



Forestry Department

Food and Agriculture Organization of the United Nations

**GLOBAL FOREST RESOURCES
ASSESSMENT 2010**

COUNTRY REPORT

CAMBODIA

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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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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
Original data from Remote sensing	M	Forest cover 1992/93	1992/93	Little ground truthing to Remote Sensing Data
Original data from Remote sensing	M	Forest cover 1996/97	1996/97	Little ground truthing to Remote Sensing Data
Original data from Remote sensing	H	Forest cover 2002	2002	Based on Remote Sensing and adequate ground truthing
Original data from Remote sensing	H	Forest cover 2005	2005	Based on Remote Sensing and adequate ground truthing

1.2.2 Classification and definitions

A. For 1992/93 and 1996/97

National class	Definition
Forest	
Evergreen forest with high cover density	Forest contains usually multi-storied forests where trees keep their leaves during the whole year. They are always seen on hills and along the course of streams and rivers. Evergreen forests appear dark red on the satellite images with a medium texture. They comprise the lowland tropical rain forests, the hill evergreen forests and the dry evergreen forests. A certain percentage of deciduous trees may be included as well and most moist deciduous forests may not be visible from the evergreen forests. The forest comprises of forest cover $\geq 90\%$ and crown cover $\geq 70\%$
Evergreen forest with	Forests contain usually multi-storied forests where trees keep their leaves

medium and low cover density	during the whole year. They are always seen on hills and along the course of streams and rivers. Evergreen forests appear dark red on the satellite images with a medium texture. They comprise the lowland tropical rain forests, the hill evergreen forests and the dry evergreen forests. A certain percentage of deciduous trees may be included as well and most moist deciduous forests may not be visible from the evergreen forests. The forests comprise of forest cover $\geq 70\%$ - $< 90\%$ and crown cover $\geq 20\%$ - $< 70\%$
Evergreen mosaic forest	Forests contain usually multi-storied forests where trees keep their leaves during the whole year. They are always seen on hills and along the course of streams and rivers. Evergreen forests appear dark red on the satellite images with a medium texture. They comprise the lowland tropical rain forests, the hill evergreen forests and the dry evergreen forests. A certain percentage of deciduous trees may be included as well and most moist deciduous forests may not be visible from the evergreen forests. The forests comprise of forest cover $\geq 40\%$ - $< 70\%$ and crown cover $\geq 20\%$
Mixed evergreen and deciduous forest with high cover density	The forests contain a variable percentage of evergreen and deciduous trees. The percentage deciduous trees may vary from some 30 to some 70 percent. The variability of this class is high as it is stretching from the moist mixed deciduous forests to the mixed deciduous and to a more humid version of the dry deciduous forests. It can not be excluded that depending on the proportion of leaf shedding trees and on the overall appearance some parts of dry evergreen forests are mapped to this class as well. The forest comprises of forest cover $\geq 90\%$ and crown cover $\geq 70\%$
Mixed evergreen and deciduous forest with medium and low cover density	The forests contain a variable percentage of evergreen and deciduous trees. The percentage deciduous trees may vary from some 30 to some 70 percent. The variability of this class is high as it is stretching from the moist mixed deciduous forests to the mixed deciduous and to a more humid version of the dry deciduous forests. It can not be excluded that depending on the proportion of leaf shedding trees and on the overall appearance some parts of dry evergreen forests are mapped to this class as well. The forests comprise of forest cover $\geq 70\%$ - $< 90\%$ and crown cover $\geq 20\%$ - $< 70\%$
Mixed mosaic forest	The forests contain a variable percentage of evergreen and deciduous trees. The percentage deciduous trees may vary from some 30 to some 70 percent. The variability of this class is high as it is stretching from the moist mixed deciduous forests to the mixed deciduous and to a more humid version of the dry deciduous forests. It can not be excluded that depending on the proportion of leaf shedding trees and on the overall appearance some parts of dry evergreen forests are mapped to this class as well. The forests comprise of forest cover $\geq 40\%$ - $< 70\%$ and crown cover $\geq 20\%$.
Deciduous forest	The forests contain the dry mixed deciduous forests and dry Dipterocarp forests. Deciduous forests drop their leaves more or less completely during the dry season. The signatures vary from reddish violet to yellowish brown at the end of wet season, and from brownish green to bluish grey during the dry season, with a medium to smooth texture. Human impact such as fire is usually much higher compared to other forest types. It was not possible to separate consistently the dry mixed deciduous forests from the dry Dipterocarp forests. Dry Dipterocarp forests have naturally an open character. Undisturbed they may have a crown cover of only 40%. The soil and the grass layer can have a significant impact on the reflection of these forests. It is impossible to separate crown cover differences consistently. The separation to deciduous shrub-land is difficult during the wet season and almost impossible during the dry season.
Deciduous mosaic forest	The characteristic of the forests is nearly the same as Deciduous forest, just different from the density of forest cover and crown cover. The forest cover varies from $\geq 40\%$ - $< 70\%$ and crown cover $\geq 20\%$.
Forest regrowth	More or less dense layer of young trees belonging already to the 'forest cover' class. The spatial texture is usually homogenous. No differentiation in density classes foreseen. General re-growth of mixed vegetation would be assigned to 'Non-Forest Re-growth'
Inundated forest	Forest regrowth found in the inundated areas around the Tonle Sap Lake was

regrowth	mapped as a separate class.
Inundated forest	This forest type is found in Cambodia around the Tonle Sap Lake. Most of the forests are low and disturbed. In many cases there is only a mosaic remaining. Degradation was often caused by charcoal production.
Mangrove forest	Mangrove forests can only be found in the South Western part of Cambodia.
Forest plantation	Forest plantations are often visible due to their textures and geometric shapes, species should be assigned when the knowledge of the local conditions allows to do so, otherwise '0'.
Inundated mosaic forest	The characteristic of the forests is nearly the same as inundated forest, just different from the density of forest cover and crown cover. The forest cover varies from $\geq 40\%$ - $< 70\%$ and crown cover $\geq 20\%$.
Wood and shrubland evergreen	Wood and shrub-land is a mixture of shrubs, grass and trees, the tree cover however remaining below 20 percent. This class can be found mainly on shallow soils, on the top of mountains under climax conditions or as a result of non-sustainable land use (degraded land, forest on fire frequently). The signature remains light red during the whole year. A sub-variant of this class represents the re-growth of forest, i.e., growing after shifting cultivation. There is usually a dense layer of shrubs and grass with some small trees and a significant proportion of bamboo. Other sub-variants diversely comprise land areas, trees, shrubs, grass and small paddy fields on lowland as long as the agriculture land is not cancelled.
Bamboo	Large areas of dense bamboo are usually discernible due to their pink and orange colour and their typical texture. After the field trips it was decided to map all bamboo visible into one class. A sparse bamboo coverage or small bamboo will not be discernible and will remain in one of the classes mentioned before. Small lots of bamboo as result of degradation of mixed deciduous or evergreen forests will also not be included in this class.
Wood and shrubland dry	Wood and shrub-land is a mixture of shrubs, grass and trees, the tree cover however remaining below 20 percent. This class can be found in the dry plains or on the plateaus of the southern part of the L.M.B, but also on dry and sun exposed slopes. The appearance often remains on a dry "savanna". The signature is light grey during the dry season and light brownish grey to violet during the wet season, the texture is medium to rough.
Wood and shrubland inundated	Wood and shrub-land is a mixture of shrubs, grass and trees, the tree cover however remaining below 20 percent. This class was defined to cover the degraded inundated areas around the Tonle Sap Lake. There is often a dense layer of small trees, which can not be classified as forest.
Non forest	
Grassland	In dry conditions grassland is displayed in bluish grey tones during the dry season showing a smooth texture. In the humid domain grassland looks light red with a component of yellow to white during the dry season.
Mosaic of cropping where cropping area < 30%	This class contains a mixture of fields actually under cropping or in various stages of fallow with shrubs and re-growth. The pattern shows a mosaic of red, white, grey and black patches. Re-growth is found in shifting cultivation areas after the land has been abandoned and contains also young trees. If not cleared again, the chances of becoming forest are theoretically high. Small tree blocks can be found within this class as well, however the percentage of forest blocks should be below 40%, otherwise they would have to be classified as "mosaic of forest" (fragmented forests). This class the cropping area < 30%. The experienced interpreter should do the delineation of the two classes because there are several possibilities to draw the boundary line. Whether to include several patches in one big block or whether to delineate the patches of mosaic separately should be decided by minimizing the total boundary line for these features. It increases consistency of the classification if the delineation of this class is done or checked by the same interpreter.
Mosaic of cropping where cropping area > 30%	The characteristic of this class is nearly the same as Mosaic of cropping where cropping area < 30% except for the percentage of cropping area.
Agriculture land	It is delineated as one class without further differentiation. It contains

	permanent fields, mainly paddy fields, or mixed agricultural land, as long as the agricultural component appears to be dominant. Additional knowledge of the area is often required for a good interpretation. Permanent mixed agriculture on slopes, as occurred frequently in the Central Highlands of Vietnam is difficult to separate from shifting cultivation.
Barren land	Not vegetated areas
Rock	Rock
Urban area	If a village can be found this class IS classified. Small villages contain fruit trees and trees without clear boundaries. The urban area of the village may be done afterwards by using GIS.
Water	Sea, lakes, rivers etc.
Other	This class belongs to unidentified class.
Wetland	Wetlands contain swamps and marshes. Due to the high water content the signatures are usually dark grey, in case of a grass layer the dark tones are mixed with light red to pink tones.

B. For 2002 /2005

The remote sensing data was filtered into following classes only that are aggregation of the above as indicated in the original data in section 1.2.3.

National class	Definition
Forest	
Evergreen forest	Forest contains usually multi-storied forests where trees keep their leaves during the whole year. They comprise the lowland tropical rain forests, the hill evergreen forests and the dry evergreen forests. It includes Evergreen forest classified as high cover density, medium and low density during earlier remote sensing efforts.
Semi- evergreen	The forests contain a variable percentage of evergreen and deciduous trees.. It includes mixed evergreen forest classified as high cover density, medium and low density and mixed mosaic forests during earlier remote sensing efforts.
Deciduous forest	The forests contain the dry mixed deciduous forests and dry Dipterocarp forests. It includes deciduous forest classified as deciduous and mosaic forests during earlier remote sensing efforts.
Other forests	The forests contain a variable percentage of following categories defined in earlier remote sensing efforts. Forest Re-growth, Inundated forests re-growth, Inundated forests Mangrove forests, Forest Plantation, and Inundated Mosaic forests
Bamboo	Large areas of dense bamboo are usually discernible due to their pink and orange colour and their typical texture. After the field trips it was decided to map all bamboo visible into one class. A sparse bamboo coverage or small bamboo will not be discernible and will remain in one of the classes mentioned before. Small lots of bamboo as result of degradation of mixed deciduous or evergreen forests will also not be included in this class.
Wood and shrub evergreen	Wood and shrub-land is a mixture of shrubs, grass and trees, the tree cover however remaining below 20 percent. It represents wood and shrub land evergreen category of earlier remote sensing efforts.
Wood and shrub dry	This category of wood and shrub-land can be found in the dry plains or on the plateaus of the southern part of the L.M.B, but also on dry and sun exposed slopes. It represents wood and shrub land dry category of earlier remote sensing efforts.
Non Forest	It contains a variable percentage of following categories of earlier remote sensing efforts. Grass land, Mosaic of cropping, Agriculture land, Barren land, Rock Urban Area, Water, Other, Wetland, and area that in satellite imagery were covered with Cloud.

1.2.3 Original data

Code	Land Cover Types	1992/93	1996/97	2002	2005
		Area (ha)			
Forest					
11	Evergreen forest with high cover density	656,582	627,219	3,720,507	3,668,891
12	Evergreen forest with medium and low cover density	3254,204	3,185,603		
13	Evergreen mosaic forest	131,651	178,150		
17	Mixed evergreen and deciduous forest with high cover density	98,851	95,322	1,455,095	1,362,638
18	Mixed evergreen and deciduous forest with medium-low cover density	1,309,010	1,286,649		
19	Mixed mosaic forest	110,103	125,331		
20	Deciduous forest	4,026,133	3931,292	4,833,135	4,692,098
22	Deciduous mosaic forest	342,851	350,193		
40	forest regrowth	435,353	374,178	1,065,706	866,811
41	Inundated forest regrowth	21,623	20,819		
52	Inundated forest	229,093	219,896		
56	Inundated mosaic forest	98,587	94,582		
53	Mangrove forest	77,244	72,457		31,037
54	Forest plantation	72,354	82,472		73,493
61	Wood and shrubland evergreen	558,864	544,753	150,017	96,390
65	Wood and shrubland inundated	377,401	348,959		
64	Wood and shrubland dry	1,267,281	1,164,743	138,935	37,028
63	Bamboo	32,209	33,715	28,951	35,802
Non-forest					
62	Grassland	478,486	488,919	6,768,325	7,296,484
81	Mosaic of cropping where cropping area < 30%	198,908	285,227		
82	Mosaic of cropping where cropping area > 30%	104,428	143,756		
91	Agriculture land	3,698,464	3,903,605		
92	Barren land	14,973	18,022		
93	Rock	2,149	2,323		
94	Urban area	26,606	27,638		
95	Water	446,317	469,294		
96	Other	1,756	1,756		
97	Wetland	87,351	83,458		
99	Clouds	1,497	0,000		
	Grand Total	18,160,331	18,160,331	18,160,670	18,160,673

1.3 Analysis and processing of national data

1.3.1 Calibration

The total country area has been calibrated to match with FAOSTAT figure of 18104 (000 ha). Similarly the area of inland water bodies has been calibrated to match FAOSTAT figure of 452 (000 ha). All differences have been adjusted only in the area of other lands.

1.3.2 Estimation and forecasting

Bamboo has been grouped together with Forests as in FRA 2000. All types of wood and Shrub lands have been grouped together as Wood and Shrub lands.

A. Segregation of 2002 and 2005 figures.

The 2002 figures provide aggregated figures for some of the categories that make it difficult to estimate and forecast and classify figures for FRA. Specifically, 2002 provides an aggregated figure of 1,065,706 ha for area of forest regrowth, inundated forest regrowth, inundated forests, Mangrove forests, and forest plantations and inundated forest mosaic. This figure has been segregated in following steps.

- Forecasting 2002 area 314,288 of inundated (forests +mosaic+regrowth) based on 1992 and 1996
- Forecasting 2002 area 65,277 of Mangrove forests based on 1992 and 1996 figures
- Using figure 76,486 ha of productive plantations base on interpolation figures 1996 and 2005

The remainder area 609,655 ha out of 1,065,706 ha has been treated as area of forest re-growth.

The 2005 figures provides an aggregated figure of 866,811 ha for area of forest regrowth, inundated forest regrowth, inundated forests and inundated forest mosaic.

- Forecasting 2005 area 303,783 ha of inundated (forests +mosaic+ regrowth) based on 1996 and 2002

The remainder area 563,028 ha out of 866,811 ha has been treated as area of forest re-growth.

B. Summary information for 1992, 1996, 2002 and 2005 after above steps

Categories	Area in hectares			
	1992	1996	2002	2005
Evergreen	4,042,435	3,990,972	3,720,507	3,668,891
Mixed	1,517,964	1,507,302	1,455,095	1,362,638
Deciduous	4,368,984	4,281,485	4,833,135	4,692,098
Bamboo	32,209	33,715	28,951	35,802
Inundated (Forest+ Re-growth+ Mosaic)	349,303	335,297	314,288	303,783
Mangrove	77,244	72,457	65,277	31,037
Forest Plantation	72,354	82,472	76,486	73,493
Forest Regrowth	435,353	374,178	619,142	563,028
Total Forests	10,895,846	10,677,878	11,112,881	10,730,770
Total Wood and Shrub land	2,203,546	2,058,455	288,952	133,418
Total Forest and Other Wooded Land	13,099,392	12,736,333	11,401,833	10,864,188
Total Other land	4,552,608	4,915,667	6,250,167	6,787,812
Inland water bodies	452,000	452,000	452,000	452,000
Total	18,104,000	18,104,000	18,104,000	18,104,000

C. Calibration of figures for certain categories of landuse

The above figures show abnormal trends in 1992 and 1996 under certain categories like “wood and shrub land”, “Deciduous forests” and “Forest Regrowth”. This is mainly due to the fact that apart for 2002 figures, very little ground truthing (field checking) of satellite interpreted data was done for 1992 and 1996 due to war and economy reasons of the country.

Therefore, for the purposes of this table for “wood and shrub land” equalling the FRA category “other wooded land” were calibrated in following manner: All the forest categories were grouped into one than the percentage 2.5342592% of “wood and shrub land” and percentage 97.4657408% of "forest" to total of “forests” and “wood and shrub land” in 2002 were applied to respective figures in 1992 and 1996 to estimate “wood and shrub land” and “forests” in these years. However, in 2005 attribute table keep remaining the same.

Percentage of wood and shrubland : 2.5342592%

Categories	1992	1996	2002	2005
Forests	12767419	12413561	11,112,881	10,730,770
Wood and Shrub land	331973	322772	288,952	133,418
Total Other land	4,552,608	4,915,667	6,250,167	678,7812
Inland water bodies	452,000	452,000	452,000	452,000
Total	18,104,000	18,104,000	18,104,000	18,104,000

D. Estimation and Forecasting

Estimation and forecasting has been done for 1990, 2000, 2005 and 2010 using linear-inter or linear-extrapolation method and with all adjustments in “Other land”.

Categories	Area in hectares			
	1990	2000	2005	2010
Forests	12,944,348	11,546,441	10,730,770	10,093,918
Wood and Shrub land	335,040	300,225	133,418	133,418
Other land	4,372,612	5,805,334	6,787,812	7,424,664
Inland water bodies	452,000	452,000	452,000	452,000
Total	18,104,000	18,104,000	18,104,000	18,104,000

For the avoiding of negative estimation in year 2010 of Wood and Shrub land, the value of 2005 will be used.

1.3.3 Reclassification into FRA 2010 categories

National Categories	Percentage allocation to FRA categories			
	Forests	Other Wooded lands	Other land	Inland Water bodies
Forests	100			
Wood and Shrub land		100		
Other land			100	
Inland water bodies				100

1.4 Data for Table T1

FRA 2010 categories	Area (1000 hectares)			
	1990	2000	2005	2010
Forest	12,944	11,546	10,731	10,094
Other wooded land	335	300	133	133
Other land	4,373	5,805	6,788	7,425
...of which with tree cover	n/a	n/a	n/a	n/a
Inland water bodies	452	452	452	452
Total for country	18,104	18,104	18,104	18,104

1.5 Comments to Table T1

Variable / category	Comments related to data, definitions, etc.	Comments on the reported trend
Forest		The difference in forest area in FRA 2000 and FRA 2005 is mainly caused by the different definition (reclassification) and estimation process. It may also be mentioned that the former definition of forest of Forestry Administration, a land is classified as forest when it has a forest cover more than 20% where as FAO's definition, only 10% of forest cover is necessary for this purpose.
Other wooded land		The 1992, 1996, 2002 and 2005 presents unexplainable trends in some categories like “wood and shrub land”, “Deciduous forests” and “Forest Re-growth” . This is attributed mainly to the fact that except for 2002 and 2005 figures very little ground truthing (field checking) of satellite interpreted data was done for 1992 and 1996 due to war and economy reasons. Therefore, for the purposes of this table figures for “other wooded lands for 1990 and 2000 were estimated by applying percentage of “other wooded land” in 2002 to 1992 and 1996 data.
Other land	The reason for differences in national figures for total country area may be because now the country is using boundaries defined by its Department of Geography while for FRA 2000 boundaries defined by MRC (Mekong River Commission) were used. The calibration has been done only for the purposes of the FRA report otherwise country wishes to maintain its figures from Department of Geography.	
Other land with tree cover		
Inland water bodies		

Other general comments to the table

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

Field inventory	
Remote sensing survey / mapping	

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
Original data from Remote sensing	M	Forest Cover 2005	2005	Based on Remote Sensing and adequate ground truthing
Community Forestry Statistics in Cambodia	M		2005	

2.2.2 Classification and definitions

National class	Definition
Not available	

2.2.3 Original data

There is lack of proper demarcation of Cambodia forest estate. According to the forestry law all forest land belongs to the state. Community forestry is one categories of permanent forest reserve. The state shall recognized and ensure their traditional use right for the purpose of traditional customs, belief, religions and living.

Community Forestry Statistics in Cambodia 2005

No	Province/Citie	Communities	Area(ha)
1	Kampong Chhnang	31	14,889
2	Kampong Cham	18	6,997
3	Kratie	13	17,831
4	Stung Trang	15	22,150
5	Mondul Kiri	3	3,104
6	Kampot	5	1,993
7	Koh Kong	2	3,790
8	Battambang	13	2,664
9	Svay Rieng	2	525
10	Kampong Speu	7	4,366
11	Kampong Thom	50	40,915
12	Siem Reap	36	17,146
13	Pursat	46	5,116
14	Ratanak Kiri	6	14,599
15	Preah Vihear	3	7,274
16	Krong Pailin	7	2,250
17	Otdor Meanchey	5	9,893
18	Banteay Meanchey	1	3,019
19	Takeo	1	500
Total		264	179,021

2.3 Data for Table T2

Table 2a - Forest ownership

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

FRA 2010 Categories	Forest area (1000 hectares)		
	1990	2000	2005
Public ownership	12,944	11,546	10,731
Private ownership	n.a	n.a	n.a
...of which owned by individuals	n.a	n.a	n.a
...of which owned by private business entities and institutions	n.a	n.a	n.a
...of which owned by local communities	n.a	n.a	n.a
...of which owned by indigenous / tribal communities	n.a	n.a	n.a
Other types of ownership	n.a	n.a	n.a
TOTAL	12,944	11,546	10,731

Does ownership of trees coincide with ownership of the land on which they are situated?	✓	Yes
		No
If No above, please describe below how the two differ:		

Table 2b - Holder of management rights of public forests

FRA 2010 Categories	Forest area (1000 hectares)		
	1990	2000	2005
Public Administration	n/a	n/a	n/a
Individuals	n/a	n/a	n/a
Private corporations and institutions	n/a	n/a	n/a
Communities	n/a	n/a	179
Other	n/a	n/a	n/a
TOTAL	n/a	n/a	n/a

2.4 Comments to Table T2

Variable / category	Comments related to data, definitions, etc.	Comments on the reported trend
Public ownership		
Private ownership		
Other types of ownership		
Management rights		

Other general comments to the table

3 Table T3 – Forest designation and management

3.1 FRA 2010 Categories and definitions

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

3.2 National data

3.2.1 Data sources

References to sources of information	Quality (H/M/L)	Variable(s)	Year(s)	Additional comments
World Bank, 1996. Cambodia Forest Policy Assessment. Report No 15777-KH. The World Bank.	M	Concession Areas	Before 1996	
KC. 2004. National Report to the fifth session of the United Nations Forum on Forests.	M	Concession Areas	2004	

Kingdom of Cambodia				
Royal Decree, 1993. Government of Cambodia	H	Protected Area	1993	
Royal Decree, 2004. Government of Cambodia	H	Protected Area	2004	
Original GIS data source	H	Protected Areas		
Gov't Sub Degree	H	Protected Forest		
Law on Forestry	H		2002	

3.2.2 Classification and definitions

By Cambodia forestry law has declared as below:

National class	Definition
Permanent Forest Estate	Consist of Permanent Forest Reserves and Private Forests
Permanent Forest Reserves	<p>Consist of Production forest, Protection Forest and Conversion Forestland for other Development Purpose</p> <p>Note: Conversion Forest land for other development purpose is idle land, comprised mainly of secondary vegetation, not yet designated for use by any sector that shall be classified as Permanent Forest Reverses until the Royal Government decide to use and develop the land for anther purpose</p>

3.2.3 Original data

A. Concession Areas (Production Areas)

These are identified for promoting forest based development and are considered as production forests as defined by FRA. The area of forest under concession prior to 1994 (World Bank, 1996) and in 1996 was about 2.244 million hectares and 6.464 million hectares respectively. Since 1999, fifteen (15) forest concession have been cancelled to ensure the sustainability of forests, the area has reduced to about 3.374 million hectares (KC, 2004).

B. Protection Areas and Protected Forest

Types of Protected Forest and Protected Area	Name (Year)	Area (1000 ha)			
		Royal Decree 1993	Royal Decree 2004	Gov't Sub Degree 2004	GIS Data
Watershed Protection	Kbal Chay (1997)	0		6	6
Watershed and Biodiversity Conservation	Central Cardamom (2002)	0		401	401
	Southern Cardamom (2004)	0		144	144
Zoo	Phnom Ta Moa (1997)	0		1	2
Biodiversity Conservation	Seima FA (2004)	0		305	298
	Preah Vihear FA (2002)	0		190	190
	Mondul Kirri (2002)	0		429	429

	Oyadav Protected Forest for Recreation Sport Game Hunting (2009)			101	101
Bird Conservation	Ang Trapeng Thmor (2000)		13	0	13
	Beoung Prek Lpov(2007)	0	0	8	8
National Park* ¹	Virachey (1993)	333	333	0	338
	Phnom Kulen (1993)	38	38	0	38
	Botum Sakor (1993)	171	171	0	183
	Kirirom (1993)	35	35	0	28
	Phnom Bokor (1993)	140	140	0	142
	Ream (1993)	21	21	0	15
	Kep (1993)	5	5	0	7
Wildlife Sanctuary* ¹	Kulen Promtep (1993)	403	403	0	407
	Lomphat (1993)	250	250	0	251
	Beng Per (1993)	243	243	0	249
	Phnom Prich (1993)	223	223	0	222
	Phnom Nam Lyr (1993)	48	48	0	54
	Phnom Samkos (1993)	334	334	0	331
	Phnom Aural (1993)	254	254	0	257
	Snoul (1993)	75	75	0	74
	Peam Krasop (1993)	24	24	0	25
	Roniem Daun Sam (1993)	179	40	0	40
Protected Landscape* ¹	Preah Vihear (1993)	5	5	0	5
	Banteay Chhmar (1993)	81	81	0	82
	Angkor (1993)	11	11	0	14
Multiple Landuse* ¹	Tonle Sap (1993)	316	316	0	322
	Samlaut (1993)	60	60	0	60
	Dong Peng (1993)	28	28	0	29
Total		3277	3151	1585	4765

The differences between the area in Royal Decree and the area in GIS data caused by the boundaries and area of the protected areas were drawn and calculated by hand and then were transferred into GIS format in 1997. All figures are processed based on forest cover data and protected area data through GIS spatial analysis with resolution 50 meters grid cell.

3.3 Analysis and processing of national data

3.3.1 Calibration

3.3.2 Estimation and forecasting

A. Concession Areas

It is assumed that figure 2.244 million ha of areas under concession prior to 1994 reflects the state in 1990. The figure 4.919 million ha for 2000 has been derived by linear interpolation of

¹ * The area in Protected Area was stated by Royal Degree 1993

1996 figure of 6.464 million ha and 2004 figure 3.374 million ha. The figure for 2004 is assumed for 2005. The 2006 figure 3.374 million ha is assumed for 2010.

B. Protection of Soil and Water

The area of 551,000 ha specifically designated for watershed conservation in 1997, 2002 and 2004 are considered as area under protection for soil and water in 2010.

C. Multiple Purposes

Area of about 404,000 ha designated for multiple land use since 1993 (and before) is being considered as area under multiple purposes for 1990, 2000 and 2005 and 2010.

D. Social Services

Area of about 97,000 ha of designated for protected landscapes since 1993 (and before) is being considered as area under social services for 1990, 2000 and 2005 and 2010.

E. Conservation of Biodiversity

Since this is the largest proportion of the protected areas, the calibration from the original data to the actual size of 4,735 million ha in 2004 is done through reduction of Royal degree and Gov't sub-degree classes.

The figure 3,277,000 ha(97,000 ha under Social Services and 404,000ha under multiple purposes were included) of areas under “Protection areas” in 1993 is assumed for 1990. The figure 4,735,000 ha (404,000 ha under multiple land use,97,000 ha under Social Services and 551,000 ha under protection to soil and water were included) of protected forest and protected areas for 2004 are assumed for 2005. The figure 3,381,000 ha for 2000 is derived by linear interpolation of above derived figures for 1990 and 2005. The figure 3,985,000 ha for 2010 is derived by linear interpolation of above derived figures for 2000 and 2005.

3.3.3 Reclassification into FRA 2010 categories

n Primary Function

	Production	Protection of Soil and Water	Conservation of Biodiversity	Social Service	Multiple Purpose	No or Unknown Function
Forest						
Concession Areas	100%					
Watershed Protection		100%				
Zoo, Biodiversity Conservation, Crane Conservation, National Park, Wildlife Sanctuary			100%			
Protected Landscape				100%		
Multiple Landuse					100%	
Unknown						100%

3.4 Data for Table T3

Table 3a – Primary designated function

FRA 2010 Categories	Forest area (1000 hectares)			
	1990	2000	2005	2010
Production	2,244	4,919	3,374	3,374
Protection of soil and water	0	6	551	551
Conservation of biodiversity	2,776	3,381	3,683	3,985
Social services	97	97	97	97
Multiple use	404	404	404	404
Other (please specify in comments below the table)	0	0	0	0
No / unknown	7 423	2,739	2 622	1,683
TOTAL	12,944	11,546	10,731	10,094

Table 3b – Special designation and management categories

FRA 2010 Categories	Forest area (1000 hectares)			
	1990	2000	2005	2010
Area of permanent forest estate	12,944	11,546	10,731	10,094
Forest area within protected areas	3,277	3,184	3,138	3,092
Forest area under sustainable forest management	n.a.	n.a.	n.a.	n.a.
Forest area with management plan	n.a.	n.a.	n.a.	n.a.

The figure 3,184 for 2000 is derived by linear interpolation of above derived figures of 1990 and 2005.

The figure 3,092 for 2010 is derived by linear extrapolation of above derived figures of 2000 and 2005.

3.5 Comments to Table T3

Variable / category	Comments related to data, definitions, etc.	Comments on the reported trend
Production		
Protection of soil and water		Protection of soil and water is under jurisdiction of Forestry Administration of Ministry of Agriculture, Forestry and Fisheries.
Conservation of biodiversity		Conservation of biodiversity responsible by two institutes are protected forest and protected area. Protected forest is under jurisdiction of Forestry Administration of Ministry of Agriculture, Forestry and Fisheries and protected area is under jurisdiction of Ministry of Environment
Social services		Social service is under jurisdiction of Ministry of Environment.

Multiple use		Multiple use is under jurisdiction of Ministry of Environment.
Other		
No / unknown designation		
Area of permanent forest estate		Permanent forest estate is the total of forest area include protected forest and protected area.
Forest area within protected areas		
Forest area under sustainable forest management		
Forest area with management plan		

Other general comments to the table

4 Table T4 – Forest characteristics

4.1 FRA 2010 Categories and definitions

Term / category	Definition
Naturally regenerated forest	Forest predominantly composed of trees established through natural regeneration.
Introduced species	A species, subspecies or lower taxon, occurring <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
World Bank, 1996. Cambodia Forest Policy Assessment. Report No 15777-KH. The World Bank.	M	Concession Areas	Before 1996	
KC. 2004. National Report to the fifth session of the United Nations Forum on Forests. Kingdom of Cambodia	M	Concession Areas	2004	

4.2.2 Classification and definitions

National class	Definition
Not available	FRA definitions are being used to derive the required information

4.2.3 Original data

The area of primary forest was estimated through GIS where the forest cover density is higher than 90% and access roads are not clearly visible. Area of productive plantations for 1992, 1996 and 2002 is from Table 1..

National Categories	Area (1000 hectares)						
	Forest				Other wooded land		
	1992	1996	2002	2005	1992	1996	2002
Primary	755	723	322	n.a	n.a.	n.a.	n.a.
Productive plantations	72	83	77	74	n.a.	n.a.	n.a.

4.3 Analysis and processing of national data

4.3.1 Calibration

4.3.2 Estimation and forecasting

Primary forest:

The forest areas where the forest cover density is higher than 90% and access roads are not clearly visible on GIS. Since linear interpolation was providing too low figure for 2005, therefore the figure of 2002 has been assumed for 2005 and 2010.

National Categories	Area (1000 hectares)							
	Forest				Other wooded land			
	1990	2000	2005	2010	1990	2000	2005	2010
Primary	766	456	322	322	n.a.	n.a.	n.a.	n.a.
Productive plantations	67	79	74	69	n.a.	n.a.	n.a.	n.a.

Planted forest:

Estimation for Planted forest was done for:

1990: using extrapolation of 1992-1996 figures

2000: using interpolation of 1996-2002 figures

2005: using 2005 figures directly

2010: using forecast based on 2002-2005 figures

Planted forest (1000 ha)			
1990	2000	2005	2010
67	79	74	69

The rest of the forest area was considered as other naturally regenerated forest.

Estimation for Mangrove:

1990 figures obtained by extrapolation of 1992-1996 figures

2000 figures obtained by interpolation of 1996-2002 figures

2005: figures obtained from extrapolation of 1996-2002 since the 2005 figure available was far too low

2010: figures obtained from extrapolation of 1996-2002 figures

	1992	1996	2002	2005
Mangroves (Forest and OWL)	77,244	72,457	65,277	31,037

	1990	2000	2005	2010
Mangroves (Forest and OWL)	79,638	67,670	61,687	55,704

Estimation for Bamboo:

1990 figures obtained by interpolation of 1992-1996 figures

2000 figures obtained by interpolation of 1996-2002 figures

2005: available

2010 figures obtained by extrapolation based on 1996-2005 trend (since 2002 figures look weird)

	1992	1996	2002	2005
Bamboo (Forest and OWL)	32,209	33,715	28,951	35,802

	1990	2000	2005	2010
Bamboo (Forest and OWL)	31,456	30,539	35,802	36,961

4.3.3 Reclassification into FRA 2010 categories

4.4 Data for Table T4

Table 4a

FRA 2010 Categories	Forest area (1000 hectares)			
	1990	2000	2005	2010
Primary forest	766	456	322	322
Other naturally regenerated forest	12,111	11,011	10,335	9,703
...of which of introduced species				
Planted forest	67	79	74	69
...of which of introduced species				
TOTAL	12,944	11,546	10,731	10,094

Table 4b

FRA 2010 Categories	Area (1000 hectares)			
	1990	2000	2005	2010
Rubber plantations (Forest)	67	79	74	69
Mangroves (Forest and OWL)	80	68	62	56
Bamboo (Forest and OWL)	31	31	36	37

4.5 Comments to Table T4

Variable / category	Comments related to data, definitions, etc.	Comments on the reported trend
Primary forest		Some parts of primary forest are disturbed by human activities; therefore, the primary forest area is reduced.
Other naturally regenerating forest		
Planted forest	All the planted forest area are considered as rubber plantation.	
Rubber plantations		
Mangroves		
Bamboo		

Other general comments to the table

5 Table T5 – Forest establishment and reforestation

5.1 FRA 2010 Categories and definitions

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

5.2 National data

5.2.1 Data sources

References to sources of information	Quality (H/M/L)	Variable(s)	Year(s)	Additional comments
Cambodia: Forestry Statistics 2002	M		2002	
Cambodia: Forestry Statistics 2004	M		2004	
Cambodia: Forestry Statistics 2006	M		2006	

5.2.2 Classification and definitions

National class	Definition
Not available	

5.2.3 Original data

Summary of Forest Plantation(ha), 1988-2007

1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
576	867	504	226	909	732	853	677	611	485

1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
2	502	984	869	1,303	2,013	1,416	11,860	4,766	9,220

5.3 Data for Table T5

FRA 2010 Categories	Annual forest establishment (hectares/year)			...of which of introduced species ¹⁾ (hectares/year)		
	1990	2000	2005	1990	2000	2005
Afforestation	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Reforestation	616	732	5,855	n.a.	n.a.	n.a.
...of which on areas previously planted	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Natural expansion of forest	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

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

5.4 Comments to Table T5

Variable / category	Comments related to data, definitions, etc.	Comments on the reported trend
Afforestation		
Reforestation		
Natural expansion of forest		

Other general comments to the table

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
				No information is available except from growing stock per hectare estimates from an old FAO inventory.

6.2.2 Classification and definitions

No information on national definitions or classes is available.

National class	Definition
Not available	

6.2.3 Original data

Estimate of per hectare growing stock for three major forest types (evergreen, Mixed and Deciduous) are only available from old FAO supported inventory and no new estimates are available. (Email of National Correspondent of December 18th, 2005).

National class	Growing Stock (m ³ /ha)
Evergreen forest with high cover density	230
Evergreen forest with medium and low cover density	165 (average of 230 and 100)
Evergreen mosaic forest	100
Mixed evergreen and deciduous forest with high cover density	145 (average of 230 and 60)
Mixed evergreen and deciduous forest with medium and low cover density	80 (average of 100 and 60)
Mixed mosaic forest	50 (average of 40 and 60)
Deciduous forest	60
Deciduous mosaic forest	60 (assumed same as deciduous)
Forest regrowth	Not considered
Inundated forest regrowth	Not considered

Inundated forest	20
Mangrove forest	20
Forest plantation	
Inundated mosaic forest	20
Bamboo	20
Wood and shrub land evergreen	Data not available
Wood and shrub land dry	Data not available
Wood and shrub land inundated	Data not available

6.3 Analysis and processing of national data

6.3.1 Calibration

This step is not necessary as area estimates are taken from Table 1.

6.3.2 Estimation and forecasting

Weighted Growing stock per hectare for three major forest types

Forest Types	Area (ha)	GS/ha	Volume (m3)	Weighted GS/ha
A. Evergreen				
For 1992				
Evergreen Dense	656,582	230	151,013,860	
Evergreen Disturbed	3,254,202	165	536,943,330	
Evergreen Mosaic	131,651	100	13,165,100	
Total	4,042,435		701,122,290	173.44
For 1996				
Evergreen Dense	627,219	230	144,260,370	
Evergreen Disturbed	3,185,603	165	525,624,495	
Evergreen Mosaic	178,150	100	17,815,000	
Total	3,990,972		687,699,865	172.31
B. Mixed				
For 1992				
Mixed Dense	98,851	145	14,333,395	
Mixed Disturbed	1,309,010	80	104,720,800	
Mixed Mosaic	110,103	50	5,505,150	
Total	1,517,964		124,559,345	82.06
For 1996				
Mixed Dense	95,322	145	13,821,690	
Mixed Disturbed	1,286,649	80	102,931,920	
Mixed Mosaic	125,331	50	6,266,550	
Total	1,507,302		123,020,160	81.62
C. Deciduous				60.00
D. Inundated, Mangrove and Bamboo Forests				20.00

B. Weighted Growing stock per hectare for Plantations

The estimates for growing stock of plantations are not available. Therefore following method has been followed.

n Grouping plantation area by species and age

Information about area by age of plantations is totally only for 43,000 ha from combination of country information collected for FRA 2000 (More than 40 year and about 20 year) with table 5.2.3 (1990 to 2007). An average net MAI of about 1 cubic meter/ha/annum is being assumed for net area under plantations to estimate weighted GS/ha in plantations. Further, it is assumed that the estimated weighted average will be applicable to all the forest areas under plantations.

Category by age of (forest species) plantations	Area 000 ha	Assumed GS/ha	Volume (000 cubm)	Weighted GS/ha
More than 40 years	3	40	120	
About 20 years	2	20	40	
Less than 20	38	10	380	
Total	43		540	13

C. Weighted Growing Stock per hectare of “forests”

The percentage composition of forests in 2002 has been used to calculate following weighted average of growing stock of forests per ha in 1992 and 1996 because only 2002 provide figures with reasonable ground verification.

Type of forests	Percentage Composition (2002)	1992		1996	
		GS/ha	Weighted GS/ha	GS/ha	Weighted GS/ha
Evergreen	33.48	173.44		172.31	
Mixed	13.09	82.06		81.62	
Deciduous	43.49	60		60	
Bamboo	0.26	20		20	
Inundated (Forest +Mosaic +Regrowth)	2.83	20		20	
Mangrove	0.59	20		20	
Forest Plantation	0.69	20		20	
Forest Regrowth	5.57	20		20	
Total Forests	100.00		96.89		96.46

D. Weighted Growing Stock per ha of forests for FRA reference years

Category	Weighted Growing Stock cubic meter per hectare					
	1992	1996	1990	2000	2005	2010
Growing stock per ha in Forests	96.89	96.46	97.11	96.03	95.49	94.96

D. Estimation of Growing Stock and Commercial Growing Stock

Variable	Unit	1990	2000	2005	2010
Forest Area	000 ha	12,944	11,546	10,731	10,094
GS/ha	cubic meter per ha	97	96	95	95
Growing Stock	million cubic meter	1,257	1,109	1,025	959

6.3.3 Reclassification into FRA 2010 categories

This step is not necessary.

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	1,257	1,109	1,025	959	n.a.	n.a.	n.a.	n.a.
... of which coniferous								
... of which broadleaved								
Growing stock of commercial species	n.a.	n.a.	n.a.	n.a.	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>Dipterocarpus dyeri</i>		n.a.	n.a.	n.a.
2 nd	<i>Dipterocarpus costatus</i>		n.a.	n.a.	n.a.
3 rd	<i>Dipterocarpus alatus</i>		n.a.	n.a.	n.a.
4 th	<i>Anisoptera cochinchinensis</i>		n.a.	n.a.	n.a.
5 th	<i>Tarritia javanica</i>		n.a.	n.a.	n.a.
6 th	<i>Anisoptera costata</i> , Korth		n.a.	n.a.	n.a.
7 th	<i>Hopea pierrei</i>		n.a.	n.a.	n.a.
8 th	<i>Dipterocarpus obtusifolius</i>		n.a.	n.a.	n.a.
9 th	<i>Dipterocarpus tuberculatus</i>		n.a.	n.a.	n.a.
10 th	<i>Dipterocarpus intricatus</i>		n.a.	n.a.	n.a.
Remaining			n.a.	n.a.	n.a.
TOTAL			n.a.	n.a.	n.a.

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 ² 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)		

² Diameter at breast height (DBH) refers to diameter over bark measured at a height of 1.30 m above ground level or 30 cm above buttresses if these are higher than 1 m.

6.5 Comments to Table T6

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

Other general comments to the table

7 Table T7 – Biomass stock

7.1 FRA 2010 Categories and definitions

Category	Definition
Above-ground biomass	All living biomass above the soil including stem, stump, branches, bark, seeds, and foliage.
Below-ground biomass	All biomass of live roots. Fine roots of less than 2mm diameter are excluded because these often cannot be distinguished empirically from soil organic matter or litter.
Dead wood	All non-living woody biomass not contained in the litter, either standing, lying on the ground, or in the soil. Dead wood includes wood lying on the surface, dead roots, and stumps larger than or equal to 10 cm in diameter or any other diameter used by the country.

7.2 National data

7.2.1 Data sources

References to sources of information	Quality (H/M/L)	Variable(s)	Year(s)	Additional comments
FAO. 2008. Guidelines for Country Reporting to FRA 2005. Global Forest Resources Assessment 2010				Biomass conversion and expansion factor (BCEF) and root-shoot ratio from Appendix 5 FRA guidelines

7.2.2 Classification and definitions

National class	Definition
Not available	

7.2.3 Original data

No national data on biomass were available so IPCC default values were applied to the growing stock as in table 6.

7.3 Analysis and processing of national data

7.3.1 Calibration

7.3.2 Estimation and forecasting

Above ground biomass:

Following recommendations from FRA guidelines the following assumptions and calculations have been made:

From appendix 5, table 5.4 pag 6 of the FRA guidelines and considering an ecological zone corresponding to the mostly tropical dry forest (open deciduous forest) the biomass conversion and expansion factor (BCEF) of 0.66 have been applied to the growing stock:

Above ground biomass=growing stock*BCEF

1990= 1257 m³*0.66 t/m³= 830 t
 2000= 1109 m³*0.66 t/m³= 732 t
 2005= 1025 m³*0.66 t/m³= 676 t
 2010= 959 m³*0.66 t/m³= 633 t

Below ground biomass :

From appendix 5, table 5.3 pag 5 of the FRA guidelines, considering an above ground biomass>20t/ha and a tropical dry forest biome, the root-shoot ratio of 0.56 has been chosen.

1990= 830 m³*0.56 t/m³= 465 t
 2000= 732 m³*0.56 t/m³= 410 t
 2005= 676 m³*0.56 t/m³= 379 t
 2010= 633 m³*0.56 t/m³= 354 t

7.3.3 Reclassification into FRA 2010 categories

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	830	732	676	633	n.a.	n.a.	n.a.	n.a.
Below-ground biomass	465	410	379	354	n.a.	n.a.	n.a.	n.a.
Dead wood	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
TOTAL	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

7.5 Comments to Table T7

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

Other general comments to the table

8 Table T8 – Carbon stock

8.1 FRA 2010 Categories and definitions

Category	Definition
Carbon in above-ground biomass	Carbon in all living biomass above the soil, including stem, stump, branches, bark, seeds, and foliage.
Carbon in below-ground biomass	Carbon in all biomass of live roots. Fine roots of less than 2 mm diameter are excluded, because these often cannot be distinguished empirically from soil organic matter or litter.
Carbon in dead wood	Carbon in all non-living woody biomass not contained in the litter, either standing, lying on the ground, or in the soil. Dead wood includes wood lying on the surface, dead roots, and stumps larger than or equal to 10 cm in diameter or any other diameter used by the country.
Carbon in litter	Carbon in all non-living biomass with a diameter less than the minimum diameter for dead wood (e.g. 10 cm), lying dead in various states of decomposition above the mineral or organic soil.
Soil carbon	Organic carbon in mineral and organic soils (including peat) to a specified depth chosen by the country and applied consistently through the time series.

8.2 National data

8.2.1 Data sources

References to sources of information	Quality (H/M/L)	Variable(s)	Year(s)	Additional comments
FAO. 2008. Guidelines for Country Reporting to FRA 2005. Global Forest Resources Assessment 2010				Carbon conversion factor of 0.47

8.2.2 Classification and definitions

National class	Definition
Not available	

8.2.3 Original data

No original data on carbon were available, so the carbon conversion factor of 0.47 recommended in the FRA guidelines has been applied to the biomass as coming from table 7.

8.3 Analysis and processing of national data

8.3.1 Calibration

8.3.2 Estimation and forecasting

The soil carbon is estimated from the forest area multiply by the HAC soils of Tropical, dry (38) found in Table 5.10 FRA Guidelines

8.3.3 Reclassification into FRA 2010 categories

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	390	344	318	298	n.a.	n.a.	n.a.	n.a.
Carbon in below-ground biomass	219	193	177	166	n.a.	n.a.	n.a.	n.a.
Sub-total: Living biomass	609	537	495	464	n.a.	n.a.	n.a.	n.a.
Carbon in dead wood	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Carbon in litter	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Sub-total: Dead wood and litter	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Soil carbon	492	439	408	384	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.

Soil depth (cm) used for soil carbon estimates	30
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8.5 Comments to Table T7

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

Other general comments to the table

9 Table T9 – Forest fires

No information is available for this table.

10 Table T10 – Other disturbances affecting forest health and vitality

No information is available for this table.

11 Table T11 – Wood removals and value of removals

11.1 FRA 2010 Categories and definitions

Category	Definition
Industrial roundwood removals	The wood removed (volume of roundwood over bark) for production of goods and services other than energy production (woodfuel).
Woodfuel removals	The wood removed for energy production purposes, regardless whether for industrial, commercial or domestic use.

11.2 National data

11.2.1 Data sources

References to sources of information	Quality (H/M/L)	Variable(s)	Year(s)	Additional comments
Cambodia: Forestry Statistics to 2002	M		2002	
Cambodia: Forestry Statistics to 2004	M		2004	
Cambodia: Forestry Statistics to 2006	M		2006	

11.2.2 Classification and definitions

National class	Definition
	National classification and definitions are not available

11.2.3 Original data

- Production of industrial roundwood (1000 m3 over bark)

1993	1994	1995	1996	1997	1998	1999
201	846	829	517	526	302	295

2000	2001	2002	2003	2004	2005	2006
187	127	1	0	4	10	3

(Source: Cambodia:Forestry Statistics 2002 & 2006)

- Production of fuel wood (Stere)

1993	1994	1995	1996	1997	1998	1999
57,112	23,677	2,085	3,590	2,780	730	255

2000	2001	2002	2003	2004	2005	2006
56	0	7,000	12,753	0	1,350	1,166

(Source: Cambodia:Forestry Statistics 2002 & 2006)

11.3 Analysis and processing of national data

11.3.1 Calibration

11.3.2 Estimation and forecasting

11.3.3 Reclassification into FRA 2010 categories

11.4 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.)	625	182	4	94	0	1
... of which from forest	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Unit value (local currency / m ³ o.b.)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total value (1000 local currency)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

The figure in 1990 (635) gets from the average of the figure from 1993-1995. The figure in 2000 gets from the average of the figure from 1998 and 2002 and the figure in 2005 gets from the average of the figure between 2003 and 2006.

The figure (94) of woodfuel removals for 1990 is derived by linear interpolation of above derived figures of 1993 and 1994.

	1990	2000	2005
Name of local currency			

11.5 Comments to Table T11

Variable / category	Comments related to data, definitions, etc.	Comments on the reported trend
Total volume of industrial roundwood removals	The total volume of industrial roundwood removals are include luxury roundwood, round wood class 1 and round wood class 2.	Forest concession harvesting activities had been suspended by Royal Government of Cambodia decision and required thus forest concession for develop a strategies Forest Management Plan and ESIA sin 200.
Total volume of woodfuel removals		
Unit value	The round wood removals there are different unit value between luxury roundwood, round wood class 1 and round wood class 2.	

Total value	The unit value of round wood removals are different from luxury round wood, round wood class 1, round wood class 2 and class 3 and so on. So we can't calculate the total value the round wood removals	
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Other general comments to the table

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

References to sources of information	Quality (H/M/L)	Variable(s)	Year(s)	Additional comments
KC Cambodia: Forestry Statistics to 2006	M		2006	

12.2.2 Classification and definitions

National class	Definition
	National classification and definitions are not available

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	Rattan		ton	4.5	n.a.	5
2 nd	Bamboo		ton	558.56	n.a.	5
3 rd	Liquid Resin		ton	185	n.a.	4
4 th						
5 th						
6 th						
7 th						
8 th						
9 th						
10 th						
All other plant products						
All other animal products						
TOTAL					n.a.	

	2005
Name of local currency	

12.4 Comments to Table T12

Variable / category	Comments related to data, definitions, etc.
10 most important products	
Other plant products	
Other animal products	
Value by product	
Total value	

Other general comments to the table

13 Table T13 – Employment

13.1 FRA 2010 Categories and definitions

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

13.2 National data

13.2.1 Data sources

References to sources of information	Quality (H/M/L)	Variable(s)	Year(s)	Additional comments
KKH. 2002. Cambodia: Forestry Statistics to 2002	M		2002	
KKH. 2006. Cambodia: Forestry Statistics to 2006	M		2006	
KKH. 2004. Ministry of Agriculture, Forestry and Fisheries (www.maff.gov.kh)	M		2004	

13.2.2 Classification and definitions

National class	Definition
	There is no information on national classification and definitions relating to this table.

13.2.3 Original data

A. Employees in Forestry Administration

Number of Employees in Department of Forest and Wildlife							Number of Employees in Forestry Administration				
1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
696	722	748	752	745	858	841	1,748	1,722	1,667	1,606	1,600

The number of employees (993) in Provincial Forest Offices is only available for 2002.

B. Employees in General Department of Rubber

Primary employment in rubber production			
Year	Production Employee	Service Employee	Total
1996	17,220	471	17,691
1997	17,389	413	17,802
1998	16,588	354	16,942
1999	14,949	231	15,180
2000	14,823	226	15,049
2001	14,816	301	15,117
2002	14,422	299	14,721
2003	13,945	509	14,454

13.3 Analysis and processing of national data

13.3.1 Calibration

13.3.2 Estimation and forecasting

It is assumed that

- (a) number of employees in provincial forest offices in 1990 and 2000 same as in 2002.
- (b) number of employees in department of forest and wildlife in 1990 same as in 1997.
- (c) number of employees looking after national parks etc. (conservation of biodiversity) is in proportion of the forest areas under conservation of biodiversity (Table 3) and it is roughly 25%. Further that this number represents employment through services.
- (d) number of employees in production and service relating to rubber production is counted against production. The number in 1990 is same as in 1996 and the number in 2005 is same as in 2003.

	1990	2000	2005	estimation and forecasting
FA	696	752	301	(b)
Provincial	993	993	1,421	(a)
FA + Provincial	1,689	1,745	1,722	(a) + (b)
of which Protected area	422	436	431	(c)=(a+b)*0.25
of which others	1,267	1,309	1,292	(a)+ (b)–(c)
Rubber	17,691	15,049	14,454	(d)
Primary Production of Goods	18,958	16,358	15,746	(a)+ (b)–(c) +(d)

13.3.3 Reclassification into FRA 2010 categories

13.4 Data for Table T13

FRA 2010 Category	Employment (1000 years FTE)		
	1990	2000	2005
Employment in primary production of goods	18.96	16.36	15.75
...of which paid employment	n.a.	n.a.	n.a.
...of which self-employment	n.a.	n.a.	n.a.
Employment in management of protected areas	n.a.	n.a.	n.a.

13.5 Comments to Table T13

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

Other general comments to the table

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	Statement of the Royal Government on National Forest Sector Policy	
National forest programme (nfp)	<input checked="" type="checkbox"/>	Yes	
	<input type="checkbox"/>	No	
If Yes above, provide:	Name of nfp in country	National Forest Programme	
	Starting year	2007	
	Current status	<input checked="" type="checkbox"/>	In formulation
		<input type="checkbox"/>	In implementation
		<input type="checkbox"/>	Under revision
<input type="checkbox"/>		Process temporarily suspended	
Reference to document or web site			
Law (Act or Code) on forest with national scope	<input checked="" type="checkbox"/>	Yes, specific forest law exists	
	<input 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	2002	
	Year of latest amendment		
	Reference to document	Forestry law 2002	

In case the responsibility for forest policy- and/or forest law-making is decentralized, please indicate the existence of the following and explain in the comments below the table how the responsibility for forest policy- and law-making is organized in your country.	
Sub-national forest policy statements	Yes
	<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	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	
National forest programme (nfp)	
Law (Act or Code) on forest with national scope	
Sub-national forest policy statements	
Sub-national Laws (Acts or Codes) on forest	

Other general comments to the table

15 Table T15 – Institutional framework

15.1 FRA 2010 Categories and definitions

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

15.2 Data for Table T15

Table 15a – Institutions

FRA 2010 Category	2008	
Minister responsible for forest policy formulation : please provide full title	Minister of Ministry of Agriculture, Forestry and Fisheries	
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
		4 th or lower level subordination to Minister
Other public forest agencies at national level	Not available	
Institution(s) responsible for forest law enforcement	-Forestry Administration responsible for permanents forest estate. -Fishery Administration responsible for inundated and Mangrove forest Ministry of Environment responsible for protected forest	

Table 15b – Human resources

FRA 2010 Category	Human resources within public forest institutions					
	2000		2005		2008	
	Number	%Female	Number	%Female	Number	%Female
Total staff	752	n/a	1,722	7.84	1,600	8.06
...of which with university degree or equivalent	276	n/a	560	n/a	623	3.69

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.

15.3 Comments to Table T15

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

Other general comments to the table

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 Data sources

References to sources of information	Quality (H/M/L)	Variable(s)	Year(s)	Additional comments
Graduation Statistics of Bachelor Students up to January 2008.	H		2008	Internal Use only

16.2.2 Original data

16.3 Analysis and processing of national data

16.4 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	n/a	n/a	n/a	n/a	n/a	n/a
Bachelor's degree (BSc) or equivalent	22	4.54	27	22.22	25	24
Forest technician certificate / diploma	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
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)	n/a		n/a		n/a	
Master's degree (MSc) or equivalent	n/a		n/a		n/a	
Bachelor's degree (BSc) or equivalent	n/a		n/a		n/a	

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.

16.5 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

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
Cambodia: Forestry Statistics 2006	M		2006	

17.3 Data for Table T17

Table 17a - Forest revenues

FRA 2010 Categories	Revenues (1000 local currency)	
	2000	2005
Forest revenue	44,569,223	5,789,281

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	1,364,496	4,114,936	n/a	n/a	1,364,496	4,114,936
Transfer payments	n/a	n/a	n/a	n/a	n/a	n/a
Total public expenditure	1,364,496	4,114,936			1,364,496	4,114,936
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		Royal Government of Cambodia cancelled all forest concession in 2001.
Operational expenditure		The upgrading of the budget due to some of recent projects has been approved.
Transfer payments		

Other general comments to the table