

GLOBAL FOREST RESOURCES ASSESSMENT 2015

COUNTRY REPORT

Uganda

Rome, 2014

FAO, at the request of its member countries, regularly monitors the world's forests and their management and uses through the Global Forest Resources Assessment (FRA). This country report is prepared as a contribution to the FAO publication, the Global Forest Resources Assessment 2015 (FRA 2015).

The content and the structure are in accordance with the recommendations and guidelines given by FAO in the document Guide for country reporting for FRA 2015 (<http://www.fao.org/3/a-au190e.pdf>). These reports were submitted to FAO as official government documents.

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Introductory Text

Place an introductory text on the content of this report

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Desk Study?

Check "yes" if this survey is a Desk Study, "no" otherwise	
Desk Study?	no

1. What is the area of forest and other wooded land and how has it changed over time?

Documents for this question:

- [Guide for country reporting FRA 2015](#)
- [FRA 2015 Terms and Definitions](#)

1.1 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 ; 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".
...of which with tree cover (<i>sub-category</i>)	Land considered as "Other land", that is predominantly agricultural or urban lands use and has patches of tree cover that span 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. It includes bothe forest and non-forest tree species.
Inland water bodies	Inland water bodies generally include major rivers, lakes and water reservoirs.
Forest expansion	Expansion of forest on land that, until then, was not defined as forest.
...of which afforestation (<i>sub-category</i>)	Establishment of forest through planting and/or deliberate seeding on land that, until then, was not defined as forest.
...of which natural expansion of forest (<i>sub-category</i>)	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).
Deforestation	The conversion of forest to other land use or the longterm reduction of the tree canopy cover below the minimum 10 percent threshold.
...of which human induced (<i>sub-category</i>)	Human induced conversion of forest to other land use or the permanent reduction of the tree canopy cover below the minimum 10 percent threshold.
Reforestation	Natural regeneration or re-establishment of forest through planting and/or deliberate seeding on land already in forest land use.
...of which artificial reforestation (<i>sub-category</i>)	Re-establishment of forest through planting and/or deliberate seeding on land already in forest land use.

1.2 National data

1.2.1 Data sources

	References to sources of information	Variables	Years	Additional comments
1	National Biomass Technical Report: 2003	Forest Cover	1989-1992	It is considered that the reference year is 1990.

2	National Forest Authority GIS & mapping	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.
3	Plantation Division	Plantations	for the reporting years	N/A
4	N/A	N/A	N/A	N/A

1.2.2 Classification and definitions

National class	Definition
Hardwood Plantations	Mainly Eucalyptus sp. And indigenous sp. E.g. <i>Maesopsis eminii</i>
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
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
Bushland	Crown cover over 40% and below 5m

1.2.3 Original data

<p>Forest area</p> <p>Source 1 : National Biomass Technical Report: 2003, Reference year = 1990</p>
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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

At the time of filling in this report only 81% of the country area had been mapped/classified and no verification/validation had been done.

Tiles covered	Total number of tiles	Percentage tiles covered
251	312	81%
Remaining tiles	61	

Land cover classes 2010 (unverified)		
Class	Area_Ha	Percentage
Agriculture	7,403,181.86	38%
Builtup area	403,451.39	2%
Bushland	2,006,625.68	10%
Cloud	36,662.20	0%
Forest	2,127,621.23	11%
Grassland	4,316,961.84	22%

Impediment	28,333.12	0%
Shadow	14,000.02	0%
Water	1,705,654.63	9%
Wetland	1,575,811.44	8%
Total	19,618,303.41	100%
Percent of country mapped		81%

Source: Mapping and Inventory Centre(NFA-2014)

Map showing areas covered(unverified)

Forest/non forest 2010(unverified)

Classes	Area_Ha	Percentage
Forest	2127621	11%
Non-Forest	15785028	80%
Water	1705655	9%
Total	19,618,303.4	100%
Percent of country mapped		81%
Approximate country total area (NBS, 2003)	24,155,058	

Source: Mapping and Inventory Centre(NFA-2014)

An assumption of 100% country coverage was made and cover classes were derived from the above 81% coverage table.

Derived(2010) cover on assumption of 100% coverage			
Class	From un verified data(ha)	Adjusted based National on country area(ha)	Percentage
Agriculture	9,139,731	9,115,284	37.7%
Builtup area	498,088	496,756	2.1%
Bushland	2,477,316	2,470,689	10.2%
Cloud	45,262	45,141	0.2%
Forest	2,626,693	2,619,667	10.8%
Grassland	5,329,583	5,315,327	22.0%

Impediment	34,979	34,886	0.1%
Shadow	17,284	17,238	0.1%
Water	2,105,746	2,100,114	8.7%
Wetland	1,945,446	1,940,243	8.0%
Total	24,220,128	24,155,344.8	100%

Source: Mapping and Inventory Centre(NFA-2014)

In view of results from earlier mapping it was clear the wetland area in above table certainly flawed and more so since the no validation had been done. Other classes reflected similar trends from earlier mapping. Therefore adjustment has been made on the wet land area as reflected in the earlier/mapping tables. Cloud and shadow have been removed. In land water is estimated at 3,652,736 ha. The total country area is 24,155,344.80

Land cover 2010(less water)	
Class	Area(ha)
Agriculture	9,115,284
Builtup area	496,756
Bushland	2,470,689
Forest	2,619,667
Grassland	5,315,327
Impediment	34,886
Wetland	450,000

Total	20,502,609
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1.3 Analysis and processing of national data

1.3.1 Adjustment

Forest area	
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

Calibration of reclassified data was thereby carried out.

Calibrating 2010 data	
National land area in ha	20,502,609.00
FAO/STATS land area	19,710,000.00
Calibrating Factor	0.96

Results after reclassifying 2010 data	
Class	Calibrated Area in hectares
Agriculture	8,762,897
Builtup area	477,552
Bushland	2,375,175
Forest	2,518,393
Grassland	5,109,842
Impediment	33,537
Wetland	432,603
Total	19,710,000

Results after reclassifying 2010 data	
Class	Calibrated Area in hectares
Forest	2,752,968
Bushland	2,879,271
Agriculture	8,326,025.2
Builtup area	453,743.8
Grassland	4,855,092.3
Impediment	31,865.0
Wetland	411,035.7
Total land area	19,710,000.0
Inland water	4,394,000.0
Total	24,104,000

1.3.2 Estimation and forecasting

Forest area						
Based on the 2005 and estimation for 2010 with mapping results of 2010a, estimations have been done, through linear inter and extrapolation, for 2010 and 2015.						
FRA Categories	Area in hectares				2010	2015
	1990	2000	2005	Estimation as of 2010		
Forests	4 751 418	3 869 480	3 428 511	2 987 542	2 752 968	2 077 424
OWL	1 369 933	2 376 650	2 880 008	3 383 366	2 879 271	2 878 533

OL	13 588 649	13 463 870	13 401 481	13 339 092	14 077 761	14 754 043
Inland Water	4 394 000	4 394 000	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	24 104 000	24 104 000

1.3.3 Reclassification

Forest area			
<u>Reclassification of 1990 and 2005 data</u>			
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%
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Results after reclassifying 1990 data

Land Cover/Use	Calibrated Area in hectares		
	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

Land Cover Classes	Calibrated Area in hectares		
	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

National Classes	Area in hectares	
	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

Results after reclassifying 2010 data

Land Cover Classes	Calibrated Area in hectares		
	Forests	OWL	OL
Forest	2,752,968		
Bush		2,879,271	
Agriculture			8,326,025.2
Builtup area			453,743.8
Grassland			4,855,092.3
Impediment			31,865.0
Wetland			411,035.7
Total	2,752,968	2,879,271	14,077,762

Therefore the results could be summarized as follows

	Area in hectares	
National Classes	1990	2010
Forests	4 751 418	2,752,968
OWL	1 369 933	2,879,271
OL	13 588 649	14,077,762
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

1.4 Data

Table 1a













Categories		Area (000 hectares)				
		1990	2000	2005	2010	2015
	Forest	4751	3869	3429	2753	2077
	Other wooded land	1370	2377	2880	2879	2879
	Other land	13860	13735	13672	14349	15025
	... of which with tree cover	N/A	N/A	N/A	N/A	N/A
	Inland water bodies	4174	4174	4174	4174	4174
	TOTAL	24155.00	24155.00	24155.00	24155.00	24155.00

Table 1b

Categories	Annual forest establishment / loss (000 hectares per year)				...of which of introduced species (000 hectares per year)			
	1990	2000	2005	2010	1990	2000	2005	2010

	Forest expansion	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	... of which afforestation	0	0	0	0	0	0	0	0
	... of which natural expansion of forest	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Deforestation	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	... of which human induced	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Reforestation	1.814	0.81	0.199	N/A	N/A	N/A	N/A	N/A
	... of which artificial	1.814	0.81	0.199	N/A	1.814	0.81	0.199	N/A

Tiers

Category	Tier for status	Tier for reported trend
Forest	Tier 2	Tier 2
Other wooded land	Tier 2	Tier 2
Forest expansion	Tier 1	Tier 1
Deforestation	N/A	N/A
Reforestation	Tier 1	Tier 1

Tier criteria

Category	Tier for status	Tier for reported trend
<ul style="list-style-type: none"> • Forest • Other wooded land • Afforestation • Reforestation • Natural expansion of forest • Deforestation 	<p>Tier 3 : Data sources: Either recent (less than 10 years ago) National Forest Inventory or remote sensing, with ground truthing, or programme for repeated compatible NFIs</p> <p>Tier 2 : Data sources: Full cover mapping / remote sensing or old NFI (more than 10 years ago)</p> <p>Tier 1 : Other</p>	<p>Tier 3 : Estimate based on repeated compatible tiers 3 (tier for status)</p> <p>Tier 2 : Estimate based on repeated compatible tier 2 or combination tier 3 and 2 or 1 (tier for status)</p> <p>Tier 1 : Other</p>

1.5 Comments

Category	Comments related to data definitions etc	Comments on the reported trends
Forest	N/A	The increase of deforestation rate between 2005 and 2010 is explained increased conversion of especially private forest land into agriculture and to some extent encroachment on Central Forest Reserves.
Other wooded land	N/A	The end of war situation North Uganda and thereby resettlement and clearance for agriculture. Whereas before 2006 abandoned settlements and agricultural lands reverted to bush land and woodlands

Other land	N/A	N/A
Other land with tree cover	N/A	N/A
Inland water bodies	N/A	N/A
Forest expansion	N/A	N/A
Deforestation	N/A	N/A
Reforestation	N/A	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.

Other general comments to the table

The percentage of indigenous used on plantation is negligible. The species planted are mostly conifers and eucalyptus. Annual forest establishment/loss (000 hectares per year): 1The figures for the reporting years refer to the average for the 5-year periods 1988-1992 1998-2002 2003-2007 and 2008-2012 respectively. ...of which of 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).

2. What is the area of natural and planted forest and how has it changed over time?

Documents for this question:

- [Guide for country reporting FRA 2015](#)
- [FRA 2015 Terms and Definitions](#)

2.1 Categories and definitions

Term	Definition
Naturally regenerated forest	Forest predominantly composed of trees established through natural regeneration.
Naturalized introduced species	Other naturally regenerated forest where the tree species are predominantly non-native and do not need human help to reproduce/maintain populations over time.
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).
Category	Definition
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.
...of which of introduced species (<i>sub-category</i>)	Other naturally regenerated forest where the trees are predominantly of introduced species.
...of which naturalized (<i>sub-sub category</i>)	Other naturally regenerated forest where the trees are predominantly of naturalized introduced species.
Planted forest	Forest predominantly composed of trees established through planting and/or deliberate seeding.
...of which of introduced species (<i>sub-category</i>)	Planted forest where the planted/seeded trees are predominantly of introduced species.
Mangroves	Area of forest and other wooded land with mangrove vegetation.
...of which planted (<i>sub-category</i>)	Mangroves predominantly composed of trees established through planting.

2.2 National data

2.2.1 Data sources

	References to sources of information	Variables	Years	Additional comments
1	National Biomass Technical Report: 2003	Forest Cover	1989-1992	It is considered that the reference year is 1990.
2	National Forest Authority GIS & mapping	Forest Cover	2005	N/A
3	National Forest Authority GIS & mapping	Forest Cover	2010	N/A
4	N/A	N/A	N/A	N/A

2.2.2 Classification and definitions

National class	Definition
N/A	N/A
N/A	N/A
N/A	N/A
N/A	N/A

2.2.3 Original data

From Question 1

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
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2.3 Analysis and processing of national data

2.3.1 Adjustment

2.3.2 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.






No change is assumed for the period 2010 to 2015

Plantations are mainly exotic.

2.3.3 Reclassification

2.4 Data

Table 2a

Categories		Forest area (000 hectares)				
		1990	2000	2005	2010	2015
	Primary forest	0	0	0	0	0
	Other naturally regenerated forest	4717	3837	3398	2698	2017
	... of which of introduced species	N/A	N/A	N/A	N/A	N/A
	... of which naturalized	N/A	N/A	N/A	N/A	N/A
	Planted forest	34	32	31	55	60


	... of which of introduced species	34	32	31	55	60
TOTAL		4751.00	3869.00	3429.00	2753.00	2077.00

Table 2b

Primary forest converted to (000 ha)								
1990-2000			2000-2010			2010-2015		
Other natural regeneration	Planted	Other land	Other natural regeneration	Planted	Other land	Other natural regeneration	Planted	Other land
0	0	0	0	0	0	0	0	0

Table 2c

Categories	Area (000 hectares)				
	1990	2000	2005	2010	2015
Mangroves (forest and OWL)	0	0	0	0	0
... of which planted	0	0	0	0	0

Tiers

Category	Tier for status	Tier for reported trend
Primary forest	Tier 1	Tier 1
Other naturally regenerated forest	Tier 1	Tier 1
Planted forest	Tier 1	Tier 1
Mangroves	Tier 1	Tier 1

Tier Criteria

Category	Tier for status	Tier for reported trend
Primary forest/Other naturally regenerated forest/Planted forest	<p>Tier 3 : Data sources: Recent (less than 10 years) National Forest Inventory or remote sensing with ground truthing or data provided by official agencies or programme for repeated compatible NFIs</p> <p>Tier 2 : Data sources: Full cover mapping/ remote sensing or old NFI (more than 10 years) Tier 1 : Other</p>	<p>Tier 3 : Estimate based on repeated compatible tiers 3 (tier for status) Tier 2 : Estimate based on repeated compatible tier 2 or combination tier 3 and 2 or 1 (tier for status) Tier 1 : Other</p>

2.5 Comments

Category	Comments related to data definitions etc	Comments on reported trend
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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. Therefore it is difficult to consider having primary forest.	N/A
Other naturally regenerating forest	N/A	N/A
Planted forest	N/A	N/A
Mangroves	N/A	N/A

Other general comments to the table

N/A

3. What are the stocks and growth rates of the forests and how have they changed?

Documents for this question:

- [Guide for country reporting FRA 2015](#)
- [FRA 2015 Terms and Definitions](#)

3.1 Categories and definitions

Category	Definition
Growing stock	Volume over bark of all living trees with a minimum diameter of 10 cm at breast height (or above buttress if these are higher). Includes the stem from ground level up to a top diameter of 0 cm, excluding branches.
Net Annual Increment (NAI)	Average annual volume of gross increment over the given reference period less that of natural losses on all trees, measured to minimum diameters as defined for "Growing stock".
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 2 mm 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.
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 soil depth of 30 cm.

3.2 National data

3.2.1 Data sources

	References to sources of information	Variables	Years	Additional comments
1	National Biomass Technical Report: 2003	Forest Cover	1989-1992	It is considered that the reference year is 1990.
2	National Forest Authority GIS & mapping	Forest Cover	2005	N/A
3	N/A	N/A	N/A	N/A
4	N/A	N/A	N/A	N/A

3.2.2 Classification and definitions

National class	Definition
N/A	N/A
N/A	N/A
N/A	N/A
N/A	N/A

3.2.3 Original data

Growing stock

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)	Area in ha
Hardwoods Plantations.	1 683	18 682
Conifer Plantations	2 458	16 384
TotalForestPlantations	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
TotalNatural 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

ABGfor natural Forest =-59.22 tons/ha

ABGfor OWL = 10 tons/ha

From Question 1 and Question 4 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

	Calibrated Area in 1 000 hectares			
	1990	2000	2005	2010
Forest Plantations	34	32	31	55
Natural forests	4717	3837	3398	2,698
OWL	1370	2377	2880	2,879

Biomass stock

See data on growing stock the AGB

	AGB
	(tons/ha)
Forest plantations	118
Natural Forests	60

OWL	10
-----	----

From Question 1 and 4 forest (natural forest and plantation) as well as OWL areas could be obtained:

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

	Calibrated Area in 1 000 hectares			
	1990	2000	2005	2010
Forest Plantations	34	32	31	55
Natural forests	4717	3837	3398	2,698
OWL	1370	2377	2880	2,879

Carbon stock

From Question 1 and data on biomass stock.

3.3 Analysis and processing of national data

3.3.1 Adjustment

3.3.2 Estimation and forecasting

Growing stock

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 :

	Growing Stock Volume in 1 000cubic 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

Biomass stock

The AGB are :

	Biomass in 1 000cubic 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

	Biomass in 1 000 cubic meters over bark			
	1990	2000	2005	2010
Forest Plantations	4,012.0	3,776.0	3,658.0	6,490.0
Natural forests	283,020.0	230,220.0	203,880.0	161,880.0
Forest	287,032.0	233,996.0	207,538.0	168,370.0

OWL	13,700.0	23,770.0	28,800.0	28,790.0
-----	----------	----------	----------	----------

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

Total Biomass(including BGB)

	Total Biomass in 1 000 cubic meters over bark			
	1990	2000	2005	2010
Forest Plantations	5,095.2	4,795.5	4,645.7	8,242.3
Natural forests	359,435.4	292,379.4	258,927.6	205,587.6
Forest	364,530.6	297,174.9	263,573.3	213,829.9
OWL	17,399.0	30,187.9	36,576.0	36,563.3

Carbon stock

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

	Carbon stock(1 000 tonnes)			
	1990	2000	2005	2010
Forest Plantations	2,394.8	2,253.9	2,183.5	3,873.9
Natural forests	168,934.6	137,418.3	121,696.0	96,626.2
Forest	171,329.4	139,672.2	123,879.4	100,500.1
OWL	8,177.5	14,188.3	17,190.7	17,184.8

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 Question 1 to get the results for the reporting years.

3.3.3 Reclassification

3.4 Data

Table 3a

Category		Growing stock volume (million m ³ over bark)									
		Forest					Other wooded land				
		1990	2000	2005	2010	2015	1990	2000	2005	2010	2015
	Total growing stock	206.2	168.1	149.1	120.9	92	9.9	17.1	20.7	20.7	20.7



	... of which coniferous	2.9	2.7	2.6	4.7	5.07	N/A	N/A	N/A	N/A	N/A
	... of which broadleaved	203.3	165.4	146.5	116.3	86.94	N/A	N/A	N/A	N/A	N/A

Table 3b

Category/Species name			Growing stock in forest (million cubic meters)			
Rank	Scientific name	Common name	1990	2000	2005	2010
1 st	N/A	N/A	N/A	N/A	N/A	N/A
2 nd	N/A	N/A	N/A	N/A	N/A	N/A
3 rd	N/A	N/A	N/A	N/A	N/A	N/A
4 th	N/A	N/A	N/A	N/A	N/A	N/A
5 th	N/A	N/A	N/A	N/A	N/A	N/A
6 th	N/A	N/A	N/A	N/A	N/A	N/A
7 th	N/A	N/A	N/A	N/A	N/A	N/A
8 th	N/A	N/A	N/A	N/A	N/A	N/A
9 th	N/A	N/A	N/A	N/A	N/A	N/A
10 th	N/A	N/A	N/A	N/A	N/A	N/A
Remaining			N/A	N/A	N/A	N/A
TOTAL			.00	.00	.00	.00

THE PRE-FILLED VALUES FOR GROWING STOCK REFER TO THE FOLLOWING THRESHOLD VALUES (SEE TABLE BELOW)

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

PLEASE NOTE THAT THE DEFINITION OF GROWING STOCK HAS CHANGED AND SHOULD BE REPORTED AS GROWING STOCK DBH 10 CM INCLUDING THE STEM FROM GROUND LEVEL UP TO A DIAMETER OF 0 CM, EXCLUDING BRANCHES.

Table 3c






Category		Net annual increment (m ³ per hectare and year)				
		Forest				
		1990	2000	2005	2010	2015
CFRQ	Net annual increment	N/A	N/A	N/A	N/A	N/A
CFRQ	... of which coniferous	N/A	N/A	N/A	N/A	N/A
CFRQ	... of which broadleaved	N/A	N/A	N/A	N/A	N/A

Table 3d

Category		Biomass (million metric tonnes oven-dry weight)									
		Forest					Other wooded land				
		1990	2000	2005	2010	2015	1990	2000	2005	2010	2015
CFRQ	Above ground biomass	287	234	207.6	168.4	128.1	13.7	23.8	28.8	28.8	28.8
CFRQ	Below ground biomass	77.5	63.2	56.1	45.5	34.6	3.7	6.4	7.8	7.8	7.8
CFRQ	Dead wood	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
TOTAL		364.50	297.20	263.70	213.90	162.70	17.40	30.20	36.60	36.60	36.60

Table 3e

Category		Carbon (Million metric tonnes)									
		Forest					Other wooded land				
		1990	2000	2005	2010	2015	1990	2000	2005	2010	2015
CFRQ	Carbon in above ground biomass	134.9	110	97.6	79.1	60.2	6.4	11.2	13.5	13.5	13.5
CFRQ	Carbon in below ground biomass	36.4	29.7	26.4	21.4	16.3	1.7	3	3.7	3.7	3.7

	<i>Subtotal Living biomass</i>	171.3	139.7	123.9	100.5	76.5	8.2	14.2	17.2	17.2	17.2
	Carbon in dead wood	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Carbon in litter	10	8.1	7.2	5.8	4.4	2.9	5	6	6	6
	<i>Subtotal Dead wood and litter</i>	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Soil carbon	308.8	251.5	222.9	178.9	135	89.1	154.5	187.2	187.1	187.1
TOTAL		490.10	399.30	354.10	285.20	215.90	100.10	173.70	210.40	210.30	210.30

Tiers

Variable/category	Tier for status	Tier for trend
Total growing stock	Tier 2	Tier 1
Net annual increment	N/A	N/A
Above ground biomass	Tier 1	Tier 1
Below ground biomass	Tier 1	Tier 1
Dead wood	N/A	N/A
Carbon in above-ground biomass	Tier 2	Tier 1
Carbon in below ground biomass	Tier 1	Tier 1
Carbon in dead wood and litter	Tier 1	Tier 1
Soil carbon	Tier 2	Tier 1

Tier criteria

Category	Tier for status	Tier for reported trend
Total growing stock	Tier 3: Data sources Recent 10 years National Forest Inventory or remote sensing with ground truthing or programme for repeated compatible NFI 10 years Domestic volume functions Tier 2: Data sources/registers and statistics modelling or old NFI 10 years or partial field inventory Tier 1: Other data sources	Tier 3: Estimate based on repeated compatible tiers 3 (tier for status) Domestic growth functions Tier 2: Estimate based on repeated compatible tier 2 or combination tier 3 and 2 or 1 tier for status Tier 1: Other

Net annual increment	Tier 3: Scientifically tested national volume and growth functions Tier 2: Selection of volume and growth functions as relevant as possible Tier 1: Other	Tier 3: Confirmation/adjustment of functions used through scientific work Tier 2: Review work done to seek alternative functions Tier 1: Other
Biomass	Tier 3: Country-specific national or sub-national biomass conversion expansion factors applied or other domestic or otherwise nationally relevant biomass studies Tier 2: Application of country specific national or sub-national biomass conversion factors from other country with similar climatic conditions and forest types Tier 1: International/regional default biomass expansion factors applied	Tier 3 : Estimate based on repeated compatible tiers 3 (tier for status) Tier 2 : Estimate based on repeated compatible tier 2 or combination tier 3 and 2 or 1 (tier for status) Tier 1 : Other
<ul style="list-style-type: none"> • Carbon in above ground biomass • Carbon in below ground biomass • Carbon in dead wood and litter • Soil carbon 	Tier 3: Country-specific national or sub-national biomass conversion expansion factors applied Tier 2: Application of country specific national or sub-national biomass conversion factors from other country with similar climatic conditions and forest types Tier 1: International/regional default biomass expansion factors applied	Tier 3 : Estimate based on repeated compatible tiers 3 (tier for status) Tier 2 : Estimate based on repeated compatible tier 2 or combination tier 3 and 2 or 1 (tier for status) Tier 1 : Other

3.5 Comments on growing stock biomass and carbon

Category	Comments related to data definitions etc	Comments on the reported trend
Total growing stock	N/A	N/A
Growing stock of broadleaved coniferous	N/A	N/A
Growing stock composition	N/A	N/A
Net annual increment	N/A	N/A
Above-ground biomass	N/A	N/A
Below-ground biomass	N/A	N/A
Dead wood	N/A	N/A
Carbon in above-ground biomass	N/A	N/A
Carbon in below-ground biomass	N/A	N/A
Carbon in dead wood	N/A	N/A
Carbon in litter	N/A	N/A
Soil carbon	N/A	N/A

Other general comments to the table

N/A

4. What is the status of forest production and how has it changed over time?

Documents for this question:

- [Guide for country reporting FRA 2015](#)
- [FRA 2015 Terms and Definitions](#)

4.1 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.
Non wood forest product (NWFP)	Goods derived from forests that are tangible and physical objects of biological origin other than wood.
Commercial value of NWFP	For the purpose of this table, value is defined as the commercial market value at the forest gate.
Category	Definition
Production forest	Forest area designated primarily for production of wood, fibre, bio-energy and/or non-wood forest products.
Multiple use forest	Forest area designated for more than one purpose and where none of these alone is considered as the predominant designated function.
Total wood removals	The total of industrial round wood removals and woodfuel removals.
...of which woodfuel	The wood removed for energy production purposes, regardless whether for industrial, commercial or domestic use.

4.2 National data

4.2.1 Data sources

	References to sources of information	Variables	Years	Additional comments
1	F. I. B. Kayanja* and D. Byarugaba 1999, Disappearing forests of Uganda: The way forward. Mbarara University of Science and Technology	Designation	1999	N/A
2	Forest Conservation Master Plan (2000)	Designation	2000	N/A
3	N/A	N/A	N/A	N/A
4	N/A	N/A	N/A	N/A

4.2.2 Classification and definitions

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

N/A	N/A
N/A	N/A
N/A	N/A
N/A	N/A

4.2.3 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).

4.3 Analysis and processing of national data

4.3.1 Adjustment

4.3.2 Estimation and forecasting

4.3.3 Reclassification

4.4 Data

Table 4a



Categories		Forest area (000 hectares)				
		1990	2000	2005	2010	2015
	Production forest	356.6	356.6	356.6	356.6	356.6
	Multiple use forest	0	0	0	0	0

Table 4b

Rank	Name of product	Key species	Commercial value of NWFP removals 2010 (value 1000 local currency)	NWFP category
1 st	N/A	N/A	N/A	N/A
2 nd	N/A	N/A	N/A	N/A
3 rd	N/A	N/A	N/A	N/A
4 th	N/A	N/A	N/A	N/A
5 th	N/A	N/A	N/A	N/A
6 th	N/A	N/A	N/A	N/A
7 th	N/A	N/A	N/A	N/A
8 th	N/A	N/A	N/A	N/A
9 th	N/A	N/A	N/A	N/A
10 th	N/A	N/A	N/A	N/A
TOTAL			.00	

2010	
Name of local currency	N/A

Category
Plant products / raw material
1 Food
2 Fodder
3 Raw material for medicine and aromatic products
4 Raw material for colorants and dyes
5 Raw material for utensils handicrafts construction
6 Ornamental plants
7 Exudates
8 Other plant products
Animal products / raw material
9 Living animals
10 Hides skins and trophies
11 Wild honey and beeswax
12 Wild meat
13 Raw material for medicine
14 Raw material for colorants
15 Other edible animal products
16 Other non-edible animal products

Table 4c Pre-filled data from FAOSTAT

Year	FRA 2015 category (1000 m ³ u.b.)	
	Total wood removals	...of which woodfuel
1990	31004.5	29265.48
1991	31678.9	29865.92

1992	32671.2	30679.21
1993	33418.1	31225.08
1994	34378	31932.03
1995	34880.4	32181.39
1996	35430.3	32622.35
1997	35967	33045.02
1998	36409.1	33368.1
1999	36901.3	33726.32
2000	37265.3	34090.32
2001	37786	34611.02
2002	38316.8	35141.82
2003	38858	35682.95
2004	39480.6	36234.6
2005	40120	36797
2006	40746.3	37343.3
2007	41685.2	37900.2
2008	42357.8	38467.8
2009	43029.5	39046.47
2010	43729.4	39636.36
2011	43729.4	39636.36

Tiers

Category	Tier for status	Tier for reported trend
Production forest	Tier 2	Tier 1
Multiple use forest	Tier 2	Tier 2

Tier Criteria

Category	Tier for status	Tier for reported trend
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Production forest Multiple use forest	Tier 3: Updated including field verifications national forest maps including functions Tier 2: Forest maps older than 6 years including forest functions Tier 1: Other	Tier 3 : Estimate based on repeated compatible tiers 3 (tier for status) Tier 2 : Estimate based on repeated compatible tier 2 or combination tier 3 and 2 or 1 (tier for status) Tier 1 : Other
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4.5 Comments

Category	Comments related to data definitions etc	Comments on the reported trend
Production forest	N/A	N/A
Multiple use forest	N/A	N/A
Total wood removals	N/A	N/A
Commercial value of NWFP	N/A	N/A

Other general comments to the table

N/A

5. How much forest area is managed for protection of soil and water and ecosystem services?

Documents for this question:

- [Guide for country reporting FRA 2015](#)
- [FRA 2015 Terms and Definitions](#)

5.1 Categories and definitions

Category	Definition
Protection of soil and water	Forest area designated or managed for protection of soil and water
...of which production of clean water (<i>sub-category</i>)	Forest area primarily designated or managed for water production, where most human uses are excluded or heavily modified to protect water quality.
...of which coastal stabilization (<i>sub-category</i>)	Forest area primarily designated or managed for coastal stabilization.
...of which desertification control (<i>sub-category</i>)	Forest area primarily designated or managed for desertification control.
...of which avalanche control (<i>sub-category</i>)	Forest area primarily designated or managed to prevent the development or impact of avalanches on human life assets or infrastructure.
...of which erosion, flood protection or reducing flood risk (<i>sub-category</i>)	Forest area primarily designated or managed for protecting communities or assets from the impacts of erosion riparian floods and landslides or for providing flood plain services.
...of which other (<i>sub-category</i>)	Forest area primarily designated or managed for other protective functions.
Ecosystem services, cultural or spiritual values	Forest area primarily designated or managed for selected ecosystem services or cultural or spiritual values.
...of which public recreation (<i>sub-category</i>)	Forest area designated or managed for public recreation.
...of which carbon storage or sequestration (<i>sub-category</i>)	Forest area designated or managed for carbon storage or sequestration.
...of which spiritual or cultural services (<i>sub-category</i>)	Forest area designated or managed for spiritual or cultural services.
...of which other (<i>sub-category</i>)	Forest area designated or managed for other ecosystem services.

5.2 National data

5.2.1 Data sources

	References to sources of information	Variables	Years	Additional comments
1	N/A	N/A	N/A	N/A
2	N/A	N/A	N/A	N/A

3	N/A	N/A	N/A	N/A
4	N/A	N/A	N/A	N/A

5.2.2 Classification and definitions

National class	Definition
N/A	N/A
N/A	N/A
N/A	N/A
N/A	N/A

5.2.3 Original data

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5.3 Analysis and processing of national data

5.3.1 Adjustment

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5.3.2 Estimation and forecasting




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5.3.3 Reclassification

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5.4 Data

Table 5a

Categories		Forest area (1000 hectares)				
		1990	2000	2005	2010	2015
	Protection of soil and water	N/A	N/A	N/A	N/A	N/A
	... of which production of clean water	N/A	N/A	N/A	N/A	N/A
	... of which coastal stabilization	N/A	N/A	N/A	N/A	N/A

	... of which desertification control	N/A	N/A	N/A	N/A	N/A
	... of which avalanche control	N/A	N/A	N/A	N/A	N/A
	... of which erosion, flood protection or reducing flood risk	N/A	N/A	N/A	N/A	N/A
	... of which other (please specify in comments below the table)	N/A	N/A	N/A	N/A	N/A

Other

N/A

Table 5b

Categories	Forest area (1000 hectares)				
	1990	2000	2005	2010	2015
Ecosystem services, cultural or spiritual values	N/A	N/A	N/A	N/A	N/A
...of which public recreation	N/A	N/A	N/A	N/A	N/A
...of which carbon storage or sequestration	N/A	N/A	N/A	N/A	N/A
...of which spiritual or cultural services	N/A	N/A	N/A	N/A	N/A
...of which other (please specify in comments below the table)	N/A	N/A	N/A	N/A	N/A

Tiers

Category	Tier for reported trend	Tier for status
Protection of soil and water	N/A	N/A
Ecosystem services, cultural or spiritual values	N/A	N/A

Tier criteria

Category	Tier for status	Tier for reported trend
----------	-----------------	-------------------------

Protection of soil and water	Tier 3: High reliability data derived either from high intensity sample survey or data obtained from national or state agencies responsible for regulations or legislation relating to soil and water protection. Tier 2: Approaches based on low intensity or incomplete sample-based surveys or studies that provide data for specific areas that is extrapolated through statistical analysis to national level estimates. Tier 1: Other	Tier 3 : Estimate based on repeated compatible tiers 3 (tier for status) Tier 2 : Estimate based on repeated compatible tier 2 or combination tier 3 and 2 or 1 (tier for status) Tier 1 : Other
<ul style="list-style-type: none"> • Cultural or spiritual values • Public recreation • Spiritual or cultural services • Other 	Tier 3: High reliability data derived either from high intensity sample survey or data obtained from national or state agencies responsible for regulations. Tier 2: Approaches based on low intensity or incomplete sample-based surveys or studies that provide data for specific areas that is extrapolated through statistical analysis to national level estimates. Tier 1: Other	Tier 3 : Estimate based on repeated compatible tiers 3 (tier for status) Tier 2 : Estimate based on repeated compatible tier 2 or combination tier 3 and 2 or 1 (tier for status) Tier 1 : Other

5.5 Comments

Category	Comments related to data definitions etc	Comments on the reported trend
Protection of soil and water	N/A	N/A
Production of clean water	N/A	N/A
Coastal stabilization	N/A	N/A
Desertification control	N/A	N/A
Avalanche control	N/A	N/A
Erosion, flood protection or reducing flood risk	N/A	N/A
Other protective functions	N/A	N/A
Ecosystem services, cultural or spiritual values	N/A	N/A
Public recreation	N/A	N/A
Carbon storage or sequestration	N/A	N/A
Spiritual or cultural services	N/A	N/A
Other ecosystem services	N/A	N/A

Other general comments to the table

N/A

6. How much forest area is protected and designated for the conservation of biodiversity and how has it changed over time?

Documents for this question:

- [Guide for country reporting FRA 2015](#)
- [FRA 2015 Terms and Definitions](#)

6.1 Categories and definitions

Category	Definition
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.
Forest area within protected areas	Forest area within formally established protected areas independently of the purpose for which the protected areas were established.

6.2 National data

6.2.1 Data sources

	References to sources of information	Variables	Years	Additional comments
1	F. I. B. Kayanja* and D. Byarugaba 1999, Disappearing forests of Uganda: The way forward. Mbarara University of Science and Technology	Designation	1999	N/A
2	Forest Conservation Master Plan (2000)	Designation	2000	N/A
3	N/A	N/A	N/A	N/A
4	N/A	N/A	N/A	N/A

6.2.2 Classification and definitions

National class	Definition
N/A	N/A
N/A	N/A
N/A	N/A
N/A	N/A

6.2.3 Original data

See 4.2.3.

6.3 Analysis and processing of national data

6.3.1 Adjustment



6.3.2 Estimation and forecasting

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

6.3.3 Reclassification

6.4 Data

Table 6

Categories		Forest area (000 hectares)				
		1990	2000	2005	2010	2015
	Conservation of biodiversity	1079.6	1079.6	1079.6	1079.6	1079.6
	Forest area within protected areas	731	731	731	731	731

Tiers

Category	Tier for status	Tier for reported trend
Conservation of biodiversity	Tier 1	Tier 1
Forest area within protected areas	Tier 1	Tier 1

Tier criteria

Category	Tier for status	Tier for reported trend
----------	-----------------	-------------------------

<ul style="list-style-type: none"> • Conservation of biodiversity • Forests within protected areas 	<p>Tier 3: Data obtained from national or state agencies responsible for conservation and protected area or legislation relating to area protection. Tier 2: Studies that provide data for specific areas that is extrapolated through statistical analysis to national level estimates Tier 1 Other</p>	<p>Tier 3 : Estimate based on repeated compatible tiers 3 (tier for status) Tier 2 : Estimate based on repeated compatible tier 2 or combination tier 3 and 2 or 1 (tier for status) Tier 1 : Other</p>
--	--	--

6.5 Comments

Category	Comments related to data definitions etc	Comments on the reported trend
Conservation of biodiversity	N/A	N/A
Forest area within protected areas	N/A	N/A

Other general comments to the table
N/A

7. What is the area of forest affected by woody invasive species?

Documents for this question:

- [Guide for country reporting FRA 2015](#)
- [FRA 2015 Terms and Definitions](#)

7.1 Categories and definitions

Category	Definition
Invasive species	Species that are non-native to a particular ecosystem and whose introduction and spread cause, or are likely to cause, socio-cultural, economic or environmental harm or harm to human health.

7.2 National data

7.2.1 Data sources

	References to sources of information	Variables	Years	Additional comments
1	N/A	N/A	N/A	N/A
2	N/A	N/A	N/A	N/A
3	N/A	N/A	N/A	N/A
4	N/A	N/A	N/A	N/A

7.2.2 Classification and definitions

National class	Definition
N/A	N/A
N/A	N/A
N/A	N/A
N/A	N/A

7.2.3 Original data

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7.3 Analysis and processing of national data

7.3.1 Adjustment

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7.3.2 Estimation and forecasting

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7.3.3 Reclassification

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7.4 Data

Table 7

Scientific name of woody invasive species	Forest area affected (000 ha)	
	2005	2010
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
Total	N/A	N/A

Tiers

Category	Tier for status	Tier for reported trend
Invasive species	N/A	N/A

Tier Criteria

Category	Tier for status	Tier for reported trend
----------	-----------------	-------------------------

Invasive species	Tier 3: Systematic assessment in forest inventory or other survey (e.g. by conservation department) within the last 5 years) Tier 2: Systematic assessment in forest inventory or other survey (e.g. by conservation department conducted more than 5 years ago) Tier 1: Other	Tier 3 : Estimate based on repeated compatible tiers 3 (tier for status) Tier 2 : Estimate based on repeated compatible tier 2 or combination tier 3 and 2 or 1 (tier for status) Tier 1 : Other
------------------	--	---

7.5 Comments

Category	Comments related to data definitions etc	Comments on the reported trend
Invasive species	N/A	N/A

Other general comments to the table
N/A

8. How much forest area is damaged each year?

Documents for this question:

- [Guide for country reporting FRA 2015](#)
- [FRA 2015 Terms and Definitions](#)

8.1 Categories and definitions

Category	Definition
Number of fires	Number of fires per year
Burned area	Area burned per year
Outbreaks of insects	A detectable reduction in forest health caused by a sudden increase in numbers of harmful insects.
Outbreaks of diseases	A detectable reduction in forest health caused by a sudden increase in numbers of harmful pathogens, such as bacteria, fungi, phytoplasma or virus.
Severe weather events	Damage caused severe weather events, such as snow, storm, drought, etc.

8.2 National data

8.2.1 Data sources

	References to sources of information	Variables	Years	Additional comments
1	N/A	N/A	N/A	N/A
2	N/A	N/A	N/A	N/A
3	N/A	N/A	N/A	N/A
4	N/A	N/A	N/A	N/A

8.2.2 Classification and definitions

National class	Definition
N/A	N/A
N/A	N/A
N/A	N/A
N/A	N/A

8.2.3 Original data

--

8.3 Analysis and processing of national data

8.3.1 Adjustment

8.3.2 Estimation and forecasting

8.3.3 Reclassification

8.4 Data

Table 8a





Category		000 ha, number of fires									
		2003		2004		2005		2006		2007	
		000 ha	#	000 ha	#	000 ha	#	000 ha	#	000 ha	#
	Total land area burned	3260.04	N/A	2266.29	N/A	4943.75	N/A	681.38	N/A	3733.97	N/A
	... of which forest area burned	293.92	N/A	108.69	N/A	36.24	N/A	102.11	N/A	79.38	N/A
Category		2008		2009		2010		2011		2012	
		000 ha	#	000 ha	#	000 ha	#	000 ha	#	000 ha	#
	Total land area burned	3365.55	N/A	1819.53	N/A	2670.71	N/A	1632.88	N/A	3539.55	N/A
	... of which forest area burned	35.67	N/A	107.75	N/A	39.74	N/A	59.94	N/A	101.94	N/A

Table 8b

Outbreak category	Description/name	Year(s) of latest outbreak	Area damaged (000 hectares)
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A

N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A

Outbreak category
1 Insects
2 Diseases
3 Severe weather events

Tiers

Category	Tier for status	Tier for trend
Area affected by fire	Tier 2	Tier 2
<ul style="list-style-type: none"> • Insects • Diseases • Severe weather events 	N/A	N/A

Tier criteria

Category	Tier for status	Tier for reported trend
Burned area	Tier 3 : National fire monitoring routines Tier 2 : Remote sensing surveys Tier 1 : Other	Tier 3 : Estimate based on repeated compatible tiers 3 (tier for status) Tier 2 : Estimate based on repeated compatible tier 2 or combination tier 3 and 2 or 1 (tier for status) Tier 1 : Other
<ul style="list-style-type: none"> • Insects • Diseases • Severe weather events 	Tier 3 : Systematic survey (e.g. via inventory or aerial damage assessment) Tier 2 : Management records Tier 1 : Other	Tier 3 : Estimate based on repeated compatible tiers 3 (tier for status) Tier 2 : Estimate based on repeated compatible tier 2 or combination tier 3 and 2 or 1 (tier for status) Tier 1 : Other

8.5 Comments

Category	Comments related to data definitions etc	Comments on the reported trend
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Burned area	N/A	N/A
Insects	N/A	N/A
Diseases	N/A	N/A
Severe weather events	N/A	N/A

Other general comments to the table

N/A

9. What is the forest area with reduced canopy cover?

Documents for this question:

- [Guide for country reporting FRA 2015](#)
- [FRA 2015 Terms and Definitions](#)

Category	Definition
Reduction in canopy cover	Forest that has undergone a reduction of canopy cover of more than 20% between the years 2000 and 2010 within the forest canopy cover range of 30-80% as detected by the MODIS VCF sensor.

Table 9

Category	Area of forest with reduced canopy cover (000 ha)
Reduction in canopy cover	1367.6

Tiers

Category	Tier for reported trend
Reduction in canopy cover	Tier 2

Tier criteria

Category	Tier for reported trend
Reduction in canopy cover	Tier 3 : Remote sensing with ground truthing and/or Landsat imagery Tier 2 : Remote sensing using Modis (using pre-filled data provided by FAO) Tier 1 : Expert opinion

Comments

Category	Comments related to data definitions etc
Reduction in canopy cover	N/A

Other general comments

--

10. What forest policy and regulatory framework exists to support implementation of sustainable forest management SFM?

Documents for this question:

- [Guide for country reporting FRA 2015](#)
- [FRA 2015 Terms and Definitions](#)

10.1 Categories and definitions

Category	Definition
Policies supporting sustainable forest management	Policies or strategies that explicitly encourage sustainable forest management.
Legislation and regulations supporting sustainable forest management	Legislation and regulations that govern and guide sustainable forest management, operations and use.

10.2 National data

10.2.1 Data sources

	References to sources of information	Variables	Years	Additional comments
1	National Forest Plan	N/A	2011-2021	N/A
2	National Forestry and Tree planting Act	N/A	2003	N/A
3	National Forestry and Tree planting Regulations	N/A	2013	N/A
4	Uganda Forestry Policy	N/A	2001	N/A

10.2.2 Classification and definitions

National class	Definition
N/A	N/A
N/A	N/A
N/A	N/A
N/A	N/A

10.2.3 Original data

--

10.3 Data

Table 10

Category				
	National	Sub-national		
		Regional	Provincial/State	Local
Policies supporting sustainable forest management	yes			yes
... of which, in <u>publicly</u> owned forests	yes			yes
... of which, in <u>privately</u> owned forests	yes			yes
Legislation and regulations supporting sustainable forest management	yes			yes
... of which, in <u>publicly</u> owned forests	yes			yes
... of which, in <u>privately</u> owned forests	yes			yes

10.4 Comments

Variable / category	Comments related to data definitions etc
Policies supporting sustainable forest management	N/A
Legislation and regulations supporting sustainable forest management	N/A

Other general comments

--

11. Is there a national platform that promotes stakeholder participation in forest policy development?

Documents for this question:

- [Guide for country reporting FRA 2015](#)
- [FRA 2015 Terms and Definitions](#)

11.1 Categories and definitions

Category	Definition
National stakeholder platform	A recognized procedure that a broad range of stakeholders can use to provide opinions, suggestions, analysis, recommendations and other input into the development of national forest policy.

11.2 National data

11.2.1 Data sources

	References to sources of information	Years	Additional comments
1	N/A	N/A	N/A
2	N/A	N/A	N/A
3	N/A	N/A	N/A
4	N/A	N/A	N/A

Table 11

Is there a national platform that promotes or allows for stakeholder participation in forest policy development?	yes
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11.3 Comments

Category	Comments related to data definitions etc
National stakeholder platform	The Uganda Forestry Working Group coordinated by Environmental Alert, and of which Government is a Secretary provides a platform where stakeholders participate in forest policy development

Other general comments

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12. What is the forest area intended to be in permanent forest land use and how has it changed over time?

Documents for this question:

- [Guide for country reporting FRA 2015](#)
- [FRA 2015 Terms and Definitions](#)

12.1 Categories and definitions

Category	Definition
Forest area intended to be in permanent forest land use	Forest area that is designated or expected to be retained as forest and is highly unlikely to be converted to other land use.
...of which permanent forest estate (<i>sub-category</i>)	Forest area that is designated by law or regulation to be retained as forest and may not be converted to other land use.

12.2 National data

12.2.1 Data sources

	References to sources of information	Variables	Years	Additional comments
1	F. I. B. Kayanja* and D. Byarugaba 1999, Disappearing forests of Uganda: The way forward. Mbarara University of Science and Technology	Designation	1999	N/A
2	Forest Conservation Master Plan (2000)	Designation	2000	N/A
3	N/A	N/A	N/A	N/A
4	N/A	N/A	N/A	N/A

12.2.2 Classification and definitions

National class	Definition
N/A	N/A
N/A	N/A
N/A	N/A
N/A	N/A

12.2.3 Original data

See 4.2.3.

12.3 Analysis and processing of national data



12.3.1 Adjustment

12.3.2 Estimation and forecasting

12.3.3 Reclassification

12.4 Data

Table 12

Categories		Forest area 2010 (000 ha)
	Forest area intended to be in permanent forest land use	
	... of which permanent forest estate	1900

Tiers

Category	Tier for status
Forest area intended to be in permanent forest land use	Tier 1
Permanent forest estate	Tier 1

Tier Criteria

Category	Tier for status
Forest area intended to be in permanent forest land use	Tier 3 : National or sub-national land use plans strategy documents or other reports within the past 10 years Tier 2 : National or sub-national land use plans strategy documents or other reports within the past 20 years Tier 1 : Other
Permanent forest estate	Tier 3 : National or sub-national land use plans strategy documents or other reports within the past 10 years Tier 2 : National or sub-national land use plans strategy documents or other reports within the past 20 years Tier 1 : Other

12.5 Comments

Category	Comments related to data definitions etc
Forest area intended to be in permanent forest land use	N/A
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.

Other general comments

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13. How does your country measure and report progress towards SFM at the national level?

Documents for this question:

- [Guide for country reporting FRA 2015](#)
- [FRA 2015 Terms and Definitions](#)

13.1 Categories and definitions

Category	Definition
Forest area monitored under a national forest monitoring framework	Forest area monitored by a national monitoring framework or systems that provide measurement based periodic monitoring of forest extent and quality.
Forest reporting at national scale	National reporting of forest extent and characteristics that includes some measure of progress toward sustainable forest management.

13.2 National data

13.2.1 Data sources

	References to sources of information	Variables	Years	Additional comments
1	N/A	N/A	N/A	N/A
2	N/A	N/A	N/A	N/A
3	N/A	N/A	N/A	N/A
4	N/A	N/A	N/A	N/A

13.2.2 Classification and definitions

National class	Definition
N/A	N/A
N/A	N/A
N/A	N/A
N/A	N/A

13.3 Data

Table 13a

Category	% of total forest area	Most recent year	Check all boxes that apply					
			Continuous	Periodic	Permanent ground plots	Temporary ground plots	Aerial/remote sensing sample based	Aerial/remote sensing full coverage
Forest inventory	100	2008			yes	yes		
Other field assessments	N/A	2011			yes			
Updates to other sources	N/A	N/A						
Expert estimate	N/A	N/A						

Table 13b

Type of forest reporting used at national scale	Check boxes that apply
1 Criteria and Indicators reporting	
2 Periodic national state of the forest report	yes
3 Other (please document)	
4 None	

Other type of forest reporting

National Forest Authority carries out various types of inventories aimed at inventories addressing management needs at specific levels/needs. Broadly the following types of inventories are currently being carried out. • Exploratory Inventory(EI) • Integrated Stock Survey and Mapping Inventory (ISSMI) • Yield Monitoring and Growth Modeling. (Permanent Sample Plots-PSPs) • Management Plantation Inventory • Biodiversity Inventory • Biomass Survey

13.4 Comments

Category	Comments
• Exploratory Inventory (EI)	EI is normally undertaken when a reserve is first being brought under management or when management is being reintroduced after a lapse of many years. The intention is to have an idea of possible annual allowable cut, the felling series and information on the major commercial species in the reserve.

<ul style="list-style-type: none"> • Biomass Inventory/Survey 	<p>NFA adopted a two-stage sampling technique in the assessment of the biomass resource in Uganda. In the first stage (Mapping Stage), the country's Land use/cover (LUC) were stratified and mapped in order to quantify the area and distribution of each LUC. While in the second stage (Biomass Inventory), an inventory of the biomass resource from sample plots is done in order to quantify the standing stock of biomass in the country. For purposes of monitoring biomass dynamics on a periodic basis, the positions of these sample plots are geo-referenced by the use of Global Positioning Systems (GPS). Mapping using 2010 is currently going on. Biomass field plots were last measured in 2008. Reassessment is long of due but there serious financial constraints.</p>
N/A	N/A

Other general comments

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14. What is the area of forest under a forest management plan and how is this monitored?

Documents for this question:

- [Guide for country reporting FRA 2015](#)
- [FRA 2015 Terms and Definitions](#)

14.1 Categories and definitions

Category	Definition
Forest area with management plan	Forest area that has a long-term documented management plan, aiming at defined management goals which is periodically revised
...of which for production (<i>sub-category</i>)	Forest management plan mainly focused on production
...of which for conservation (<i>sub-category</i>)	Forest management plan mainly focused on conservation
Monitoring of forest management plans	Government monitoring of forest management plan implementation conducted through field visits or audits of forest management plan performance

14.2 National data

14.2.1 Data sources

	References to sources of information	Variables	Years	Additional comments
1	N/A	N/A	N/A	N/A
2	N/A	N/A	N/A	N/A
3	N/A	N/A	N/A	N/A
4	N/A	N/A	N/A	N/A

14.3 Data

Table 14a

Forest plan type	Forest area 2010 (000 ha)
Forest area with management plan	N/A
... of which for production	N/A
... of which for conservation	N/A

Table 14b

Indicate which (if any) of the following are required in forest management plans in your country	
1 Soil and water management	yes

2 High conservation value forest delineation	yes
3 Social considerations community involvement	yes

Table 14c

Percent of area under forest management plan that is monitored annually	N/A
--	------------

Tiers

Category	Tier for status
Forest area with management plan	N/A
Percent of area under forest management plan that is monitored annually	N/A

Tier criteria

Category	Tier for status
Forest area with management plan	Tier 3 : Reports that describe national records 5 years old or less that contain long-term forest monitoring plans Tier 2 : Industry or other records indicating the presence of a long-term forest management plan Tier 1 : Other
Percent of area under forest management plan that is monitored annually	Tier 3 : Government documentation of monitoring extent Tier 2 : Reports from forest managers or other documental sources Tier 1 : Other

14.4 Comments

Category	Comments
Forest area with management plan	N/A
N/A	N/A
N/A	N/A

Other general comments

--

15. How are stakeholders involved in the management decision making for publicly owned forests?

Documents for this question:

- [Guide for country reporting FRA 2015](#)
- [FRA 2015 Terms and Definitions](#)

15.1 Categories and definitions

Category	Definition
Stakeholder involvement	Stakeholder involvement is defined as significant inputs into at least one aspect of forest management at the operational scale

Table 15

Please indicate the type of stakeholder involvement in forest management decision making required in your country	
1. Planning phase	yes
2. Operations phase	
3. Review of operations	yes

Tiers

Category	Tier for status
Type of stakeholder inputs	Tier 2

Tier criteria

Category	Tier for status
Type of stakeholder inputs	Tier 3 : Government (national or sub-national) documentation of stakeholder inputs Tier 2 : Government (national or subnational) requirement but stakeholder inputs not documented Tier 1 : Other

15.2 Comments

Category	Comments
N/A	N/A
N/A	N/A
N/A	N/A

Other general comments

--

16. What is the area of forest under an independently verified forest certification scheme?

Documents for this question:

- [Guide for country reporting FRA 2015](#)
- [FRA 2015 Terms and Definitions](#)

16.1 Categories and definitions

Category	Definition
FSC certification	Forest area certified under the Forest Stewardship Council certification scheme
PEFC certification	Forest area certified under the Programme for the Endorsement of Forest Certification scheme
Other international forest management certification	Forest area certified under an international forest management certification scheme with published standards and is independently verified by a third-party, excluding FSC and PEFC certification.
Certified forest area using a domestic forest management certification scheme	Area certified under a forest management certification scheme with published standards that are nationally recognized and independently verified by a thirdparty

16.2 Data

Table 16a













International forest management certification		Forest area (000 ha)						
		2000	2001	2002	2003	2004	2005	2006
	FSC	0	0	191.6	191.6	191.6	191.6	191.6
	PEFC	0	0	0	0	0	0	0
	Other	0	0	0	0	0	0	0
		2007	2008	2009	2010	2011	2012	
	FSC	112.1	204.21	222.85	101.27	106.95	112.1	
	PEFC	0	0	0	0	0	0	
	Other	0	0	0	0	0	0	

Table 16b

Domestic forest management certification		Forest area (000 ha)						
		2000	2001	2002	2003	2004	2005	2006
	N/A	0	0	0	0	0	0	0
	N/A	0	0	0	0	0	0	0
	N/A	0	0	0	0	0	0	0

		2007	2008	2009	2010	2011	2012	
		0	0	0	0	0	0	
		0	0	0	0	0	0	
		0	0	0	0	0	0	

Tier criteria

Category	Tier for status
International forest management certification	Tier 3: International forest management scheme records maintained by the certifying organization for the reporting year Tier 2: International forest management scheme records reported by the certifying organization for a period 2 years prior to the reporting year Tier: 1 Other
Domestic forest management certification	Tier 3: National registry reports for domestic forest management certification maintained by the certifying organization for the reporting year Tier 2: Domestic forest management scheme records reported by the certifying organization for a period 2 years prior to the reporting year Tier: 1 Other

Tiers

Category	Tier for status
International forest management certification	Tier 3
Domestic forest management certification	N/A

16.3 Comments

Category	Comments related to data definitions etc
Certified forest area using an international forest management certification scheme	N/A
Domestic forest management certification	N/A

Other general comments

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17. How much money do governments collect from and spend on forests?

Documents for this question:

- [Guide for country reporting FRA 2015](#)
- [FRA 2015 Terms and Definitions](#)

17.1 Categories and definitions

Category	Definition
Forest revenue	All government revenue collected from the domestic production and trade of forest products and services. For this purpose revenue include: <ul style="list-style-type: none"> • Goods : roundwood; sawnwood; biomass; woodbased panels; pulp and paper and non-wood forest products. • Services : including concession fees and royalties, stumpage payments, public timber sales revenue taxes and charges based on forest area or yield, taxes on domestic trade and export of forest products, special levies on forestry activities and payments into forest related funds, other miscellaneous inspection, licence and administrative fees levied by forest administrations, permit and licence fees for recreation and other forest related activities.
Public expenditure on forestry	All government expenditure on forest related activities.

17.2 National data

17.2.1 Data sources

	References to sources of information	Variables	Years	Additional comments
1	N/A	N/A	N/A	N/A
2	N/A	N/A	N/A	N/A
3	N/A	N/A	N/A	N/A
4	N/A	N/A	N/A	N/A

17.3 Data

Table 17

Category	Revenues / expenditures (000 local currency)		
	2000	2005	2010
Forest revenue	N/A	N/A	N/A
Public expenditure on forestry	N/A	N/A	N/A
	2000	2005	2010
Name of Local Currency	Uganda Shilling	Uganda Shilling	Uganda Shilling

17.4 Comments

Category	Comments related to data definitions etc
Forest revenue	N/A
Public expenditure on forestry	N/A
Other general comments	N/A

Other general comments

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18. Who owns and manages the forests and how has this changed?

Documents for this question:

- [Guide for country reporting FRA 2015](#)
- [FRA 2015 Terms and Definitions](#)

18.1 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.
...of which owned by the state at national scale (<i>sub-category</i>)	Forest owned by the State at the national scale or administrative units of the public administration or by institutions or corporations owned by the public administration.
...of which owned by the state at the sub-national government scale (<i>sub-category</i>)	Forest owned by the State at the sub-national government scale 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 cooperatives corporations and other business entities, private, religious and educational institutions, pension or investment funds, NGOs, nature conservation associations and other private institutions.
...of which individuals (<i>sub-category</i>)	Forest owned by individuals and families.
...of which private business entities and institutions (<i>sub-category</i>)	Forest owned by private corporations cooperatives companies and other business entities as well as private nonprofit organizations such as NGOs nature conservation associations, and private religious and educational institutions etc.
...of which local tribal and indigenous communities (<i>sub-category</i>)	Forest owned by a group of individuals belonging to the same community residing within or in the vicinity of a forest area or forest owned by communities of indigenous or tribal people The community members are coowners that share exclusive rights and duties and benefits contribute to the community development.
Unknown ownership	Forest area where ownership is unknown includes areas where ownership is unclear or disputed.
Categories related to management rights of public forests	Definition
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 companies	Forest management rights and responsibilities are transferred from the Public Administration to corporations, other business entities private cooperatives, private nonprofit 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.

18.2 National data

18.2.1 Data sources

	References to sources of information	Variables	Years	Additional comments
1	National Biomass Technical Report: 2003	Forest Cover	1989-1992	It is considered that the reference year is 1990.
2	National Forest Authority GIS & mapping	Forest Cover	2005	N/A
3	N/A	N/A	N/A	N/A
4	N/A	N/A	N/A	N/A

18.2.2 Classification and definitions

National class	Definition
N/A	N/A
N/A	N/A
N/A	N/A
N/A	N/A

18.2.3 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

18.3 Analysis and processing of national data

18.3.1 Adjustment

18.3.2 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;

for 2010 forest ownership is estimated 35% and 65% private. (*this estimate is derived from the fact more private forest is continuously being lost to other lands annually than the gazetted public forests*).

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.

18.3.3 Reclassification

18.4 Data

Table 18a

Categories		Forest area (1000 hectares)			
		1990	2000	2005	2010
	Public ownership	1425	1212	1097	964

	... of which owned by the state at national scale	N/A	N/A	N/A	N/A
	... of which owned by the state at the sub-national government scale	N/A	N/A	N/A	N/A
	Private ownership	3326	2657	2332	1789
	... of which owned by individuals	N/A	N/A	N/A	N/A
	... of which owned by private business entities and institutions	N/A	N/A	N/A	N/A
	... of which owned by local, tribal and indigenous communities	N/A	N/A	N/A	N/A
	Unknown ownership	0	0	0	0
TOTAL		4751.00	3869.00	3429.00	2753.00

Tiers

Category	Tier for status	Tier for reported trend
Public ownership	Tier 2	Tier 2
Private ownership	Tier 2	Tier 2
Unknown ownership	Tier 2	Tier 2

Tier criteria

Category	Tier for status	Tier for reported trend
Ownership	Tier 3: National forestry statistics registers of land titles or maps on land ownership or all forest area under one ownership category that is five years old or less. Tier 2: National forestry statistics registers of land titles or maps on land ownership or questionnaires that are more than five years old. Tier 1: Other	Tier 3 : Estimate based on repeated compatible tiers 3 (tier for status) Tier 2 : Estimate based on repeated compatible tier 2 or combination tier 3 and 2 or 1 (tier for status) Tier 1 : Other

Table 18b - Holder of management rights of public forests

Categories	Forest area (000 hectares)			
	1990	2000	2005	2010
Public Administration	N/A	N/A	N/A	N/A

Individuals	N/A	N/A	N/A	N/A
Private companies	N/A	N/A	N/A	N/A
Communities	N/A	N/A	N/A	N/A
Other	N/A	N/A	N/A	N/A
TOTAL	.00	.00	.00	.00

Category	Tier for reported trend	Tier for status
Public Administration	N/A	N/A
Individuals	N/A	N/A
Private companies	N/A	N/A
Communities	N/A	N/A
Other	N/A	N/A

18.5 Comments

Category	Comments related to data definitions etc	Comments on the reported trend
Public ownership	N/A	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	N/A	For the private ownership this negative trend is likely going to continue well beyond into the future.
Unknown ownership	N/A	N/A
Management rights	N/A	N/A

Other general comments to the table

N/A

19. How many people are directly employed in forestry?

Documents for this question:

- [Guide for country reporting FRA 2015](#)
- [FRA 2015 Terms and Definitions](#)

19.1 Categories and definitions

Category	Definition
Full-time equivalents (FTE)	A measurement equal to one person working full-time during a specified reference period.
Employment in forestry	Employment in activities related to production of goods derived from forests. This category corresponds to the ISIC/NACE Rev. 4 activity A02 (Forestry and logging).

19.2 National data

19.2.1 Data sources

	References to sources of information	Variables	Years	Additional comments
1	Isooba, M: 2002 An analysis of the Uganda Implementation of the Convention on Biological diversity with a focus on forests	Employment	2002	Assumption is that the same number of people were employed in 2000
2	Trends and current status of the contribution of the forest sector to national economies”(FAO, 2003)	Employment in primary production of goods	1990 and 2000	N/A
3	N/A	N/A	N/A	N/A
4	N/A	N/A	N/A	N/A

19.2.2 Classification and definitions

National class	Definition
N/A	N/A
N/A	N/A
N/A	N/A
N/A	N/A

19.2.3 Original data



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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

19.3 Data

Table 19

Category		Employment (000 years FTE)			
		1990	2000	2005	2010
	Employment in forestry	1.3	2.4	N/A	N/A
	... of which female	N/A	N/A	N/A	N/A

19.4 Comments

Category	Comments related to data definitions etc	Comments on the reported trend
Employment in forestry	N/A	N/A

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

20. What is the contribution of forestry to Gross Domestic Product (GDP)?

Documents for this question:

- [Guide for country reporting FRA 2015](#)
- [FRA 2015 Terms and Definitions](#)

20.1 Categories and definitions

Category	Definition
Gross value added from forestry (at basic prices)	This category corresponds to the ISIC/NACE Rev. 4 activity A02 (Forestry and logging).

20.2 Data

Table 20 (Pre-filled data from UNdata/EUROSTAT)

Category	Million	Currency	Year for latest available information
Gross value added from forestry (at basic prices)	1326426.74	Uganda shilling	2010

20.3 Comments

Category	Comments
N/A	N/A

Other general comments

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21. What is forest area likely to be in the future

Documents for this question:

- [Guide for country reporting FRA 2015](#)
- [FRA 2015 Terms and Definitions](#)

21.1 Categories and definitions

Category	Definition
Government target/aspiration for forest area	Government target/aspiration for forest area for a specific year.
Forests earmarked for conversion	Forest area that is allocated/classified or scheduled to be converted into non-forest uses.

21.2 National data

21.2.1 Data sources

	References to sources of information	Variables	Years	Additional comments
1	N/A	N/A	N/A	N/A
2	N/A	N/A	N/A	N/A
3	N/A	N/A	N/A	N/A
4	N/A	N/A	N/A	N/A

21.3 Data

Table 21a

Category	Forest area (000 ha)	
	2020	2030
Government target/aspiration for forest area	N/A	N/A

Table 21b

Category	Forest area (000 ha)
	2013
Forests earmarked for conversion	N/A

21.4 Comments

Category	Comments
Government target/aspiration for forest area	N/A

Forests earmarked for conversion	N/A
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Other general comments

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