



Forestry Department

Food and Agriculture Organization of the United Nations

**GLOBAL FOREST RESOURCES
ASSESSMENT 2010**

COUNTRY REPORT

SWAZILAND

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The Forest Resources Assessment Programme

Sustainably managed forests have multiple environmental and socio-economic functions important at the global, national and local scales, and play a vital part in sustainable development. Reliable and up-to-date information on the state of forest resources - not only on area and area change, but also on such variables as growing stock, wood and non-wood products, carbon, protected areas, use of forests for recreation and other services, biological diversity and forests' contribution to national economies - is crucial to support decision-making for policies and programmes in forestry and sustainable development at all levels.

FAO, at the request of its member countries, regularly monitors the world's forests and their management and uses through the Forest Resources Assessment Programme. This country report forms part of the Global Forest Resources Assessment 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).

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The Global Forest Resources Assessment Country Report Series is designed to document and make available the information forming the basis for the FRA reports. The Country Reports have been compiled by officially nominated country correspondents in collaboration with FAO staff. Prior to finalisation, these reports were subject to validation by forestry authorities in the respective countries.

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Introduction

Forest and flora resources account for 45% of land area and contribute enormously to economic development, food security, poverty alleviation, creation of employment opportunities, income generation, water, health, amelioration of effects of drought, conservation of natural resources and cultural heritage, and combating degradation of land, forest and environment resources to sustain the socio-economic life and livelihoods of the population.

However, these resources continue to be degraded and threatened with depletion due to unsustainable use by the population as well as denuded by socio-economic development endeavours such as conversion of forests to commercial irrigated agriculture, resettlement, roads, water dams, and urban infrastructural expansion activities and other capital programmes. Consequently, the National Forest Policy calls for a prudent, judicious and balanced use of land resources to give equal investment and employment opportunities in the forest sector which is one of the natural resource base sustaining the land productive functions, ecosystems, and all life supporting systems.

Constraints on data collection

- The data collection was not easy because the information is too fragmented that is to say it is in different ministries,
- The stakeholders failed to return questioners in time and some non at all which made it difficult to complete some of the tables,
- The statistical reports do not cover most of the information required by the report hence there is a need to collect forestry data that will cover all the requirements for FRA reporting.

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 <i>in situ</i> . It does not include land that is predominantly under agricultural or urban land use.
Other wooded land	Land not classified as “Forest”, spanning more than 0.5 hectares; with trees higher than 5 meters and a canopy cover of 5-10 percent, or trees able to reach these thresholds <i>in situ</i> ; or with a combined cover of shrubs, bushes and trees above 10 percent. It does not include land that is predominantly under agricultural or urban land use.
Other land	All land that is not classified as “Forest” or “Other wooded land”.
Other land with tree cover (Subordinated to “Other land”)	Land classified as “Other land”, spanning more than 0.5 hectares with a canopy cover of more than 10 percent of trees able to reach a height of 5 meters at maturity.
Inland water bodies	Inland water bodies generally include major rivers, lakes and water reservoirs.

1.2 National data

1.2.1 Data sources

References to sources of information	Quality (H/M/L)	Variable(s)	Year(s)	Additional comments
Thurland, M. 1999. Forest Resource Assessment	H	Definition and Land use cover	1990	Primary data source
Forest Policy and Legislation Project, DANCED/ MOAC/ FS	M		1999	Secondary data source
Central Statistics Office	L	Timber Statistics	1999	Primary data source
FAOSTAT	H	Total land area	2009	Secondary data source

1.2.2 Classification and definitions

National class	Definition
Montane and Highland	Indigenous forest. >900m, Afromontane and mixed woodland, >10% canopy cover, Highveld/upper Middleveld
Riparian	Indigenous forest. Mixed woodland occurring along rivers, all physiographic zones.
Moister Savannah	Indigenous forest. 400-800m, mainly broadleaved mixed woodland, >10% canopy cover, Middleveld/Lubombo range.
Acacia Savannah	Indigenous forest. 200-400m, Acacia dominated woodland, >10% canopy cover, Lowveld.
Dryer Acacia Savannah	>10% canopy cover, >5m canopy height, (East) Lowveld, precipitation <600mm.

Bushveld	Indigenous forest. 200-400m, bush/thicket communities, >10% canopy cover, <5m canopy height, Lowveld to Highveld.
Wattle Forest	Man-made Forest. Highveld, <i>A. maermsii</i> dominated forests.
Plantation	Man-made Forest. Man-made plantations of pines and eucalypts (mainly highveld).

1.2.3 Original data

Total land and inland water

FAOSTAT	
Total Country Area	1736
Inland water	16
Total land area	1720

1990 and 1999

National Classes	1990	1999
Montane and Highland	11 930	15 765
Riparian	2 344	25 997
Moister Savannah	112 720	104 273
Acacia Savannah	150 590	180 546
Dryer Acacia Savannah	34 025	35 125
Bushveld	151 890	275 705
Wattle Forest	25 439	28 839
Plantation	135 034	122 596
Total	623 972	788 846

1.3 Analysis and processing of national data

1.3.1 Calibration

Not needed.

1.3.2 Reclassification into FRA 2010 categories

National Classes	FRA Classification	
	Forest	Other wooded land
Montane and Highland	100%	
Riparian	100%	
Moister Savannah	100%	
Acacia Savannah	100%	
Dryer Acacia Savannah	100%	
Bushveld		100%
Wattle Forest	100%	
Plantation	100%	

1.3.3 Estimation and forecasting

National Classes	FRA Classification for 1990		FRA Classification for 1999	
	Forest	Other wooded land	Forest	Other wooded land
Montane and Highland	11 930		15 765	
Riparian	2 344		25 997	
Moister Savannah	112 720		104 273	
Acacia Savannah	150 590		180 546	
Dryer Acacia Savannah	34 025		35 125	
Bushveld		151 890		275 705
Wattle Forest	25 439		28 839	
Plantation	135 034		122 596	
Total	472 082		513 141	

The original data for 1990 are used directly and those for 2000, 2005 and 2010 were obtained through linear extrapolation.

FRA Categories	Area (hectares)				
	1990	1999	2000	2005	2010
Forest	472 082	513 141	517 703	540 514	563 325
Other wooded land	151 890	275 705	289 462	358 248	427 034

1.4 Data for Table T1

FRA 2010 categories	Area (1000 hectares)			
	1990	2000	2005	2010
Forest	472	518	541	563
Other wooded land	152	289	358	427
Other land	1 096	913	821	730
...of which with tree cover	n/a	n/a	n/a	n/a
Inland water bodies	16	16	16	16
TOTAL	1 736	1 736	1 736	1 736

1.5 Comments to Table T1

Variable / category	Comments related to data, definitions, etc.	Comments on the reported trend
Forest	<p>The definitions are similar to those from FAO.</p> <p>The dryer acacia savannah has been classified as “forest” in this report, because its definition clearly states that it is above 5 m tall and has a canopy cover greater than 10%.</p>	<p>Even if it is assumed that the forest is still increasing (according to a linear extrapolation), the question is raised about the real situation of the cover. There is a need to conduct a national forest inventory in order to find out.</p>
Other wooded land		<p>Wooded lands are increasing due to the spread of natural invasive but useful plants like <i>Dycrostachis cineri</i></p>

Other land	This is land which is under different land use systems e.g. agriculture.	
Other land with tree cover	This entails trees outside forests and on agricultural land.	
Inland water bodies	The data is from FAOSTAT.	

Other general comments to the table

Dryer Acacia Savannah which was considered to be “other wooded land” in the FRA 2000 report has been reclassified as “forest” in this report. This is because its definition clearly states that it is above 5 m tall and has a canopy cover greater than 10%.

Expected year for completion of ongoing/planned national forest inventory and/or RS survey / mapping

Field inventory	No plans yet
Remote sensing survey / mapping	No plans yet

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 (<i>sub-category of Private ownership</i>)	Forest owned by individuals and families.
Private business entities and institutions (<i>sub-category of Private ownership</i>)	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 (<i>sub-category of Private ownership</i>)	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 (<i>sub-category of Private ownership</i>)	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
Forest Resource Assessment - Forest Policy and Legislation Project, DANCED/ MOAC/ FS	H	Definition and Land use cover	1990	Primary data
Timber Statistics – Central Statistics	M	Census for Timber Plantations and wood Processing	1990	Primary data
Timber Statistics - Central Statistics	M	Census for Timber Plantations and wood Processing	2000	Primary data
Menne, W. 2004. Timber Plantations in Swaziland. Timber Watch Coalition, 46p. http://www.wrm.org.uy/countries/Swaziland/Plantations.pdf	H	Private ownership	2004	Secondary data source.

2.2.2 Classification and definitions

National class	Definition
Forested area	This is a total area under forests which comprise of individual forests, private/registered companies and others.
Individual ownership	These are forests that are owned by individuals and partners
Registered companies	These are forests that are under sustainable forest management under registered companies
Community forests	These are forests on Swazi Nation Land and community woodlots
Other Land	These are forests without defined ownership.

2.2.3 Original data

National classification	Area (ha)	
	1990	2000
...Individuals ownership	5 437	4 600
...Registered companies	104 884	109 147
Other types of ownership	2 735	2 471

But, no information is available for 2005.

2.3 Analysis and processing of national data

No information has been identified on the ownership of the rest of the forests and of the other wooded land.

2.3.1 Reclassification into FRA 2010 categories

The data is overall forest area regardless of the different categories.

For 2005, it is assumed that the proportions among the different types of ownership remain stable, compared to 2000.

2.4 Data for Table T2

Table 2a - Forest ownership

FRA 2010 Categories	Forest area (1000 hectares)		
	1990	2000	2005
Public ownership	359.1	401.8	419.7
Private ownership	110.2	113.7	118.7
...of which owned by individuals	5.4	4.6	n/a
...of which owned by private business entities and institutions	104.8	109.1	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 (such as educational and religious institutions)	2.7	2.5	2.6
TOTAL	472	518	541

Does ownership of trees coincide with ownership of the land on which they are situated?	<input type="checkbox"/>	Yes
	<input checked="" type="checkbox"/>	No
If No above, please describe below how the two differ:		
In some cases the land belongs to the Government of Swaziland and it is leased to the business owner. Which mean the person owns the trees not the land.		

Table 2b - Holder of management rights of public forests

FRA 2010 Categories	Forest area (1000 hectares)		
	1990	2000	2005
Public Administration	359.1	401.8	419.7
Individuals	0	0	0
Private corporations and institutions	0	0	0
Communities	0	0	0
Other	0	0	0
TOTAL	359.1	401.8	419.7

2.5 Comments to Table T2

Variable / category	Comments related to data, definitions, etc.	Comments on the reported trend
Public ownership	Forest owned by the State; or administrative units of the public administration; or by institutions or corporations owned by the public administration.	The figures show an increase in the area under public ownership due to public awareness campaigns on importance of tree planting.
Private ownership	These are forests owned by private registered companies who are into production. It should be noted that Three private companies own 101 000 ha of plantations	The area is increasing slightly under private companies.
Other types of ownership	Other kind of ownership arrangements not covered by the categories above. Also includes areas where ownership is unclear or disputed.	
Management rights		

Other general comments to the table
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Ownership issues are still a challenge in Swaziland and Legislation is needed in order to address this issue as well as the land tenure.
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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
Thurland, M. 1999. Forest Resource Assessment	H	Definition and Land use cover	1990	Primary data source
Forest Policy and Legislation Project, DANCED/ MOAC/ FS	M		1999	Secondary data source

3.2.2 Classification and definitions

National class	Definition
Wattle Forest	Man-made Forest. Highveld, <i>A. mearnsii</i> dominated forests.
Plantation	Man-made Forest. Man-made plantations of pines and eucalypts (mainly Highveld).

3.2.3 Original data

From original data of T1

National Classes	1990 (ha)	1999 (ha)
Wattle Forest	25 439	28 839
Plantation	135 034	122 596

3.3 Analysis and processing of national data

3.3.1 Estimation and forecasting

The plantation and wattles forest areas have been estimated by linear extrapolation:

National Classes	1990(ha)	1999 (ha)	2000 (ha)	2005 (ha)	2010 (ha)
Wattle Forest	25 439	28 839	29 217	31 106	32 995
Plantation	135 034	122 596	121 214	114 304	107 394
Total	160 473	151 435	150 431	145 410	140 389

Assumptions:

1. Plantation areas and wattle forest areas are designated for production purposes.
2. The rest unknown

3.4 Data for Table T3

Table 3a – Primary designated function

FRA 2010 Categories	Forest area (1000 hectares)			
	1990	2000	2005	2010
Production	160	150	145	140
Protection of soil and water	0	0	0	0
Conservation of biodiversity	0	0	0	0
Social services	0	0	0	0
Multiple use	0	0	0	0
Other (please specify in comments below the table)	0	0	0	0
No / unknown	312	368	396	423
TOTAL	472	518	541	563

Table 3b – Special designation and management categories

FRA 2010 Categories	Forest area (1000 hectares)			
	1990	2000	2005	2010
Area of permanent forest estate	n/a	n/a	n/a	n/a
Forest area within protected areas	n/a	n/a	n/a	n/a
Forest area under sustainable forest management	n/a	n/a	n/a	n/a
Forest area with management plan	135	121	114	107

3.5 Comments to Table T3

Variable / category	Comments related to data, definitions, etc.	Comments on the reported trend
Production	These are forests under private companies which comprise of exotic species.	The area under production is decreasing as a result of change in management practices and plantings.
Protection of soil and water	No data available	
Conservation of biodiversity	No data available	
Social services	No data available	
Multiple use	No data available	
Other	No data available	
No / unknown designation		
Area of permanent forest estate	No comprehensive information is available. There is data for private companies only, but no for public/natural forest	
Forest area within protected areas	No data available	
Forest area under sustainable forest management	No data available	
Forest area with management plan	Only forest plantations have management plans at the moment.	

Other general comments to the table

The only available data is for private forestry companies. There is no information on public/natural forests. Protected areas have one constant area which covers the whole nature reserve or national park not necessarily forested area within the parks or nature reserves.

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 <u>outside</u> 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
Thurland, M. 1999. Forest Resource Assessment	H	Definition and Land use cover	1990	Primary data source
Forest Policy and Legislation Project, DANCED/ MOAC/ FS	M		1999	Secondary data source

4.2.2 Original data

From T3

National Classes	1990(ha)	1999 (ha)	2000 (ha)	2005 (ha)	2010 (ha)
Wattle Forest	25 439	28 839	29 217	31 106	32 995
Plantation	135 034	122 596	121 214	114 304	107 394
Total Planted forest	160 473	151 435	150 431	145 410	140 389

4.3 Analysis and processing of national data

4.3.1 Reclassification into FRA 2010 categories

No primary forest

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	312	368	396	423
...of which of introduced species	n/a	n/a	n/a	n/a
Planted forest	160	150	145	140
...of which of introduced species	n/a	n/a	n/a	n/a
TOTAL	472	518	541	563

Table 4b

FRA 2010 Categories	Area (1000 hectares)			
	1990	2000	2005	2010
Rubber plantations (Forest)	0	0	0	0
Mangroves (Forest and OWL)	0	0	0	0
Bamboo (Forest and OWL)	0	0	0	0

4.5 Comments to Table T4

Variable / category	Comments related to data, definitions, etc.	Comments on the reported trend
Primary forest	There are no primary forests	
Other naturally regenerating forest	Naturally regenerated forest where there are clearly visible indications of human activities. Some are a result of poor management practices and they end up encroaching in other land use systems	
Planted forest	These are forests under plantation or private companies. But the areas face poor management (for example wattle trees).	
Rubber plantations	There is no rubber plantation in Swaziland	
Mangroves	There are no mangroves in Swaziland	
Bamboo	There is no bamboo plantation in Swaziland	

Other general comments to the table

There is a need to conduct a national survey in order to collect the above data under T4a. The Legislation will compel the Department to conduct a national survey to fill in the gaps.

5 Table T5 – Forest establishment and reforestation

No comprehensive data is available (from the companies, owners of the plantations). It should be noted that companies are converting from Pines to Eucalyptus and they will therefore rely on coppices of Eucalyptus instead of new plantings in the near future.

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
Thurland, M. 1999. Forest Resource Assessment	H	Definition and Land use cover	1990	Primary data source
Forest Policy and Legislation Project, DANCED/ MOAC/ FS	M		1999	Secondary data source
Annual Statistical Bulletin	M	Forest statistics	2000	Primary data source

6.2.2 Original data

Source 1999

National Classes	Area (ha)	Volume/hectare (m3/ha)	Total volume (m3)
Montane and Highland	15 765	14.2	223 863
Riparian	25 997	37.8	982 687
Moister Savannah	104 273	18.5	1 929 051
Acacia Savannah	180 546	16.4	2 960 954
Dryer Acacia Savannah	35 125	16.2	569 025
Wattle Forest	28 839	16.4	472 960
Total	666 250	18.3	7 138 539

Bushveld (OWL)	275 705	11.7	3 224 912
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According to expert estimates, the volume per hectare in Plantations is 100 m3/ha.

6.3 Analysis and processing of national data

6.3.1 Estimation and forecasting

From T1 and T3

FRA Categories	Vol (m3)/ha	Area (hectares)			
		1990	2000	2005	2010
<i>Forest excl. Plantations</i>	18.3	337 048	396 489	426 210	455 931
<i>Plantations</i>	100.0	135 034	121 214	114 304	107 394
Forest		472 082	517 703	540 514	563 325
Other Wooded Land	11.7	151 890	289 462	358 248	427 034

The results are the following:

FRA Categories	Vol (m3)/ha	GS m3			
		1990	2000	2005	2010
<i>Forest excl. Plantation</i>	18.3	6167978	7255749	7799643	8343537
<i>Plantations</i>	100.0	13503400	12121400	11430400	10739400
Forest		19671378	19377149	19230043	19082937
Other Wooded Land	11.7	1777113	3386705	4191502	4996298

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	19.7	19.4	19.2	19.1	1.8	3.4	4.2	5.0
... of which coniferous	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
... of which broadleaved	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Growing stock of commercial species	13.5	12.1	11.4	10.7	n/a	n/a	n/a	n/a

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

FRA 2010 category / Species name			Growing stock in forest (million cubic meters)		
Rank	Scientific name	Common name	1990	2000	2005
1 st	<i>Pinus patula</i>		4.8	n/a	n/a
2 nd	<i>Pinus elliottii</i>		2.3	n/a	n/a
3 rd	<i>Eucalyptus saligna/grandis</i>		1.7	n/a	n/a
4 th	<i>Pinus taeda</i>		0.9	n/a	n/a
5 th	<i>Other gums</i>		0.3	n/a	n/a
6 th			n/a	n/a	n/a
7 th			n/a	n/a	n/a
8 th			n/a	n/a	n/a
9 th			n/a	n/a	n/a
10 th			n/a	n/a	n/a
Remaining			9.7	n/a	n/a
TOTAL			19.7	19.4	19.2

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)	-	
Minimum diameter (cm) at the top end of stem for calculation of growing stock (Y)	-	
Minimum diameter (cm) of branches included in growing stock (W)	-	
Volume refers to “above ground” (AG) or “above stump” (AS)	-	

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

The growing stock might be decreasing due to the fires experienced in the country which destroyed large portion of plantation forests. It is worth noting that most of the companies are converting from coniferous to gum. The data is lightly to change in 2010. It was also difficult to get feedback from the companies as far as this table is concern.

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.

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 Original data

No national biomass data are available. Growing stock data from table T6 used as input.

Volume (million cubic meters over bark)							
Forest				Other wooded land			
1990	2000	2005	2010	1990	2000	2005	2010
19.7	19.4	19.2	19.1	1.8	3.4	4.2	5.0

7.3 Analysis and processing of national data

7.3.1 Estimation and forecasting

The following conversion factors were used

Wood density 0.58

BEF 3.4

R/S ratio 0.24

with the formula : $AGB = GS \times Wd \times BEF$ and $BGS = AGB \times R/S \text{ ratio}$

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	38.8	38.3	37.9	37.7	3.5	6.7	8.3	9.9
Below-ground biomass	9.3	9.2	9.1	9.0	0.9	1.6	2.0	2.4
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
The data is based on expert estimates and there is a need to conduct a study to verify the data trends as indicated in this report.

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

Table T7 used as input.

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.

B/- Carbon in the litter has been estimated, based on the standard factor of 2.8 (sub-tropical), and
 - Soil carbon has been estimated, based on the factor of 19 (warm temperate, dry with sandy soils).

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

Year	1990	2000	2005	2010
Total Forest area (1000 ha)	472	518	541	563
Carbon in the litter (1000 C)	1322	1450	1515	1576
Soil carbon (1000 C)	8968	9842	10279	10697

Year	1990	2000	2005	2010
Total Forest area (1000 ha)	152	289	358	427
Carbon in the litter (1000 C)	426	809	1002	1196
Soil carbon (1000 C)	2888	5491	6802	8113

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	18.2	18.0	17.8	17.7	1.7	3.2	3.9	4.6
Carbon in below-ground biomass	4.4	4.3	4.3	4.2	0.4	0.8	0.9	1.1
Sub-total: Living biomass	22.6	22.3	22.1	22.0	2.1	3.9	4.8	5.7
Carbon in dead wood	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Carbon in litter	1.3	1.5	1.5	1.6	0.4	0.8	1.0	1.2
Sub-total: Dead wood and litter	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Soil carbon	9.0	9.8	10.3	10.7	2.9	5.5	6.8	8.1
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

The data is based on estimates and there is a need to conduct a study on carbon stock assessment urgently since this data can also be used in addressing the Climate Change issues on carbon credits business for the country.

9 Table T9 – Forest fires

There is no data currently available due to un-reported incidences and poor monitoring systems in the country. Private companies are not willing to disclose figures due to insurance issues.

10 Table T10 – Other disturbances affecting forest health and vitality

10.1 FRA 2010 Categories and definitions

Term	Definition
Disturbance	Damage caused by any factor (biotic or abiotic) that adversely affects the vigour and productivity of the forest and which is not a direct result of human activities.
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.
Category	Definition
Disturbance by insects	Disturbance caused by insect pests.
Disturbance by diseases	Disturbance caused by diseases attributable to pathogens, such as bacteria, fungi, phytoplasma or virus.
Disturbance by other biotic agents	Disturbance caused by biotic agents other than insects or diseases, such as wildlife browsing, grazing, physical damage by animals, etc.
Disturbance caused by abiotic factors	Disturbances caused by abiotic factors, such as air pollution, snow, storm, drought, etc.

10.2 National data

10.2.1 Original data

Currently there is no data. Based on expert knowledge, there are some woody invasive species identified, but without any precise detail.

Table 10c – Area of forest affected by woody invasive species

Scientific name of woody invasive species	Forest area affected 2005 (1000 hectares)
<i>Chromolaena odorata</i>	n/a
<i>Lantana camara</i>	n/a
<i>Solanum mauritianum</i>	n/a
<i>Cecropia peltata</i>	n/a
<i>Psidium guajava</i>	n/a
Total forest area affected by woody invasive species	n/a

Note: The total forest area affected by woody invasive species is not necessarily the sum of the values above, as these may be overlapping.

10.3 Comments to Table T10

Variable / category	Comments related to data, definitions, etc.	Comments on the reported trend
Disturbance by insects	No data available	
Disturbance by diseases	No data available	
Disturbance by other biotic agents	No data available	
Disturbance caused by abiotic factors	No data available	
Major outbreaks	No data available	
Invasive species		

Other general comments to the table

The country is currently conducting the first national survey of selected invasive alien plant species in the country. The survey will be completed in November 2009. There is no data on insect and diseases. A Quarantine Unit under the Agricultural Research and Development Department has been established which will also carry out pest and disease surveillance following IPPC guidelines.

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 fuelwood	1988-2007	
Forest Reports	M	Value of Industrial roundwood	1990 and 1999	

11.2.2 Original data

From FAOStat
 ub = under bark
 ob = over bark

Industrial Round Wood

Year	1988	1989	1990	1991	1992
Vol cum ub	1221000	975000	964000	964000	964000
	Average 1990 ub		1017600		
	Average 1990 ob		1170240		

Year	1998	1999	2000	2001	2002
Vol cum ub	330000	330000	330000	330000	330000
	Average 1990 ub		330000		
	Average 1990 ob		379500		

Year	2003	2004	2005	2006	2007
Vol cum ub	330000	330000	330000	330000	330000
	Average 1990 ub		330000		
	Average 1990 ob		379500		

Fuel wood

Year	1988	1989	1990	1991	1992
Vol cum ub	560000	560000	560000	560000	560000
	Average 1990 ub		560000		
	Average 1990 ob		644000		

Year	1998	1999	2000	2001	2002
Vol cum ub	560000	560000	560000	560000	560000
	Average 1990 ub		560000		
	Average 1990 ob		644000		

Year	2003	2004	2005	2006	2007
Vol cum ub	560000	560000	560000	995500	1011800
	Average 1990 ub		737460		
	Average 1990 ob		848079		

Based on the Forest Reports, estimates have been established regarding the prices of roundwood for 1990 and 1999 (which will be used for 2000), respectively, 446 E/m³ and 828 E/m³.

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.)	1170	379	379	644	644	848
... of which from forest	1170	379	379	644	644	848
Unit value (local currency / m ³ o.b.)	446	828	n/a	n/a	n/a	n/a
Total value (1000 local currency)	521820	313812	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	Emalangeneni (E)	Emalangeneni (E)	Emalangeneni (E)

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
<p>The Ministry of Natural Resource and Energy is planning to carry out a national survey on woodfuel consumption with assistance from GTZ – ProBec project. The data has a lot of gaps and a study is needed to verify the trends as reported in this document.</p>

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

12.1 FRA 2010 Categories and definitions

Term	Definition
Non-wood forest product (NWFP)	Goods derived from forests that are tangible and physical objects of biological origin other than wood.
Value of NWFP removals	For the purpose of this table, value is defined as the market value at the site of collection or forest border.

NWFP categories

Category
<u>Plant products / raw material</u>
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
<u>Animal products / raw material</u>
9. Living animals
10. Hides, skins and trophies
11. Wild honey and bee-wax
12. Wild meat
13. Raw material for medicine
14. Raw material for colorants
15. Other edible animal products
16. Other non-edible animal products

12.2 National data

12.2.1 Data sources

General indication is below provided about some NWFP (expert knowledge).

12.3 Data for Table T12

Rank	Name of product	Key species	Unit	NWFP removals 2005		NWFP category
				Quantity	Value (1000 local currency)	
1 st	Indigenous fruits	<i>Sclerocarya caffra</i>	n/a	n/a	n/a	1
2 nd		<i>Syzigium codartum</i>	n/a	n/a	n/a	1
3 rd		<i>Bequaertiodendron magalimontanum</i>	n/a	n/a	n/a	1
4 th		<i>Cephalanthus natalensis</i>	n/a	n/a	n/a	1
5 th		<i>Strychnos spinosa</i>	n/a	n/a	n/a	1
6 th	Medicinal (leaves, roots, bark)	<i>Aloe marlothii</i>	n/a	n/a	n/a	5
7 th		African potatoes	n/a	n/a	n/a	1
8 th	Reed	<i>Phragmites mauritanus</i>	n/a	n/a	n/a	5
9 th						
10 th						
All other plant products					n/a	
All other animal products					n/a	
TOTAL					n/a	

	2005
Name of local currency	Emalangenani (E)

12.4 Comments to Table T12

Variable / category	Comments related to data, definitions, etc.
10 most important products	There is no data on how much is being utilised and the revenue collected from the sales.
Other plant products	No data available
Other animal products	No data available
Value by product	No data available
Total value	

Other general comments to the table
These products are not sold at commercial level but at community level. The country is in a process of domesticating and commercialising most of the above species. The ranking of table T12 is based on expert knowledge.

13 Table T13 – Employment

No data available for this table.

14 Table T14 – Policy and legal framework

14.1 FRA 2010 Categories and definitions

Term	Definition
Forest policy	A 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 society.
Forest policy statement	A document that describes the objectives, priorities and means for implementation of the forest policy.
National forest programme (nfp)	A generic expression that refers to a wide range of approaches towards forest policy formulation, planning and implementation at national and sub-national levels. The national forest programme provides a framework and guidance for country-driven forest sector development with participation of all stakeholders and in consistence with policies of other sectors and international policies.
Law (Act or Code) on forest	A 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	<input checked="" type="checkbox"/>	Yes	
	<input type="checkbox"/>	No	
If Yes above, provide:	Year of endorsement	2002	
	Reference to document	National Forest Policy (2002)	
National forest programme (nfp)	<input checked="" type="checkbox"/>	Yes	
	<input type="checkbox"/>	No	
If Yes above, provide:	Name of nfp in country	National Forestry Action Programme	
	Starting year	2002	
	Current status	<input type="checkbox"/>	In formulation
		<input type="checkbox"/>	In implementation
		<input type="checkbox"/>	Under revision
Reference to document or web site	<input checked="" type="checkbox"/>	Process temporarily suspended	
	Reference to document or web site	Draft National Forestry Action Programme (2002)	
Law (Act or Code) on forest with national scope	<input type="checkbox"/>	Yes, specific forest law exists	
	<input checked="" type="checkbox"/>	Yes, but rules on forests are incorporated in other (broader) legislation	
	<input type="checkbox"/>	No, forest issues are not regulated by national legislation	
If Yes above, provide:	Year of enactment	Draft Bill was formulated in 2002	
	Year of latest amendment	Being amended at the moment (2009)	
	Reference to document	Draft Forest Bill, 2009	

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	<input type="checkbox"/>	Yes
	<input checked="" type="checkbox"/>	No
If Yes above, indicate the number of regions/states/provinces with forest policy statements		
Sub-national Laws (Acts or Codes) on forest	<input type="checkbox"/>	Yes
	<input checked="" type="checkbox"/>	No
If Yes above, indicate the number of regions/states/provinces with Laws on forests		

14.3 Comments to Table T14

Variable / category	Comments related to data, definitions, etc.
Forest policy statement with national scope	A forest policy statement with national scope exists and was endorsed in 2002.
National forest programme (nfp)	A National Forestry Action Programme was formulated after the Policy document but due to inadequate resources very little has been done to implement it. It is currently on hold until the Legislation is endorsed which will establish a department of Forestry with more resources
Law (Act or Code) on forest with national scope	A draft Bill was formulated in 2002 but due to lack of funding it remained a bill until this year. It is currently under review.
Sub-national forest policy statements	N/A
Sub-national Laws (Acts or Codes) on forest	N/A

Other general comments to the table
There is a need for financial and technical support for reviewing the National Forestry Action Programme (2002) because it has been overtaken by events.

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 – Institutions

FRA 2010 Category	2008
Minister responsible for forest policy formulation : please provide full title	Honourable Mr. Macford Sibandze Minister for Tourism and Environmental Affairs
Level of subordination of Head of Forestry within the Ministry	1 st level subordination to Minister
	2 nd level subordination to Minister
	3 rd level subordination to Minister
	X 4 th or lower level subordination to Minister
Other public forest agencies at national level	None
Institution(s) responsible for forest law enforcement	Ministry of Agriculture and Co-operatives – Forestry Section, Ministry of Natural Resources and Energy, Swaziland National Trust Commission.

Table 15b – Human resources

FRA 2010 Category	Human resources within public forest institutions					
	2000		2005		2008	
	Number	%Female	Number	%Female	Number	%Female
Total staff	20	10 %	13	15 %	14	14 %
...of which with university degree or equivalent	5	20 %	4	25 %	7	14 %

Notes:

1. Includes human resources within public forest institutions at sub-national level
2. Excludes people employed in State-owned enterprises, education and research, as well as temporary / seasonal workers.
3. Data are based on the information provided by the Establishment Register.

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	A Minister changes after a five year term. The current Minister will be vacating office this year (2009).	
Level of subordination of Head of Forestry within the Ministry	The head of Forestry is in the fourth level from the Minister.	
Other public forest agencies at national level	The Forestry Section under the Ministry of Agriculture is the only public Forestry Institution in the country	
Institution(s) responsible for forest law enforcement	The Ministry of Agriculture and Cooperatives is the core institution but there are other Ministries which implement part of the Forest Law as mentioned above	
Human resources within public forest institutions	Permanent qualified staff is decreasing as time progresses.	

Other general comments to the table

There is no Forestry Institution in Swaziland and there is no funding for external training hence the limited number of degree holders in the Forestry Section. Funding is needed for capacity building to cater for the professional post that will be created by the Legislation.

16 Table T16 – Education and research

16.1 FRA 2010 Categories and definitions

Term	Definition
Forest-related education	Post-secondary education programme with focus on forests and related subjects.
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 primarily implementing research programmes on forest matters. Funding is mainly public or channelled through public institutions.

16.2 National data

16.2.1 Original data

There is no Forestry University or College in Swaziland.

16.3 Data for Table T16

FRA 2010 Category	Graduation ¹⁾ of students in forest-related education					
	2000		2005		2008	
	Number	%Female	Number	%Female	Number	%Female
Master's degree (MSc) or equivalent	0	0	0	0	0	0
Bachelor's degree (BSc) or equivalent	0	0	0	0	0	0
Forest technician certificate / diploma	0	0	0	0	0	0
FRA 2010 Category	Professionals working in publicly funded forest research centres ²⁾					
	2000		2005		2008	
	Number	%Female	Number	%Female	Number	%Female
Doctor's degree (PhD)	0	0	0	0	0	0
Master's degree (MSc) or equivalent	0	0	0	0	0	0
Bachelor's degree (BSc) or equivalent	0	0	0	0	0	0

Notes:

1. Graduation refers to the number of students that have successfully completed a Bachelor's or higher degree or achieved a certificate or diploma as forest technician.
2. Covers degrees in all sciences, not only forestry.

16.4 Comments to Table T16

Variable / category	Comments related to data, definitions, etc.	Comments on the reported trend
Graduation of students in forest-related education		
Professionals working in public forest research centres		

Other general comments to the table
There is no Forestry University or College in Swaziland hence no graduates from the available Universities.

17 Table T17 – Public revenue collection and expenditure

17.1 FRA 2010 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, forest products include: roundwood; sawnwood; wood-based panels; pulp and paper; and non-wood forest products. As far as possible, this should include revenue collected by all levels of government (i.e. central, regional/provincial and municipal level), but it should exclude the income of publicly owned business entities.
Public expenditure	All government expenditure on forest related activities (further defined below).
Operational expenditure (sub-category to Public expenditure)	All government expenditure on public institutions solely engaged in the forest sector. Where the forest administration is part of a larger public agency (e.g. department or ministry), this should only include the forest sector component of the agency's total expenditure. As far as possible, this should also include other institutions (e.g. in research, training and marketing) solely engaged in the forest sector, but it should exclude the expenditure of publicly owned business entities.
Transfer payments (sub-category to Public expenditure)	All government expenditure on direct financial incentives paid to non-government and private-sector institutions, enterprises communities or individuals operating in the forest sector to implement forest related activities.
Domestic funding	Public expenditure funded from domestic public financial resources, including: retained forest revenue; forest-related funds; and allocations from the national budget (i.e. from non-forest sector public revenue sources).
External funding	Public expenditure funded from grants and loans from donors, non-governmental organisations, international lending agencies and international organisations, where such funds are channelled through national public institutions.

17.2 National data

17.2.1 Data sources

References to sources of information	Quality (H/M/L)	Variable(s)	Year(s)	Additional comments
Book of Estimated, Ministry of Finance	H	Budget	1995	
Book of Estimated Ministry of Finance	H	Budget	2000	
Book of Estimated Ministry of Finance	H	Budget	2005	

17.2.2 Classification and definitions

National class	Definition
Operational expenditure	Refers to all government expenditure on forest related activities

17.2.3 Original data

This is a table for public expenditure and funding came from government.

Items	1995 (E)	2000 (E)	2005 (E)
Transport	38 190	325 029	802 705
Personnel	398 946	740 971	1 407 842
Travel and Communication	79 320	105 968	76 732
Professional Services	7 347	11 009	45 321
Stationery, Textile, perishables	22 377	38 797	80 505
Durables	0	24 354	53 675
Total	538 833	1 246 128	2 466 780

17.3 Data for Table T17

Table 17a - Forest revenues

FRA 2010 Categories	Revenues (1000 local currency)	
	2000	2005
Forest revenue	n/a	n/a

Table 17b - Public expenditure in forest sector by funding source

FRA 2010 Categories	Domestic funding (1000 local currency)		External funding (1000 local currency)		Total (1000 local currency)	
	2000	2005	2000	2005	2000	2005
Operational expenditure	1 246.13	2 466.78	0	1 750.00	1 246.13	4 216.78
Transfer payments	0	0	0	0	0	0
Total public expenditure	1 246.13	2 466.78	0	1 750.00	1 246.13	4 216.78
If transfer payments are made for forest management and conservation, indicate for what specific objective(s) - Please tick all that apply.	<input type="checkbox"/>	Reforestation				
	<input type="checkbox"/>	Afforestation				
	<input type="checkbox"/>	Forest inventory and/or planning				
	<input type="checkbox"/>	Conservation of forest biodiversity				
	<input type="checkbox"/>	Protection of soil and water				
	<input type="checkbox"/>	Forest stand improvement				
	<input type="checkbox"/>	Establishment or maintenance of protected areas				
	<input type="checkbox"/>	Other, specify below				

17.4 Comments to Table T17

Variable / category	Comments related to data, definitions, etc.	Comments on the reported trend
Forest revenue	No data available	
Operational expenditure	This has been referred to as public expenditure in order to indicate the Department's expenditure. There are no government institutions dealing with forestry except private sector and government does not fund such entities.	Public expenditure increases with time. The Department is growing and more activities are being added.
Transfer payments	No data available	

Other general comments to the table

The Forestry Department does not have commercial forests but plays a regulatory role, and promote conservation of natural forests. There is very little revenue if any from sales of public forests which play a service role rather than business.