areas in the National Parks + area of strict nature conservation = 1 079 600 ha.

Assumptions are made that the different figures remain constant. For remaining forest area, the designation is unknown.

## *3.4 Data for Table T3*

### Table 3a – Primary designated function

| FRA 2010 Categories | Forest area (1000 hectares) | | | |
|---|---|---|---|---|
| | 1990 | 2000 | 2005 | 2010 |
| Production | 356.6 | 356.6 | 356.6 | 356.6 |
| Protection of soil and water | 0 | 0 | 0 | 0 |
| Conservation of biodiversity | 1 079.6 | 1 079.6 | 1 079.6 | 1 079.6 |
| Social services | 460.5 | 460.5 | 460.5 | 460.5 |
| Multiple use | 0 | 0 | 0 | 0 |
| Other (please specify in comments below the table) | 0 | 0 | 0 | 0 |
| No / unknown | 2 854.3 | 1 972.3 | 1 532.3 | 1 091.3 |
| **TOTAL** | **4 751** | **3 869** | **3 429** | **2 988** |

### Table 3b – Special designation and management categories

| FRA 2010 Categories | Forest area (1000 hectares) | | | |
|---|---|---|---|---|
| | 1990 | 2000 | 2005 | 2010 |
| Area of permanent forest estate | 1 900 | 1 900 | 1 900 | 1 900 |
| Forest area within protected areas | 731 | 731 | 731 | 731 |
| Forest area under sustainable forest management | n/a | n/a | n/a | n/a |
| Forest area with management plan | n/a | n/a | n/a | n/a |

## *3.5 Comments to Table T3*

| Variable / category | Comments related to data, definitions, etc. | Comments on the reported trend |
|---|---|---|
| Production | | |
| Protection of soil and water | | |
| Conservation of biodiversity | | |
| Social services | | |
| Multiple use | | |
| Other | | |
| No / unknown designation | | |
| Area of permanent forest estate | According to the Forest Policy (2001), Uganda's Permanent Forest Estate is 1.9 million ha which consists of all the Gazetted Central Forest Reserve land and all the forested areas in the National parks. | |
| Forest area within protected areas | | |
| Forest area under sustainable forest management | | |
| Forest area with management plan | | |

| Other general comments to the table |
|---|
| |

# 4 Table T4 – Forest characteristics

## 4.1 FRA 2010 Categories and definitions

| Term / category | Definition |
|---|---|
| Naturally regenerated forest | Forest predominantly composed of trees established through natural regeneration. |
| Introduced species | A species, subspecies or lower taxon, occurring outside its natural range (past or present) and dispersal potential (i.e. outside the range it occupies naturally or could occupy without direct or indirect introduction or care by humans). |
| **Characteristics categories** | |
| Primary forest | Naturally regenerated forest of native species, where there are no clearly visible indications of human activities and the ecological processes are not significantly disturbed. |
| Other naturally regenerated forest | Naturally regenerated forest where there are clearly visible indications of human activities. |
| Other naturally regenerated forest of introduced species *(sub-category)* | Other naturally regenerated forest where the trees are predominantly of introduced species. |
| Planted forest | Forest predominantly composed of trees established through planting and/or deliberate seeding. |
| Planted forest of introduced species *(sub-category)* | Planted forest, where the planted/seeded trees are predominantly of introduced species. |
| **Special categories** | |
| Rubber plantations | Forest area with rubber tree plantations. |
| Mangroves | Area of forest and other wooded land with mangrove vegetation. |
| Bamboo | Area of forest and other wooded land with predominant bamboo vegetation. |

## 4.2 National data

### 4.2.1 Data sources

| References to sources of information | Quality (H/M/L) | Variable(s) | Year(s) | Additional comments |
|---|---|---|---|---|
| National Biomass Technical Report: 2003 | H | Forest Cover | 1989-1992 | It is considered that the reference year is 1990. |
| National Forest Authority GIS & mapping | H | Forest Cover | 2005 | |

### 4.2.2 Original data

From T1

Source 1 : National Biomass Technical Report: 2003, Reference year = 1990

| Land Cover/Use | Calibrated Area in hectares |
|---|---|
| Plantations Hardwoods | 17 993 |
| Plantations Softwoods | 15 780 |
| Total | 33 773 |

Source 2 : National Forest Authority GIS & mapping, Reference year =2005

| Land Cover/Use | Calibrated Area in hectares |
|---|---|
| Broad leaved plantations | 14 075 |
| Conifer plantations | 16 564 |
| Total | 30 639 |

## *4.3 Analysis and processing of national data*

### 4.3.1 Estimation and forecasting

According to expert knowledge (from the plantation Division), the rate of cutting the planted forest was higher than the planting rate during the period of 1990 to 2000. Therefore, the 2000 figure results from this trend and is equal to 32 000 ha.

Since 2005, the situation changes with the planting rate of about 5 000 ha/y and the cutting of less than 1 000 ha. It is assumed that the planted forest will be in 2010 at 51 000 ha.

Plantations are mainly exotic.

## *4.4 Data for Table T4*

### Table 4a

| FRA 2010 Categories | Forest area (1000 hectares) | | | |
|---|---|---|---|---|
| | 1990 | 2000 | 2005 | 2010 |
| Primary forest | 0 | 0 | 0 | 0 |
| Other naturally regenerated forest | 4 717 | 3 837 | 3 398 | 2 937 |
| ...of which of introduced species | n/a | n/a | n/a | n/a |
| Planted forest | 34 | 32 | 31 | 51 |
| ...of which of introduced species | 34 | 32 | 31 | 51 |
| **TOTAL** | **4 751** | **3 869** | **3 429** | **2 988** |

**Table 4b**

| FRA 2010 Categories | Area (1000 hectares) | | | |
|---|---|---|---|---|
| | 1990 | 2000 | 2005 | 2010 |
| Rubber plantations (Forest) | n/a | n/a | n/a | n/a |
| Mangroves (Forest and OWL) | 0 | 0 | 0 | 0 |
| Bamboo (Forest and OWL) | n/a | n/a | n/a | n/a |

## *4.5 Comments to Table T4*

| Variable / category | Comments related to data, definitions, etc. | Comments on the reported trend |
|---|---|---|
| Primary forest | Many of the natural vegetation in the protected areas system has a long history of human occupancy, fire used to maintain grazing, and areas which later became colonized by the present forests. The forest were further modified by the modern forest management practice applied over the last century involved heavy (mechanical) logging and clearance for agricultural settlement.<br>Therefore, it is difficult to consider having primary forest. | |
| Other naturally regenerating forest | | |
| Planted forest | | |
| Rubber plantations | | |
| Mangroves | | |
| Bamboo | | |

| Other general comments to the table |
|---|
| |

# 5 Table T5 – Forest establishment and reforestation

## 5.1 FRA 2010 Categories and definitions

| Term | Definition |
|---|---|
| Afforestation | Establishment of forest through planting and/or deliberate seeding on land that, until then, was not classified as forest. |
| Reforestation | Re-establishment of forest through planting and/or deliberate seeding on land classified as forest. |
| Natural expansion of forest | Expansion of forests through natural succession on land that, until then, was under another land use (e.g. forest succession on land previously used for agriculture). |

## 5.2 National data

### 5.2.1 Data sources

| References to sources of information | Quality (H/M/L) | Variable(s) | Year(s) | Additional comments |
|---|---|---|---|---|
| Plantation Division | H | Plantations | for the reporting years | |

## 5.3 Data for Table T5

| FRA 2010 Categories | Annual forest establishment (hectares/year) | | | ...of which of introduced species [1)] (hectares/year) | | |
|---|---|---|---|---|---|---|
| | 1990 | 2000 | 2005 | 1990 | 2000 | 2005 |
| Afforestation | 0 | 0 | 0 | 0 | 0 | 0 |
| Reforestation | 1814 | 810 | 199 | 1814 | 810 | 199 |
| ...of which on areas previously planted | n/a | n/a | n/a | n/a | n/a | n/a |
| Natural expansion of forest | n/a | n/a | n/a | n/a | n/a | n/a |

Note: The figures for the reporting years refer to the averages for the 5-year periods 1988-1993, 1994-1998 and 1999-2005 respectively.

## 5.4 Comments to Table T5

| Variable / category | Comments related to data, definitions, etc. | Comments on the reported trend |
|---|---|---|
| Afforestation | | |
| Reforestation | Replanting has been taking place in previously harvested areas with little increases. However with the recent institutional and legal reforms in the | |

| | | |
|---|---|---|
| | sector, serious efforts have been put in place by the National Forest Authority and the private Sector there is a lot of reforestation activities going. | |
| Natural expansion of forest | | |

| **Other general comments to the table** |
|---|
| The percentage of indigenous used on plantation is negligible. The species planted are mostly conifers and eucalyptus. |

# 6 Table T6 – Growing stock

## 6.1 FRA 2010 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. |
| Growing stock of commercial species | Growing stock (see def. above) of commercial species. |

## 6.2 National data

### 6.2.1 Data sources

| References to sources of information | Quality (H/M/L) | Variable(s) | Year(s) | Additional comments |
|---|---|---|---|---|
| National Biomass Technical Report: 2003 | H | Forest Cover | 1989-1992 | It is considered that the reference year is 1990. |
| National Forest Authority GIS & mapping | H | Forest Cover | 2005 | |

### 6.2.2 Original data

As no growing stock data are available biomass figures were used as an input.

Above-ground biomass (from source 1), reference year 1990.

| Land cover (use) | Standing Stock (000, Tons) | Standing Stock Area in ha |
|---|---|---|
| Hardwoods Plantations. | 1 683 | 18 682 |
| Conifer Plantations | 2 458 | 16 384 |
| ***Total Forest Plantations*** | ***4141*** | ***35066*** |
| Tropical High Forest (Normally stocked) | 136 491 | 650 150 |
| Tropical High Forest (Depleted) | 27 596 | 274 058 |
| Woodlands | 126 014 | 3 974 102 |
| ***Total Natural Forest*** | ***290101*** | ***4898310*** |
| Bushlands (2) | 14 008 | 1 422 395 |
| ***Total OWL*** | ***14 008*** | ***1 422 395*** |

Therefore, ABG for Forest Plantation = 118.09 tons/ha; and
ABG for natural Forest =-59.22 tons/ha
ABG for OWL = 10 tons/ha

From T1 and T3, forest (natural forest and plantation) as well as OWL areas could be obtained:

| | Calibrated Area in 1 000 hectares | | | |
|---|---|---|---|---|
| | **1990** | **2000** | **2005** | **2010** |
| Forest Plantations | 34 | 32 | 31 | 51 |
| Natural forests | 4 717 | 3 837 | 3 398 | 2 937 |
| OWL | 1 370 | 2 377 | 2 880 | 3 383 |

## *6.3 Analysis and processing of national data*

### 6.3.1 Estimation and forecasting

The following conversion factors have been used for the calculations

| | |
|---|---|
| Biomass expansion factor (BEF) | 2.4 |
| Wood density (WD) | 0.58 |
| Root/shoot ratio | 0.27 |

Growing stock has been estimated from the above-ground biomass figures in T6 by using the following formula and applying default conversion factors.

GS = AGB / BEF / WD
GS = Growing stock (m3)
AGB = Above-ground biomass (tons)

The result of the calculation is

| | **AGB** | **GS** |
|---|---|---|
| | **(tons/ha)** | **m3/ha** |
| Forest plantations | 118 | 84.8 |
| Natural Forests | 60 | 43.1 |
| OWL | 10 | 7.2 |

And the GS are :

| | Volume in 1 000 cubic meters over bark | | | |
|---|---|---|---|---|
| | **1990** | **2000** | **2005** | **2010** |
| Forest Plantations | 2 883.2 | 2 713.6 | 2 628.8 | 4 324.8 |
| Natural forests | 203 302.7 | 165 374.7 | 146 453.8 | 126 584.7 |
| OWL | 9 864.0 | 17 114.4 | 20 736.0 | 24 357.6 |

## 6.4 Data for Table T6

### Table 6a – Growing stock

| FRA 2010 category | Volume (million cubic meters over bark) | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Forest | | | | Other wooded land | | | |
| | 1990 | 2000 | 2005 | 2010 | 1990 | 2000 | 2005 | 2010 |
| Total growing stock | 206.2 | 168.1 | 149.1 | 130.9 | 9.9 | 17.1 | 20.7 | 24.4 |
| ... of which coniferous | 2.9 | 2.7 | 2.6 | 4.3 | n/a | n/a | n/a | n/a |
| ... of which broadleaved | 203.3 | 165.4 | 146.5 | 126.6 | n/a | n/a | n/a | n/a |
| Growing stock of commercial species | 2.9 | 2.7 | 2.6 | 4.3 | n/a | n/a | n/a | n/a |

### Table 6b – Growing stock of the 10 most common species

No data available for this table

| FRA 2010 category / Species name | | | Growing stock in forest (million cubic meters) | | |
|---|---|---|---|---|---|
| Rank | Scientific name | Common name | 1990 | 2000 | 2005 |
| 1st | | | | | |
| 2nd | | | | | |
| 3rd | | | | | |
| 4th | | | | | |
| 5th | | | | | |
| 6th | | | | | |
| 7th | | | | | |
| 8th | | | | | |
| 9th | | | | | |
| 10th | | | | | |
| Remaining | | | | | |
| **TOTAL** | | | | | |

Note: Rank refers to the order of importance in terms of growing stock, i.e. 1st is the species with the highest growing stock. Year 2000 is the reference year for defining the species list and the order of the species.

### Table 6c – Specification of threshold values

| Item | Value | Complementary information |
|---|---|---|
| Minimum diameter (cm) at breast height[1] of trees included in growing stock (X) | 3 cm | |
| Minimum diameter (cm) at the top end of stem for calculation of growing stock (Y) | none | |
| Minimum diameter (cm) of branches included in growing stock (W) | | |
| Volume refers to "above ground" (AG) or "above stump" (AS) | AG | |

[1] Diameter at breast height (DBH) refers to diameter over bark measured at a height of 1.30 m above ground level or 30 cm above buttresses if these are higher than 1 m.

## *6.5 Comments to Table T6*

| Variable / category | Comments related to data, definitions, etc. | Comments on the reported trend |
|---|---|---|
| Total growing stock | | |
| Growing stock of broadleaved / coniferous | | |
| Growing stock of commercial species | | |
| Growing stock composition | | |

| Other general comments to the table |
|---|
| |

# 7 Table T7 – Biomass stock

## 7.1 FRA 2010 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 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 | 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. |

## 7.2 National data

### 7.2.1 Data sources

| References to sources of information | Quality (H/M/L) | Variable(s) | Year(s) | Additional comments |
|---|---|---|---|---|
| National Biomass Technical Report: 2003 | H | Forest Cover | 1989-1992 | It is considered that the reference year is 1990. |

### 7.2.2 Original data

See table T6, the AGB

| | AGB (tons/ha) |
|---|---|
| Forest plantations | 118 |
| Natural Forests | 60 |
| OWL | 10 |

From T1 and T3, forest (natural forest and plantation) as well as OWL areas could be obtained:

| | Calibrated Area in 1 000 hectares | | | |
|---|---|---|---|---|
| | 1990 | 2000 | 2005 | 2010 |
| **Forest Plantations** | 34 | 32 | 31 | 51 |
| **Natural forests** | 4 717 | 3 837 | 3 398 | 2 937 |
| **OWL** | 1 370 | 2 377 | 2 880 | 3 383 |

## *7.3 Analysis and processing of national data*

### 7.3.1 Estimation and forecasting

The AGB are :

| | Biomass in 1 000 cubic meters over bark | | | |
|---|---|---|---|---|
| | **1990** | **2000** | **2005** | **2010** |
| Forest Plantations | 4 012.0 | 3 776.0 | 3 658.0 | 6 018.0 |
| Natural forests | 283 020.0 | 230 220.0 | 203 880.0 | 176 220.0 |
| Forest | 287 032.0 | 233 996.0 | 207 538.0 | 182 238.0 |
| OWL | 13 700.0 | 23 770.0 | 28 800.0 | 33 830.0 |

Then to calculate the BGB, the 0.27 (Root/shoot ratio) has been used.

## *7.4 Data for Table T7*

| **FRA 2010 category** | **Biomass (million metric tonnes oven-dry weight)** | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | **Forest** | | | | **Other wooded land** | | | |
| | **1990** | **2000** | **2005** | **2010** | **1990** | **2000** | **2005** | **2010** |
| Above-ground biomass | 287.0 | 234.0 | 207.6 | 182.2 | 13.7 | 23.8 | 28.8 | 33.8 |
| Below-ground biomass | 77.5 | 63.2 | 56.1 | 49.2 | 3.7 | 6.4 | 7.8 | 9.1 |
| Dead wood | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| **TOTAL** | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |

## *7.5 Comments to Table T7*

| **Variable / category** | **Comments related to data, definitions, etc.** | **Comments on the reported trend** |
|---|---|---|
| Above-ground biomass | | |
| Below-ground biomass | | |
| Dead wood | | |

| **Other general comments to the table** |
|---|
| |

# 8 Table T8 – Carbon stock

## 8.1 FRA 2010 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 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 | 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 the minimum diameter for dead wood (e.g. 10 cm), lying dead in various states of decomposition above the mineral or organic soil. |
| 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. |

## 8.2 National data

### 8.2.1 Original data

From tables T1 and T7.

## 8.3 Analysis and processing of national data

### 8.3.1 Estimation and forecasting

A/- Carbon stock is calculated by multiplying the biomass by 0.47, as suggested by IPCC 2006 good practice guidelines.

B/- Carbon in the litter has been estimated, based on the standard factor of 2.1 t/ha (tropical), and
- Soil carbon has been estimated, based on the factor of 65 t/ha (tropical moist).

The biomass/ hectare values are then applied to the forest area values in table T1 to get the results for the reporting years.

## 8.4 Data for Table T8

| FRA 2010 Category | Carbon (Million metric tonnes) | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Forest | | | | Other wooded land | | | |
| | 1990 | 2000 | 2005 | 2010 | 1990 | 2000 | 2005 | 2010 |
| Carbon in above-ground biomass | 134.9 | 110.0 | 97.6 | 85.6 | 6.4 | 11.2 | 13.5 | 15.9 |
| Carbon in below-ground biomass | 36.4 | 29.7 | 26.4 | 23.1 | 1.7 | 3.0 | 3.7 | 4.3 |
| ***Sub-total: Living biomass*** | 171.3 | 139.7 | 123.9 | 108.8 | 8.2 | 14.2 | 17.2 | 20.2 |
| Carbon in dead wood | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| Carbon in litter | 10.0 | 8.1 | 7.2 | 6.3 | 2.9 | 5.0 | 6.0 | 7.1 |
| ***Sub-total: Dead wood and litter*** | ***n/a*** | ***n/a*** | ***n/a*** | ***n/a*** | ***n/a*** | ***n/a*** | ***n/a*** | ***n/a*** |
| Soil carbon | 308.8 | 251.5 | 222.9 | 194.2 | 89.1 | 154.5 | 187.2 | 219.9 |
| **TOTAL** | **n/a** | **n/a** | **n/a** | **n/a** | **n/a** | **n/a** | **n/a** | **n/a** |

| | |
|---|---|
| Soil depth (cm) used for soil carbon estimates | 30 |

## 8.5 Comments to Table T8

| Variable / category | Comments related to data, definitions, etc. | Comments on the reported trend |
|---|---|---|
| Carbon in above-ground biomass | | |
| Carbon in below-ground biomass | | |
| Carbon in dead wood | | |
| Carbon in litter | | |
| Soil carbon | | |

| Other general comments to the table |
|---|
| |

# 9 Table T9 – Forest fires

No data available for this table

# 10 Table T10 – Other disturbances affecting forest health and vitality

No data available for this table

# 11 Table T11 – Wood removals and value of removals

## 11.1 FRA 2010 Categories and definitions

| Category | Definition |
|---|---|
| Industrial roundwood removals | The wood removed (volume of roundwood over bark) for production of goods and services other than energy production (woodfuel). |
| Woodfuel removals | 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 |
|---|---|---|---|---|
| FAO stat | M | Industrial roundwood and Woodfuel | 1988 - 2007 | |

### 11.2.2 Original data

FAO Stat, Industrial roundwood

| Year | 1988 | 1989 | 1990 | 1991 | 1992 |
|---|---|---|---|---|---|
| Vol m3 u.b. | 1652000 | 1693000 | 1739000 | 1813000 | 1992000 |
| Vol m3 u.b. | Average 1990: 1777800 | | | | |
| Vol m3 o.b. | Average 1990: 2044470 | | | | |

| Year | 1998 | 1999 | 2000 | 2001 | 2002 |
|---|---|---|---|---|---|
| Vol m3 u.b. | 3041000 | 3175000 | 3175000 | 3175000 | 3175000 |
| Vol m3 u.b. | Average 2000: 3148200 | | | | |
| Vol m3 o.b. | Average 2000 : 3620430 | | | | |

| Year | 2003 | 2004 | 2005 | 2006 | 2007 |
|---|---|---|---|---|---|
| Vol m3 u.b. | 3175000 | 3175000 | 3175000 | 3175000 | 3175000 |
| Vol m3 u.b. | Average 2005 : 3175000 | | | | |
| Vol m3 o.b. | Average 2005 : 3651250 | | | | |

FAO Stat, woodfuel

| Year | 1988 | 1989 | 1990 | 1991 | 1992 |
|---|---|---|---|---|---|
| Vol m3 u.b. | 28573000 | 28856900 | 29265500 | 29865900 | 30679200 |
| Vol m3 u.b. | Average 1990 : 29448100 | | | | |
| Vol m3 o.b. | Average 1990 : 33865315 | | | | |

| Year | 1998 | 1999 | 2000 | 2001 | 2002 |
|---|---|---|---|---|---|
| Vol m3 u.b. | 33368100 | 33726300 | 34090300 | 34611000 | 35141800 |
| Vol m3 u.b. | Average 2000: 34187500 | | | | |
| Vol m3 o.b. | Average 2000 : 39315625 | | | | |

| Year | 2003 | 2004 | 2005 | 2006 | 2007 |
|---|---|---|---|---|---|
| Vol m3 u.b. | 35683000 | 36234600 | 36797000 | 37343297 | 37900200 |
| Vol m3 u.b. | Average 2005 : 36791619 | | | | |
| Vol m3 o.b. | Average 2005 : 42310362 | | | | |

## *11.3 Data for Table T11*

| FRA 2010 Category | Industrial roundwood removals | | | Woodfuel removals | | |
|---|---|---|---|---|---|---|
| | 1990 | 2000 | 2005 | 1990 | 2000 | 2005 |
| Total volume (1000 $m^3$ o.b.) | 2044 | 3620 | 3651 | 33865 | 39316 | 42310 |
| ... of which from forest | n/a | n/a | n/a | n/a | n/a | n/a |
| Unit value (local currency / $m^3$ o.b.) | n/a | n/a | n/a | n/a | n/a | n/a |
| Total value (1000 local currency) | n/a | n/a | n/a | n/a | n/a | n/a |

Note: The figures for the reporting years refer to the averages of annually affected areas for the 5-year periods 1988-1992, 1998-2002 and 2003-2007 respectively.

| | 1990 | 2000 | 2005 |
|---|---|---|---|
| Name of local currency | Uganda Shilling | Uganda Shilling | Uganda Shilling |

## *11.4 Comments to Table T11*

| Variable / category | Comments related to data, definitions, etc. | Comments on the reported trend |
|---|---|---|
| Total volume of industrial roundwood removals | | |
| Total volume of woodfuel removals | | |
| Unit value | | |
| Total value | | |

| Other general comments to the table |
|---|
| |

# 12 Table T12 – Non-wood forest products removals and value of removals

No data is available for this table.

# 13 Table T13 – Employment

## 13.1 FRA 2010 Categories and definitions

| Category | Definition |
|---|---|
| Full-time equivalents (FTE) | A measurement equal to one person working full-time during a specified reference period. |
| Employment | Includes all persons in paid employment or self-employment. |
| Paid employment | Persons who during a specified reference period performed some work for wage or salary in cash or in kind. |
| Self-employment | Persons who during a specified reference period performed some work for profit or family gain in cash or in kind (e.g. employers, own-account workers, members of producers' cooperatives, contributing family workers). |

## 13.2 National data

### 13.2.1 Data sources

| References to sources of information | Quality (H/M/L) | Variable(s) | Year(s) | Additional comments |
|---|---|---|---|---|
| Isooba. M: 2002 An analysis of the Uganda Implementation of the Convention on Biological diversity with a focus on forests | H | Employment | 2002 | Assumption is that the same number of people were employed in 2000 |
| Trends and current status of the contribution of the forest sector to national economies"(FAO, 2003) | L | Employment in primary production of goods | 1990 and 2000 | |

### 13.2.2 Original data

| Category | Number Employed |
|---|---|
| Firewood and charcoal production | 89000 |
| Household fire wood production | 71000 |
| Commercial and industrial firewood production | 36000 |
| Plantation establishment and management | 1400 |
| Institutions | 2600 |
| Pole production | 1000 |
| **Total** | **201000** |

Notes: It is not clear whether the above includes self employment

## *13.3 Data for Table T13*

| FRA 2010 Category | Employment (1000 years FTE) | | |
|---|---|---|---|
| | 1990 | 2000 | 2005 |
| Employment in primary production of goods | 1.3 | 2.4 | n/a |
| ...of which paid employment | n/a | n/a | n/a |
| ...of which self-employment | n/a | n/a | n/a |
| Employment in management of protected areas | n/a | n/a | n/a |

## *13.4 Comments to Table T13*

| Variable / category | Comments related to data, definitions, etc. | Comments on the reported trend |
|---|---|---|
| Employment in primary production of goods | | |
| Paid employment / self-employment | | |
| Employment in management of protected areas | | |

| Other general comments to the table |
|---|
| As it was not clear whether the original national table includes self employment, FAO statistics was used for the final reporting table |

# 14 Table T14 – Policy and legal framework

## 14.1 FRA 2010 Categories and definitions

| Term | Definition |
|---|---|
| Forest policy | Forest policy is the set of orientations and principles of actions adopted by public authorities in harmony with national socio-economic and environmental policies in a given country to guide future decisions in relation to the management, use and conservation of forest and tree resources for the benefit of the society. |
| Forest law | Set of rules enacted by the legislative authority of a country regulating the access, management, conservation and use of forest resources. |

## 14.2 Data for Table T14

| **Indicate the existence of the following (2008)** | | | |
|---|---|---|---|
| **Forest policy statement with national scope** | | X | Yes |
| | | | No |
| If Yes above, provide: | Year of endorsement | 2001 | |
| | Reference to document | Ministry of Water and Environment. National Forest Authority. | |
| **National forest programme (nfp)** | | X | Yes |
| | | | No |
| If Yes above, provide: | Name of nfp in country | The National Forest Plan | |
| | Starting year | 2002 | |
| | Current status | | In formulation |
| | | X | In implementation |
| | | | Under revision |
| | | | Process temporarily suspended |
| | Reference to document or web site | Ministry of Water and Environment. National Forest Authority. | |
| **Law (Act or Code) on forest with national scope** | | X | Yes, specific forest law exists |
| | | | Yes, but rules on forests are incorporated in other (broader) legislation |
| | | | No, forest issues are not regulated by national legislation |
| If Yes above, provide: | Year of enactment | 2003 | |
| | Year of latest amendment | | |
| | Reference to document | Ministry of Water and Environment. National Forest Authority. | |

| **In case the responsibility for forest policy- and/or forest law-making is decentralized, please indicate the existence of the following and explain in the comments below the table how the responsibility for forest policy- and law-making is organized in your country.** | | |
|---|---|---|
| **Sub-national forest policy statements** | | Yes |
| | X | No |
| If Yes above, indicate the number of regions/states/provinces with forest policy statements | | |
| **Sub-national Laws (Acts or Codes) on forest** | | Yes |
| | X | No |
| If Yes above, indicate the number of regions/states/provinces with Laws on forests | | |

**Explanatory notes to the reporting table:**

1. The national forest policy document or statement describes the objectives, priorities and means for implementation of the forest policy. It is endorsed when it is officially recognised as a government policy or instruction. The endorsement is formalised by the Minister in charge of forests by a dated and signed document.
2. The term "national forest programme" is a generic expression referring to a wide range of approaches towards forest policy formulation, planning and implementation at national and sub-national levels and providing a framework and guidance for country-driven forest sector development in consultation and participation of all stakeholders and in consistence with policies of other sectors and international policies.
3. The term "law on forest" refers to a Law (Act or Code) providing specific rules on forests and forest sector management, such as access, management and use of forest resources. The Law is enacted when the legislative authority adopted its text.
4. Same as (1) but the policy documents or statements refer to sub-national administrative units, e.g. States in a Federation or Autonomous Regions or Provinces.
5. Same as (3) but indicate if specific Laws on forests exist at sub-national level (at the level of regions/states/provinces).

## *14.3 Comments to Table T14*

| Variable / category | Comments related to data, definitions, etc. |
|---|---|
| Forest policy statement with national scope | |
| National forest programme (nfp) | |
| Law (Act or Code) on forest with national scope | |
| Sub-national forest policy statements | |
| Sub-national Laws (Acts or Codes) on forest | |

| Other general comments to the table |
|---|
| |

# 15 Table T15 – Institutional framework

## 15.1 FRA 2010 Categories and definitions

| Term | Definition |
|---|---|
| Minister responsible for forest policy-making | Minister holding the main responsibility for forest issues and the formulation of the forest policy. |
| Head of Forestry | The Head of Forestry is the Government Officer responsible for implementing the mandate of the public administration related to forests. |
| Level of subordination | Number of administrative levels between the Head of Forestry and the Minister. |
| University degree | Qualification provided by University after a minimum of 3 years of post secondary education. |

## 15.2 Data for Table T15

### Table 15a

| FRA 2010 Category | 2008 | |
|---|---|---|
| Minister responsible for forest policy formulation : please provide full title | Minister of Water and Environment. | |
| Level of subordination of Head of Forestry within the Ministry | | 1st level subordination to Minister |
| | | 2nd level subordination to Minister |
| | X | 3rd level subordination to Minister |
| | | 4th or lower level subordination to Minister |
| Other public forest agencies at national level | National Forest Authority (NFA) Responsible for Central Forest Reserves. Forest Sector Support Department (FSSD) overall sector overseer. | |
| Institution(s) responsible for forest law enforcement | NFA, FSSD, Police, local governments | |

### Table 15b

| FRA 2010 Category | Human resources within public forest institutions | | | | | |
|---|---|---|---|---|---|---|
| | 2000 | | 2005 | | 2008 (1) | |
| | Number | %Female | Number | %Female | Number | %Female |
| Total staff | n/a | n/a | n/a | n/a | n/a | n/a |
| ...of which with university degree or equivalent | n/a | n/a | n/a | n/a | 79 | n/a |

Note: (1) Partial information (2007), limited to qualified forestry staff in HQ and in decentralized offices.

## *15.3 Comments to Table T15*

| Variable / category | Comments related to data, definitions, etc. | Comments on the reported trend |
|---|---|---|
| Minister responsible for forest policy formulation | | |
| Level of subordination of Head of Forestry within the Ministry | | |
| Other public forest agencies at national level | | |
| Institution(s) responsible for forest law enforcement | | |
| Human resources within public forest institutions | | |

| Other general comments to the table |
|---|
| Foresty staff with university degrees in 2007:<br>HQ : 9 MSc;<br>Decentralized : 70 BSc. |

# 16 Table T16 – Education and research

## 16.1 FRA 2010 Categories and definitions

| Term | Definition |
|---|---|
| Annual graduation of students | Number of students that have successfully completed a Bachelor's or higher degree in forest science or achieved a certificate or diploma as forest technician. |
| Doctor's degree (PhD) | University (or equivalent) education with a total duration of about 8 years. |
| Master's degree (MSc) or equivalent | University (or equivalent) education with a total duration of about five years. |
| Bachelor's degree (BSc) or equivalent | University (or equivalent) education with a duration of about three years. |
| Technician certificate or diploma | Qualification issued from a technical education institution consisting of 1 to 3 years post secondary education. |
| Publicly funded forest research centers | Research centers implementing research programmes on forest matters. Funding is public or channelled through public institutions. |

## 16.2 National data

### 16.2.1 Data sources

| References to sources of information | Quality (H/M/L) | Variable(s) | Year(s) | Additional comments |
|---|---|---|---|---|
| Forest Policy, Legal and Institutional Framework Information Report, Uganda | M | Institutional data | 2007 | |

## 16.3 Data for Table T16

| FRA 2010 Category | Annual graduation of students within the country | | | | | |
|---|---|---|---|---|---|---|
| | 2000 | | 2005 | | 2008 | |
| | Number | %Female | Number | %Female | Number | %Female |
| Master's degree in Forest Science | n/a | n/a | n/a | n/a | n/a | n/a |
| Bachelor's degree in Forest Science | n/a | n/a | n/a | n/a | n/a | n/a |
| Forest technician certificate / diploma | n/a | n/a | n/a | n/a | n/a | n/a |
| **FRA 2010 Category** | **Professionals working in public forest research centres** | | | | | |
| | 2000 | | 2005 | | 2008 (1) | |
| | Number | %Female | Number | %Female | Number | %Female |
| Doctor's degree (PhD) | n/a | n/a | n/a | n/a | 4 | n/a |
| Master's degree (MSc) or equivalent | n/a | n/a | n/a | n/a | 12 | n/a |
| Bachelor's degree (BSc) or equivalent | n/a | n/a | n/a | n/a | 4 | n/a |

Note: (1) Data are related to 2007 and refer only to the National Forestry Resources Research Institute.

## *16.4 Comments to Table T16*

| Variable / category | Comments related to data, definitions, etc. | Comments on the reported trend |
|---|---|---|
| Annual graduation of students within the country | | |
| Professionals working in public forest research centres | | |

| Other general comments to the table |
|---|
| |

# 17 Table T17 – Public revenue collection and expenditure

No data available for this table.