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The Forest Resources Assessment Programme

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

FAO, at the request of its member countries, regularly monitors the world's forests and their management and uses through the Forest Resources Assessment Programme. This country report forms part of the Global Forest Resources Assessment 2005 (FRA 2005), which is the most comprehensive assessment to date. More than 800 people have been involved, including 172 national correspondents and their colleagues, an Advisory Group, international experts, FAO staff, consultants and volunteers. Information has been collated from 229 countries and territories for three points in time: 1990, 2000 and 2005.

The reporting framework for FRA 2005 is based on the thematic elements of sustainable forest management acknowledged in intergovernmental forest-related fora and includes more than 40 variables related to the extent, condition, uses and values of forest resources. More information on the FRA 2005 process and the results - including all the country reports - is available on the FRA 2005 Web site (www.fao.org/forestry/fra2005).

The Global Forest Resources Assessment process is coordinated by the Forestry Department at FAO headquarters in Rome. The contact person for matters related to FRA 2005 is:

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The Global Forest Resources Assessment 2005 Country Report Series is designed to document and make available the information forming the basis for the FRA 2005 reports. The Country Reports have been compiled by officially nominated country correspondents in collaboration with FAO staff. Prior to finalisation, these reports were subject to validation by forestry authorities in the respective countries.

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1 Table T1 – Extent of Forest and Other wooded land

1.1 FRA 2005 Categories and definitions

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

1.2 National data

1.2.1 Data sources

References to sources of information	Quality (H/M/L)	Variable(s)	Information Year(s)
GOP. 1961. Inventory of Sangu- Matamuhari Reserved Forests.	H	Extent	1958 and 1961
GOP. 1963. Forestal, Forestry and Engineering International Ltd.. Inventory of Sitaphar .	H	Extent	1963
GOP. 1963. Forestal, Forestry and Engineering International Ltd.. Inventory of Kasalong	H	Extent	1963
GOP. 1963. Forestal, Forestry and Engineering International Ltd. Inventory of Rankiang	H	Extent	1963
ANON, 1964. Forest Inventory Survey of Chittagong Hill Tracts in 1961-1963, Forestal, Forestry and Engineering International Ltd.	M	Extent	1963
Hammermaster, E. T., 1981. Village Forest Inventory of Bangladesh: Inventory Results. Field Document No. 5. UNDP/FAO Project BGD/78/020	M	Extent	1981
FAO 1988. Assistance to the Forestry Sector of Bangladesh. Project Findings and Recommendations. FD/BGD/79/017 Terminal Report.	H	Extent	1983
Drigo et al 1987. FAO/UNDP/BGD/85/085.	H	Extent	1984
FMP, 1993. Forestry Master Plan, Ministry of Environment and Forest, Government of Bangladesh. GOB.1993. Asian Development Bank (UNDP/FAO/BGD/88/025). Main and supporting volumes	M	Extent	1985, 1990, 1991, 1992
Ghani, . Q., A. ALim and P.R. Stevens. 1990. Rehabilitation and land use of Sal Forests. FAO/UNDP Project BGD/85/085.	M	Extent	1990
Revilla Jr. J. A. V et. al. 1998. Final Report: Forest Inventory of the natural forests and Forest plantation (Sundarbans Forest Division) Mandela Agricultural Development Corporation and Forest Department, Ministry of Environment and Forests. Bangladesh.	H	Extent	1995

Revilla Jr. J. A. V et. al. 1998. Final Report: Forest Inventory of the natural forests and Forest plantation (Cox's Bazar Forest Division) Mandela Agricultural Development Corporation and Forest Department, Ministry of Environment and Forests. Bangladesh.	H	Extent	1996
Revilla Jr. J. A. V et. al., 1998. Final Report: Forest Inventory of the natural forests and Forest plantation (Chittagong Forest Division) Mandela Agricultural Development Corporation and Forest Department, MOEF. Bangladesh.	H	Extent	1996
Revilla Jr. J. A. V et. al. 1998. Final Report: Forest Inventory of the natural forests and Forest plantation (Sylhet Forest Division) Mandela Agricultural Development Corporation and Forest Department, MOEF. Bangladesh.	H	Extent	1996
Revilla Jr. J. A. V et. al. 1998. Final Report: Forest Inventory of the natural forests and Forest plantation (Coastal Afforestation) Mandela Agricultural Development Corporation and Forest Department, MOEF. Bangladesh.	H	Extent	1998
Sylvander, R., Latif, M. A. and Karlsson, A. 2000. Forest Inventory of the Sal Forests of Bangladesh. Forestry Sector Project, Forest Department, MOEF, Bano Bhaban, Dhaka.	H	Extent	2000
SYB, 2000. Statistical yearbook of Bangladesh. Twenty-First edition. Bangladesh Statistics Division, Ministry of Planning, Government of the People's Republic of Bangladesh, Dhaka.	M	Extent	2000
GOB, 2002. Ek-najare Bangladesh Ban Bibhag, Information Cell, National Tree Planting Movement and Tree Fair.	M	Extent	2002
ANON, 2004. Office Letter of BFIDC, No. 455 of 19 Dec. 2004	M	Extent	2004

1.2.1 Classification and definitions

There has been no nation wide inventory or survey of forests in Bangladesh. The Forest Department of Bangladesh mostly follows the FAO categories and definitions. There are some local terms or terminology, which have been defined or described below.

National class	**Definition**
Hill Forest	Forests developed over tertiary hills along the northeast and southeast fringe of the country.
Natural Mangrove	Forests – naturally developed in the active delta of river Padma along the coast of Bay of Bengal.
Mangrove Plantation	Artificially created plantation of mangrove species over the estuary of the river Meghna
Plain Land Sal Forest	Forest, naturally developed in the Pleistocene terrace, spread over the central and northern region of the country.
Unclassed State Forests	It is also hill forests but not classed as forest.
Forest Under Rubber	Rubber plantation managed for latex production.
Village Forest	Homestead garden – intensively managed – where fruits are preferential species.
Open Sal Forest	These are original Sal forest, which have been but depleted over time and their density is poor.
Khas Forest Lands	The forest in the govt. khas land, but not managed.
Strip Plantation	The afforestation along the roads, railway line, 'Bangladesh Water Development Board' embankment and linear strips.
Haor	A haor is a low-lying area consisted of bowl shaped depressions or succession of depressions.
Baor	A baor is a oxbow lake formed in a dead arm of a river.

1.2.3 Original data

A. Hill Forests

1. Kassalong

Category	Area in 000 ha		
	1963	1983	1992
Natural Forests	76.195	61.273	53.225
Bamboo	41.366	12.653	12.653
Sub Total	117.561	73.926	65.878
Scattered trees			3.525
Plantation			19.186
Total	**117.561**	**73.926**	**88.589**

2. Rankhiang

Variable	Area in 000 ha		
	1963	1983	1992
Natural Forests	27.258	10.344	5.052
Bamboo	27.907	13.606	13.606
Sub Total	55.165	23.95	18.658
Scatter trees			6.494
Plantation			18.718
Total	**55.165**	**23.95**	**43.87**

3. Sitapahar

Category	Area in 000 ha	
	1984	1990
Natural Forests	0.65	0.65
Plantation (teak)	3.81	3.74
Sub total	**4.46**	**4.39**
Non-productive forests	0.35	0.30
Other	0.62	0.75
Sub-Total	**0.98**	**1.05**
TOTAL	5.44	5.44

4. Sangu Matamuhari

Category	Area in 000 ha	
	1958	1983
Timber mixed	9.48	8.70
Bamboo – Timber	64.24	47.84
Sub Total	**73.72**	**56.54**
Jhum	0.03	17.10
Other	0.75	0.86
Sub Total	0.78	17.96
Total	74.50	74.50

5. Chittagong

Category	Area in 000 ha	
	1984	1996
Natural Forests	30.003	22.224
Bamboo		3.299
Sub Total Forests	30.003	25.523
Scatter trees OWL	22.468	34.157
Plantation	13.223	14.109
Total	**65.694**	**73.789**

6. Cox's Bazar

Category	Area in 000 ha	
	1984	1996
Natural Forests	31.294	26.867
Bamboo		
Sub Total Forests	31.294	26.867
Scatter trees OWL	3.205	3.532
Plantation	18.044	19.439
Total	**52.543**	**49.838**

7. Sylhet

Category	Area in 000 ha	
	1984	1996
Natural Forests	3.337	2.782
Bamboo	13.933	20.04
Sub Total Forests	17.270	22.822
Scatter trees OWL	2.832	0.872
Plantation	11.502	17.872
Total	**31.604**	**41.566**

8. Jhum Plantations

The FMP, 1993 has indicated following area of Jhum Control plantations in the hills.

Forest Plantation	Area in 000 ha (1990)
Jhum Plantations	15.36

B. Plain Sal Forests

1. Dhaka

Category	Area in 000 ha	
	1990	2000
Natural Forests	6.734	9.88
Plantation (wood lot)	0.917	2.04
Total	7.651	11.92

2. Tangail

Category	Area in 000 ha	
	1990	2000
Natural Forests	9.975	8.130
Plantation (wood lot)	5.157	7.250
Total	15.132	15.38

3. Mymensingh

Category	Area in 000 ha	
	1990	2000
Natural Forests	5.787	2.320
Plantation (wood lot)	3.844	5.136
Total	9.631	7.456

4. Dinajpur

Category	Area in 000 ha	
	1990	2000
Natural Forests	0.946	1.472
Plantation (wood lot)	3.450	1.856
Total	4.396	3.328

5. Rangpur

Category	Area in 000 ha	
	1990	2000
Natural Forests	0.084	0.064
Plantation (wood lot)	1.746	0.568
Total	1.83	0.632

6. Rajshahi

Category	Area in 000 ha	
	1990	2000
Natural Forests	not available	0.128
Plantation (wood lot)	not available	0.200
Total	not available	0.328

C. Littoral Forests (Mangrove and Coastal Afforestation)

1. Sunderbans

Category	Area in 000 ha	
	1981	1995
Forests	405.257	399.465
Plantations	0.351	0.217
Total	405.608	399.682

2. Coastal Afforestation

Coastal Areas	Area in 000 ha	
	1984	1996
Bhola CA	3.565	12.42
Chittagong CA	3.342	20.042
Noakhali CA	6.065	34.223
PatuaKhali CA	4.007	9.848
Total	16.979	76.533

D. Rubber Plantation

Category	Area in 000 ha	
	1990	2000
Rubber Plantations	19.800	35.430

E. Unclassed State Forests

There is more than 700,000 ha of hill land under district administration and most of this land is barren and lacks forest cover (GOB, 1993 Page 84 Main volume). No information is available on extent of forest cover on this land except for following plantations in the hills (FMP, 1993). Hence its area, excluding following plantations, will be classified as "Other Land" under FRA 2005 Category.

Forest Plantation	Area in 000 ha (1990)
Khagrachari	1.41
Bandarban Pulpwood	8.72
Bandarban	9.36
Kaptai Pulpwood	18.17

F. Strip Plantations

Bangladesh Forest Department (GOB, 2002) estimates that the country has about 72,498.37 km long strip plantations. If average width of these plantations is assumed to be 10 meters then 1 km long plantation is equal to 1 hectare and the total strip plantation in Bangladesh in 2002 may be treated as covering about 72, 498 ha. It will be classified as "Other Land with tree cover " under FRA 2005 Category.

G. Village Homestead Forests

The "Forest Master Plan" indicates that about 270,000 ha are under village homestead forests comprising of bamboo as well as trees (GOB, 1993. "Statistical Report" – Village Forest Inventory- Page 1, one of the supplementary volumes to the "Forest Master Plan"). It will be classified as "Other Land with tree cover " under FRA 2005 Category.

H. National Statistics on Total Area and Inland water bodies area

Category	Country Variables	Area ('000 hectare)
Inland Water		**1770.0**
	Haor, Baor & Lakes	133.8
	Rivers	1506.2
	Ponds	130.0
Total for country	Country Area	**14,757.0**

Source: SYB 2000, Table- 2.02 page-20.

I. UN Statistics on Total Land Area and Inland Water bodies

The total area of the country in FAOSTAT is 14,400 (000 ha) and the area of inland water is 1383 (000 ha), which is different than the above.

1.3 Analysis and processing of national data

1.3.1 Calibration

The calibration has been done to match the area of the country and inland water bodies with FAOSTAT/UNSTAT by adjusting these area differences in the area of the "other land".

1.3.2 Estimation and forecasting

The estimating and the forecasting for 1990, 2000 and 2005 have been done separately for each sub-national forest boundary of inventory or assessment as these has been inventoried or surveyed in different years as indicated in the original data.

A. Hill Forests

1. Kassalong

The linear trend has been used for natural forests and bamboo area. Since only one point information was available for Bamboo, Scattered trees and Plantations same figure has been used for 1990, 2000 and 2005.

Category	**Area in 000 ha**		
	1990	2000	2005
Natural Forests	55.01	46.07	41.60
Bamboo	12.65	12.65	12.65
Sub Total	67.67	58.72	54.25
Scattered trees	3.53	3.53	3.53
Plantation	19.19	19.19	19.19
Total	**90.38**	**81.44**	**76.96**

2. Rankhiang

The linear trend has been used for natural forests and bamboo area. Since only one point information was available for Bamboo, Scattered trees and Plantations same figure has been used for 1990, 2000 and 2005

	Area in 000 ha		
	1990	2000	2005
Natural Forests	6.23	0.35	0.35
Bamboo	13.61	13.61	13.61
Sub Total	**19.83**	**13.95**	**13.95**
Scatter trees	6.49	6.49	6.49
Plantation	18.72	18.72	18.72
Total	**45.05**	**39.17**	**39.17**

3. Sita Pahar

The linear interpolation and extrapolation method has been used for estimating area of natural forests, plantations and non-productive forests in 1990, 2000 and 2005.

	Area in 000 ha		
Category	**1990**	**2000**	**2005**
Natural Forests	0.65	0.65	0.65
Plantation (teak)	3.74	3.62	3.56
Sub total	**4.39**	**4.27**	**4.21**
Non-productive forests	0.30	0.21	0.17
Other	0.75	0.96	1.06
Sub-Total	**1.05**	**1.17**	**1.23**
TOTAL	5.44	5.44	5.44

4. Sanghu Matamuhari

The linear interpolation and extrapolation method has been used for estimating areas of timber and bamboo-timber natural forests. The area of Jhum has been assumed constant since 1990.

Category	**1990**	**2000**	**2005**
Timber mixed	8.48	8.17	8.01
Bamboo – Timber	43.25	36.69	33.41
Sub Total	**51.73**	**44.86**	**41.42**
Jhum	17.10	17.10	17.10
Other	5.67	12.54	15.98
Sub Total	**22.77**	**29.64**	**33.08**
Total	**74.50**	**74.50**	**74.50**

3. Chittagong

The interpolation and extrapolation method has been used for estimating and forecasting the area of natural forests. Since bamboo had only data hence same figure has been assumed for the three reference years. Area under plantation for 1990 has been interpolated, while for 2000 and 2005 it has been assumed same as in 1996. The area under scattered trees for 1990 has been interpolated for 1990 but for 2000 and 2005 it has been treated as remainder area such that the total does not increase the actual original level of 1996.

Category	Area in 000 ha		
	1990	2000	2005
Natural Forests	26.114	19.631	16.390
Bamboo	3.299	3.299	3.299
Sub Total Forests	29.413	22.930	19.689
Scatter trees	28.313	36.750	39.991
Plantation	13.666	14.109	14.109
Total	**71.391**	**73.789**	**73.789**

4. Cox's Bazar

The interpolation and extrapolation method has been used for natural forests. Area under plantation for 1990 has been interpolated, while for 2000 and 2005 it has been assumed as in 1996. The area under Scattered trees for 1990 has been interpolated for 1990 but for 2000 and 2005 it has been treated as remainder area such that the total does not increase the actual original level of 1996.

Category	Area in 000 ha		
	1990	2000	2005
Natural Forests	29.081	25.391	23.547
Bamboo	0	0	0
Sub Total Forests	29.081	25.391	23.547
Scatter trees OWL	3.369	5.008	6.852
Plantation	18.742	19.439	19.439
Total	**51.191**	**49.838**	**49.838**

5. Sylhet

The interpolation and extrapolation method has been used for estimating and forecasting the areas of natural forests. Area under bamboo has been interpolated for 1990 but for 2000 and 2005 it has been assumed same as in 1996. The area under plantation for 1990 has been interpolated, while for 2000 and 2005 it has been assumed as in 1996. The area under Scattered trees for 1990 has been interpolated for 1990 but for 2000 and 2005 it has been treated as remainder area such that the total maintains the original level of 1996.

Category	Area in 000 ha		
	1990	**2000**	**2005**
Natural Forests	3.060	2.597	2.366
Bamboo	16.987	20.04	20.04
Sub Total Forests	20.046	22.637	22.406
Scatter trees OWL	1.852	1.057	1.288
Plantation	14.687	17.872	17.872
Total	**36.585**	**41.566**	**41.566**

6. Other Plantations

The area in 1990 has been assumed for 2000 and 2005 since there was only one point in time information available for the following plantations in the hills.

Category	Area in 000 ha		
	1990	**2000**	**2005**
Khagrachari	1.41	1.41	1.41
Bandarban Pulpwood	8.72	8.72	8.72
Bandarban	9.36	9.36	9.36
Kaptai Pulpwood	18.17	18.17	18.17
Jhum control	15.36	15.36	15.36
Total	**53.02**	**53.02**	**53.02**

Total Hill Forests

The above estimating and forecasting for different forest areas has lead to the following total of forest, bamboo, plantation and scattered trees (OWL) areas in the hills of Bangladesh.

Category	Area in 000 ha		
	1990	**2000**	**2005**
Natural Forests	128.63	102.86	92.91
Bamboo	89.79	86.29	83.01
Sub-total Forests	**218.42**	**189.15**	**175.92**
Plantation	141.76	145.97	145.91
Sub-Total Forests and Plantation	**360.18**	**335.12**	**321.83**
Scattered trees (Other wooded lands)_	43.55	52.83	58.15
Grand Total	**403.73**	**387.95**	**379.98**

B. Plain Sal Forests

The figures for 1990 and 2000 were available. The figures of 2000 have been assumed for 2005 as they present more realistic picture of the forest resources on the ground.

1. Dhaka

Category	Area in 000 ha		
	1990	**2000**	**2005**
Natural Forests	6.734	9.88	9.88
Plantation (wood lot)	0.917	2.04	2.04
Total	7.651	11.92	11.92

2. Tangail

Category	Area in 000 ha		
	1990	2000	2005
Natural Forests	9.975	8.130	8.130
Plantation (wood lot)	5.157	7.250	7.250
Total	**15.132**	**15.38**	**15.38**

3. Mymensingh

Category	Area in 000 ha		
	1990	2000	2005
Natural Forests	5.787	2.320	2.320
Plantation (wood lot)	3.844	5.136	5.136
Total	**9.631**	**7.456**	**7.456**

4. Dinajpur

Category	Area in 000 ha		
	1990	2000	2005
Natural Forests	0.946	1.472	1.472
Plantation (wood lot)	3.450	1.856	1.856
Total	**4.396**	**3.328**	**3.328**

5. Rangpur

Category	Area in 000 ha		
	1990	2000	2005
Natural Forests	0.084	0.064	0.064
Plantation (wood lot)	1.746	0.568	0.568
Total	**1.83**	**0.632**	**0.632**

6. Rajshahi

Category	Area in 000 ha		
	1990	2000	2005
Natural Forests	0.128	0.128	0.128
Plantation (wood lot)	0.200	0.200	0.200
Total	**0.328**	**0.328**	**0.328**

Total Plains Forest

The above figures lead to the following total of the forest resources in the plains of Bangladesh.

Category	Area in 000 ha		
	1990	2000	2005
Natural Forests	23.654	21.994	21.994
Plantation (wood lot)	15.314	17.050	17.050
Total	**38.968**	**39.044**	**39.044**

C. Littoral Forests (Mangroves and Coastal Afforestation)

Interpolation and extrapolation has been used to estimate the areas figures for 1990, 2000 and 2005 in littoral forest of Bangladesh.

1. Sunderbans

Category	Area in 000 ha		
	1990	2000	2005
Natural Forests	401.53	397.40	395.33
Plantation	0.26	0.22	0.22
Total	**401.80**	**397.61**	**395.54**

2. Coastal Afforestation

Interpolation and extrapolation has been used to estimate data for 1990, 2000 and 2005.

Coastal Areas	Area in 000 ha		
	1990	2000	2005
Bhola CA	10.21	12.42	12.90
Chittagong CA	15.87	20.04	20.82
Noakhali CA	27.18	34.22	35.55
PatuaKhali CA	8.39	9.85	10.23
Total	**61.65**	**76.53**	**79.50**

Total Littoral Forests

Category	Area in 000 ha		
	1990	2000	2005
Forests	401.53	397.40	395.33
Plantations	61.91	76.75	79.72
Total	**463.44**	**474.15**	**475.05**

D. Rubber Plantations

The figure for 2005 has been assumed same as of 2000.

Category	Area in 000 ha		
	1990	2000	2005
Rubber Plantation	19.800	35.430	35.430

E. Unclassed State Forests

There is more than 700,000 ha of hill land under district administration and most of this land is barren and lacks forest cover (GOB, 1993 Page 84 Main volume). Detail information is not available on extent of forest cover on this land. Since only point (1992) information is available for village homestead forests the same information is being assumed for 1990, 2000 and 2005.

Category	Area in 000 ha		
	1990	2000	2005
Un-classed State forests	700	700	700

F. Strip Plantations

Bangladesh Forest Department (GOB, 2002) estimates that the country has about 72,498.37 km long strip plantations. If average width of these plantations is assumed to be 10 meters then 1 km long plantation is equal to 1 hectare and the total strip plantation in Bangladesh in 2002 may be treated as covering about 72, 498 ha.

Category	Area in 000 ha		
	1990	2000	2005
Strip plantations	73	73	73

G. Village Homestead Forests

Since only point (1992) information is available for village homestead forests the same information is being assumed for 1990, 2000 and 2005. This assumption is also based on the cultural practice to maintain and conserve village homesteads.

Category	Area in 000 ha		
	1990	2000	2005
Village homestead forests	270	270	270

H. Total Hills, Plain and Littoral Forests and Rubber Plantation

National Category		Area in 000 ha		
		1990	**2000**	**2005**
Natural Forests	Hills	218.42	189.14	175.92
	Plain	23.65	21.99	21.99
	Littoral	401.53	397.40	395.33
	Sub Total	643.61	608.53	593.24
Plantations	Hills	141.76	145.97	145.91
	Plain	15.31	17.05	17.05
	Littoral	61.91	76.75	79.72
	Rubber	19.80	35.43	35.43
	Sub Total	238.79	275.20	278.11
Sub Total Forest		**882.39**	**883.74**	**871.35**
Scattered Trees (OWL)		**43.55**	**52.83**	**58.15**
Homestead Forest and Strip Plantations		**342.50**	**342.71**	**342.67**

1.4 Reclassification into FRA 2005 classes

Country Variables	FRA 2005 Categories				
	Forest	**Other Wooded land**	**Other land**	**Other land of which with tree cover**	**Inland Water bodies**
Natural Forests	100				
Forest Plantation	100				
Scattered Trees		100			
Rubber Plantations	100				
Unclassed State Forests			100		
Strip Plantations				100	
Village Homesteads				100	
All remaining national categories			100		
Haor, Baor & Lakes					100
Rivers					100
Ponds					100

(Note: Inland water bodies' areas will be calibrated (set equal to) with area of Inland water bodies in FAOSTAT. The area of the land remaining after accounting forests and other wooded land will be allocated to the category of "other land")

1.5 Data for National reporting table T1

FRA 2005 Categories	Area (1000 hectares)		
	1990	**2000**	**2005**
Forest	882	884	871
Other wooded land	44	53	58
Other land	12091	12080	12088
Other land of which with tree cover [1)]	343	343	343
Inland water bodies	1383	1383	1383
TOTAL	**14400**	**14400**	**14400**

1) Area of "Other land with tree cover" is included in the area reported under "Other land" and should therefore be excluded when calculating the total area for the country.

1.6 Comments to National reporting table T1

There is no single national inventory, hence various estimation and forecasting has been done for each sub-national inventory or assessment area.

2 Table T2 – Ownership of Forest and Other wooded land

2.1 FRA 2005 Categories and definitions

Category	Definition
Private ownership	Land owned by individuals, families, private co-operatives, corporations, industries, religious and educational institutions, pension or investment funds, and other private institutions.
Public ownership	Land owned by the State (national, state and regional governments) or government-owned institutions or corporations or other public bodies including cities, municipalities, villages and communes.
Other ownership	Land that is not classified either as "Public ownership" or as "Private ownership".

2.2 National data

2.2.1 Data sources

References to sources of information	Quality (H/M/L)	Variable(s)	Information Year(s)
FMP, 1993. Forestry Master Plan, Ministry of Environment and Forest, Government of Bangladesh. GOB (Government of Bangladesh) 1993. Asian Development Bank (UNDP/FAO/BGD/88/025). Main and supporting volumes	M	Ownership of Forests	1985, 1990, 1991 and 1992
ANON, 2004. Office Letter of BFIDC, No. 455 Dated : 19-12-2004.	M	Rubber Plantations	2004

2.2.2 Classification and definitions

There not specific national definitions to define private and public ownership of forests etc. The general concept of private and public ownership is same as contained in FAO definitions.

2.2.2 Original data

All forests, plantations and scattered trees on legal forest lands are publicly owned. The rubber plantations are both under public and private ownership (FMP. 1993 and Anon, 2004).

Rubber plantations	Extent and (Percentage) of ownership		
	1990	2000	2005
Private ownership	0	15.630 (44.12%)	15.630 (44.12%)
Public ownership	19.800 (100%)	19.800 (55.88%)	19.800 (55.88%)
Other ownership	0	0	0
TOTAL	19.800	35.430	35.430

2.3 Analysis and processing of national data

2.3.1 Calibration

Not needed

2.3.2 Estimation and forecasting

Not needed

2.4 Reclassification into FRA 2005 classes

Categories of Forests and Other Wooded lands	Ownership	
	Public	**Private**
Hill, Plains and Littoral forests and Forest plantations	100%	
Scattered trees on legal forest lands	100%	
Un-classed State Forests	100%	
Rubber Plantation in 1990		100%
Rubber Plantation in 2000 and 2005	55.88%	44.12%

2.5 Data for National reporting table T2

FRA 2005 Categories	Area (1000 hectares)					
	Forest			Other wooded land		
	1990	**2000**	**2005**	**1990**	**2000**	**2005**
Private ownership	0	16	16			
Public ownership	882	868	855	44	53	58
Other ownership	0	0	0			
TOTAL	882	884	871	44	53	58

2.6 Comments to National reporting table T2

3 Table T3 – Designated function of Forest and Other wooded land

3.1 FRA 2005 Categories and definitions

Types of designation

Category	Definition
Primary function	A designated function is considered to be primary when it is significantly more important than other functions. This includes areas that are legally or voluntarily set-aside for specific purposes.
Total area with function	Total area where a specific function has been designated, regardless whether it is primary or not.

Designation categories

Category / Designated function	Definition
Production	Forest / Other wooded land designated for production and extraction of forest goods, including both wood and non-wood forest products.
Protection of soil and water	Forest / Other wooded land designated for protection of soil and water.
Conservation of biodiversity	Forest / Other wooded land designated for conservation of biological diversity.
Social services	Forest / Other wooded land designated for the provision of social services.
Multiple purpose	Forest / Other wooded land designated to any combination of: production of goods, protection of soil and water, conservation of biodiversity and provision of social services and where none of these alone can be considered as being significantly more important than the others.
No or unknown function	Forest / Other wooded land for which a specific function has not been designated or where designated function is unknown.

3.2 National data

3.2.1 Data sources

References to sources of information	Quality (H/M/L)	Variable(s)	Information Year(s)
FMP, 1993. Forestry Master Plan, Ministry of Environment and Forest, Government of Bangladesh. GOB (Government of Bangladesh) 1993. Asian Development Bank (UNDP/FAO/BGD/88/025). Main and supporting volumes	M	Designation	1985, 1990, 1991 and 1992
ANON, 2004. Office Letter of BFIDC, No. 455 of 19th December 2004.	M	Rubber Plantations	2004

3.2.2 Classification and definitions

Following has been assumed since there is no national classification by designation for forests.

Main function of Forest	Description
Forests	
Production	Hill and Plains Forests less areas under forests designated for Conservation, Social services and Protection of Soil and water.
	All Rubber Plantation
Protection of Soil and Water	Rankheong and Kassalong in Chittagong Hill tracts
Conservation of Biodiversity	Protected Areas (PA)
Social Services	Selected areas in Forests .
Multiple Purpose	All Littoral forests less area of PA in littoral forests

3.2.3 Original data

A. Protected Areas

Forest Areas	Protected Area	Area in 000 ha		
		1990	**2000**	**2005**
Hill Forest and Plantation	Himchari National Park	1.73	1.73	1.73
	Lawachara National Park	1.25	1.25	1.25
	Rema-Kalenga WS	1.80	1.80	1.80
	Hail Haor	1.43	1.43	1.43
	Hazarikhil	2.91	2.91	2.91
	Chunati WS	7.76	7.76	7.76
	Teknaf Game Reserve	11.62	11.62	11.62
	Sub TOTAL	**28.49**	**28.49**	**28.49**
Sal Forests and Plantation				
	Bhawal National Park	5.02	5.02	5.02
	Modhupur National Park	8.44	8.44	8.44
	Ramsagar National Park	0.05	0.05	0.05
	Mirpur Botanic Garden	0.09	0.09	0.09
	Sub TOTAL	**13.60**	**13.60**	**13.60**
Littoral Forests				
	Sundarbans East WS	31.23	31.23	31.23
	Sundarbans South WS	36.97	36.97	36.97
	Sundarbans West WS	71.50	71.50	71.50
	Sub TOTAL	**139.70**	**139.70**	**139.70**
Grand Total PA		**181.78**	**181.78**	**181.78**

(WS= Wildlife Sanctuary)

B. Social Services Areas

Forest Type	Social Service Areas	Area in 000 ha		
		1990	**2000**	**2005**
Sal Forests	Rampahar-Sitapahar	3.026	3.026	3.026
	Dulahazara Safari Park	1.6	1.6	1.6
	Baldah Garden	0.001	0.001	0.001
	Modhutila	0.12	0.12	0.12
	Madhabkunda	4.23	4.23	4.23
	Sitakundu Eco Park	0.81	0.81	0.81
	TOTAL	**9.787**	**9.787**	**9.787**

C. Protection of Soil and Water

Forest Type	Social Service Areas	Area in 000 ha		
		1990	**2000**	**2005**
Hill Forests and Plantations	Rankhiang and Kasalong Forests	87.500	72.678	68.207
	TOTAL	**87.500**	**72.678**	**68.207**

D. Multiple Function Areas

Forest Type		Area in 000 ha		
		1990	**2000**	**2005**
Littoral forests	All areas less "PA"s	323.74	334.45	335.35
	Total	**323.74**	**334.45**	**335.35**

E. Production Forests Areas

Forest Type		Area in 000 ha		
		1990	**2000**	**2005**
Hill Forests and Plantations	All areas less Rankhiang, Kassalong and "PA"s	244.19	233.95	225.14
Sal Forests and Plantations	All areas less "PA"s and Social areas	15.59	15.66	15.66
Rubber Plantations	All areas	19.80	35.43	35.43
	TOTAL	**279.58**	**285.04**	**276.23**

3.2 Analysis and processing of national data

3.2.1 Calibration

Not needed

3.2.2 Estimation and forecasting

Not needed

3.3 Reclassification into FRA 2005 classes

A. Primary Function

National Category	Percentage of area serving Primary function				
	Production	Protection	Conservation	Social Ser.	Multiple
Production	100				
Protection		100			
Conservation			100		
Social Service				100	
Multiple					100

B. Total Area with Function

Primary function Area	Percentage of Primary function area that is serving other function				
	Production	Protection	Conservation	Social Ser.	Multiple
Production	100				
Protection		100	100		
Conservation		100	100	100	
Social Service				100	
Multiple	100			100	

3.4 Data for National reporting table T3

FRA 2005 Categories / Designated function	Area (1000 hectares)					
	Primary function			Total area with function		
	1990	2000	2005	1990	2000	2005
Forest						
Production	280	285	276	603	619	612
Protection of soil and water	87	73	68	269	255	250
Conservation of biodiversity	182	182	182	269	255	250
Social services	10	10	10	515	526	527
Multiple purpose	323	334	335	not appl.	not appl.	not appl.
No or unknown function	0	0	0	not appl.	not appl.	not appl.
Total – Forest	**882**	**884**	**871**	**not appl.**	**not appl.**	**not appl.**
Other wooded land						
Production	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Protection of soil and water	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Conservation of biodiversity	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Social services	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Multiple purpose	n.a.	n.a.	n.a.	not appl.	not appl.	not appl.
No or unknown function	44	53	58	not appl.	not appl.	not appl.
Total – Other wooded land	44	53	58	**not appl.**	**not appl.**	**not appl.**

3.5 Comments to National reporting table T3

4 Table T4 – Characteristics of Forest and Other wooded land

4.1 FRA 2005 Categories and definitions

Category	Definition
Primary	Forest / Other wooded land of native species, where there are no clearly visible indications of human activities and the ecological processes are not significantly disturbed.
Modified natural	Forest / Other wooded land of naturally regenerated native species where there are clearly visible indications of human activities.
Semi-natural	Forest / Other wooded land of native species, established through planting, seeding or assisted natural regeneration.
Productive plantation	Forest / Other wooded land of introduced species, and in some cases native species, established through planting or seeding mainly for production of wood or non wood goods.
Protective plantation	Forest / Other wooded land of native or introduced species, established through planting or seeding mainly for provision of services.

4.2 National data

4.2.1 Data sources

References to sources of information	Quality (H/M/L)	Variable(s)	Information Year(s)
FMP, 1993. Forestry Master Plan, Ministry of Environment and Forest, Government of Bangladesh. GOB (Government of Bangladesh) 1993. Asian Development Bank (UNDP/FAO/BGD/88/025). Main and supporting volumes	M	Characteristics	1985, 1990, 1991 and 1992
ANON, 2004. Office Letter of BFIDC, No. 455 Dated : 19-12-2004.	M	Rubber Plantations	2004

4.2.1 Classification and definitions: No comment

There no national definitions relevant to his table. The following assumption has been made to address information requirement of this table T4.

FRA Category	National Forests that match the FRA Category
Primary	Nil
Modified Natural	All forests less plantations
Semi-Natural	Nil
Productive Plantation	All forest plantations less protective plantations
	Rubber plantation
Protective plantation	Plantations in PA areas
	Plantations in Littoral forests

4.2.3 Original data

This table uses data from Table T1 and Table T3. The following table provides some more information on plantations.

Plantations	**Area in 000 ha**		
	1990	**2000**	**2005**
Protective Plantations			
Teknaf GR	2.40	2.40	2.40
Chunati WS	1.45	1.45	1.45
Sundarbans	0.26	0.22	0.22
Costal Afforestation	61.64	76.53	79.50
Sub Total	**65.75**	**80.60**	**83.56**
Productive plantation			
(Total less protective)	**173.04**	**194.61**	**194.55**
Total Plantation	**238.79**	**270.74**	**278.11**

4.3 Analysis and processing of national data

4.3.1 Calibration

This step is not needed.

4.3.2 Estimation and forecasting

This step is not needed.

4.4 Reclassification into FRA 2005 classes

National Class	**FRA 2005 categories**				
	Primary	**Modified Natural**	**Semi natural**	**Productive plantation**	**Protective plantation**
Protective Plantations					100
Productive Plantations				100	
Forest less Plantations		100			

4.5 Data for National reporting table T4

FRA 2005 Categories	**Area (1000 hectares)**					
	Forest			**Other wooded land**		
	1990	**2000**	**2005**	**1990**	**2000**	**2005**
Primary						
Modified natural	643	608	592			
Semi-natural						
Productive plantation	173	195	195			
Protective plantation	66	81	84			
TOTAL	882	884	871			

4.6 Comments to National reporting table T4

5 Table T5 – Growing stock

5.1 FRA 2005 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.
Commercial growing stock	The part of the growing stock of species that are considered as commercial or potentially commercial under current market conditions, and with a diameter at breast height of Z cm or more.

5.2 National data

5.2.1 Data Sources

References to sources of information	Quality (H/M/L)	Variable(s)	Information Year(s)
De Milde, R et. al. 1985. The Kassalong and Rankhian Reserve Forests in the Chittagong Hill Tracts. Field Document No. 10. FAO/UNDP Project BGD/79/017	H	Area and Volume	1963 1983
Chaffey, et. al. 1985. Forest Inventory of the Sunderbans, Bangladesh.	H	Area and Volume	1983
Drigo, et al. 1987. The Maturing Mangrove Plantations of Coastal afforestation Projects.. FAO/UNDP Project	H	Area and Volume	1985
FMP, 1993. Forestry Master Plan, Ministry of Environment and Forest, Government of Bangladesh. GOB (Government of Bangladesh) 1993. Asian Development Bank (UNDP/FAO/BGD/88/025). Main and supporting volumes	M	Area and Volume	1985, 1990, 1991 and 1992
Drigo, et al. 1988. Inventory of Forest resources of Southern Sylhet Forest Division. Field Document No. 3. FAO/UNDP Project	H	Area and Volume	1987
Revilla Jr. J. A. V et. al. 1998 a. Final Report: Forest Inventory of the natural forests and Forest plantation (Cox's Bazar Forest Division). Mandela Agricultural Development Corporation and Forest Department, Ministry of Environment and Forests. Bangladesh.	H	Area and Volume	1996
Revilla Jr. J. A. V et. al. 1998 b.. Final Report: Forest Inventory of the natural forests and Forest plantation (Chittagong Forest Division) Mandela Agricultural Development Corporation and Forest Department, Ministry of Environment and Forests. Bangladesh.	H	Area and Volume	1996
Revilla Jr. J. A. V et. al. 1998c. Final Report: Forest Inventory of the natural forests and Forest plantation (Sylhet Forest Division) Mandela Agricultural Development Corporation and Forest Department, Ministry of Environment and Forests. Bangladesh.	H	Area and Volume	1996
Revilla Jr. J. A. V et. al. 1998d. Final Report: Forest Inventory of the natural forests and Forest plantation (Sundarbans Forest Division) Mandela Agricultural Development Corporation and Forest Department, Ministry of Environment and Forests. Bangladesh	H	Area and Volume	1996
Revilla Jr. J. A. V et. al. 1998. Final Report: Forest Inventory of the natural forests and Forest plantation	H	Area and Volume	1996

(Coastal Afforestation) Mandela Agricultural Development Corporation and Forest Department, Ministry of Environment and Forests. Bangladesh.			
Sylvander, R.; Latif, M. A. and Karlsson, A. 2000. Forest Inventory of the Sal Forests of Bangladesh. Forestry Sector Project, Forest Department, Ministry of Environment and Forests, Bano Bhaban, Mohakhali, Dhaka. (Tecsult International Ltd in association with SODEV, NRP, HCL and HCL.)	H	Area and Volume	1996
ANON, 2004. Office Letter of BFIDC, No. 455 dated 19December 2004.	M	Rubber Plantations	2004

5.2.2 Classification and definitions

There no national definitions and classification relevant to this table.

5.2.3 Original data

A. Hills

1. Chittagong Forests

	1983			1996		
Forest Type	Volume (m^3)	Area (ha)	m^3/ha	Volume (m^3)	Area (ha)	m^3/ha
Natural Forests	2271078	52471	43.28	648900	59679	10.87
Plantations	809065	15950	50.73	171630	14378.8	11.94

2. Sylhet Forests

	1987			1996		
Forest Type	Volume (m^3)	Area (ha)	m^3/ha	Volume (m^3)	Area (ha)	m^3/ha
Natural Forests	276200	6169	44.77	1260530	23693	53.20
Plantations	643800	11502	55.97	669860	17816.7	37.60

3. Cox Bazar

	1983			1996		
Forest Type	Volume (m^3)	Area (ha)	m^3/ha	Volume (m^3)	Area (ha)	m^3/ha
Natural Forests	2696607	34499	78.16	2260460	30398.4	74.36
Plantations	522280	10850	48.14	377510	19438.6	19.42

4. Kassalong Forests

	1963			1983		
Forest Type	Volume (m^3)	Area (ha)	m^3/ha	Volume (m^3)	Area (ha)	m^3/ha
Natural Forests	12260800	149533	81.99	9506500	97451	97.55

5. Kassalong Plantations

	Assumed		
Forest Type	Volume (m^3)	Area (ha)	m^3/ha
Plantations			30.00

6. Rankhiang Forest

Forest Type	1963			1983		
	Volume (m^3)	**Area (ha)**	**m^3/ha**	**Volume (m^3)**	**Area (ha)**	**m^3/ha**
Natural Forests	5646100	72684	77.68	2175200	30144	72.16

7. Rankhiang Plantations

Forest Type	Assumed		
	Volume (m^3)	**Area (ha)**	**m^3/ha**
Plantations			30.00

8. Sita Pahar

Forest Type	1990 (not sure)		
	Volume (m^3)	**Area (ha)**	**m^3/ha**
Natural Forests	81403	1707	47.69
Plantations	672664	3740	179.86

9. Sanghu Matamuhuri

Forest Type	1990 (not sure)		
	Volume (m^3)	**Area (ha)**	**m^3/ha**
Natural Forests	5700000	74500	76.51

10. Other Plantations

Plantations	2000		
	Volume (m^3)	**Area (ha)**	**m^3/ha**
Khagrachari	52034	1410	36.90
Bandarban Pulpwood	208254	8722	23.88
Bandarban	183549	9362	19.61
Kaptai Pulpwood	365456	18169	20.11
Jhum control	398090	15363	25.91

B. Plain Sal Forests

Forest Divisions	**Forest Type**	**Voume per ha (m^3/ha) in 2000**
Dhaka	Natural forests	48.1
	Plantation	37.6
Tangail	Natural forests	41.5
	Plantation	45.7
Mymensingh	Natural forests	70.8
	Plantation	52.9
Dinajpur	Natural forests	91.1
	Plantation	60.3
Rangpur	Natural forests	275.4
	Plantation	62.6
Rajshahi	Natural forests	70.5
	Plantation	59.3

C. Littoral Forests

1. Sundarbans

Forest Type	1983			1983		
	Volume (m^3)	Area (ha)	m^3/ha	Volume (m^3)	Area (ha)	m^3/ha
Natural Forests	10646000	395600	26.9	10985452.5	399471.00	27.50

2. Coastal Afforestation

CA Divisions	1983			1983		
	Volume (m^3)	Area (ha)	m^3/ha	Volume (m^3)	Area (ha)	m^3/ha
Noakhali	1095615.92	18225.5	60.1	596840	34223	17.44
Chittagong	420895.86	12437.1	33.8	20470	20042	1.02
Bhola				115620	12420	9.31
Patuakhali	823602.01	12471.3	66.04	299920	9848	30.45
Total	**2340113.79**	**43133.9**	**54.3**	**1032850**	**76533.1**	**13.5**

5.3 Analysis and processing of national data

5.3.1 Calibration

This step is not needed

5.3.2 Estimation and forecasting

A. Volume per ha in 1990, 2000 and 2005

The linear interpolation and extrapolation method has been used where more than one point in time information is available otherwise more realistic or only data has been assumed. This excludes Rubber plantations.

a. Hills

Forests	Forest Type	Volume per ha (m^3/ha)		
		1990	2000	2005
Chiitagong	Natural Forest	25.83	10.87	3.39
	Plantations	29.84	11.94	2.99
Sylhet	Natural Forest	47.58	53.20	56.01
	Plantations	49.85	37.60	31.47
Cox Bazar	Natural Forest	76.12	74.36	73.48
	Plantations	32.67	19.42	12.79
Kasalong	Natural Forest	94.72	110.78	114.67
	Plantations	30.00	30.00	30.00
Rankhiang	Natural Forest	73.16	67.47	66.09
	Plantations	30.00	30.00	30.00
Sita Phar	Natural Forest	47.69	47.69	47.69
	Plantations	179.86	179.86	179.86
Sanghu Matamuhuri	Natural Forest	76.51	76.51	76.51

Other plantations in Hills

Areas	Forest Type	Volume per ha (m^3/ha)		
		1990	2000	2005
Khagrachari	Plantations	36.90	36.90	36.90
Bandarban Pulpwood	Plantations	23.88	23.88	23.88
Bandarban	Plantations	19.61	19.61	19.61
Kaptai Pulpwood	Plantations	20.11	20.11	20.11
Jhum control	Plantations	25.91	25.91	25.91

b. Plains Forests

Areas	Forest Type	Volume per ha (m^3/ha)		
		1990	2000	2005
Dhaka	Natural forests	48.1	48.1	48.1
	Plantation	37.6	37.6	37.6
Tangail	Natural forests	41.5	41.5	41.5
	Plantation	45.7	45.7	45.7
Mymensingh	Natural forests	70.8	70.8	70.8
	Plantation	52.9	52.9	52.9
Dinajpur	Natural forests	91.1	91.1	91.1
	Plantation	60.3	60.3	60.3
Rangpur	Natural forests	275.4	275.4	275.4
	Plantation	62.6	62.6	62.6
Rajshahi	Natural forests	70.5	70.5	70.5
	Plantation	59.3	59.3	59.3

c. Littoral Forests

Areas	Forest Type	Volume per ha (m^3/ha)		
		1990	2000	2005
Sunderbans	Natural forests	27.23	27.50	27.64
Coastal Afforestation	Plantation	35.73	13.50	13.50

B. Growing Stock

The "Area" and "Per hectare volume" estimates yield the following figures of growing stock in 1990, 2000 and 2005.

Region	Volume in 000 m^3		
	1990	2000	2005
Hills	19339	17258	16027
Plains	2069	1977	1968
Littoral	13143	11967	12004
Total	**34550**	**31202**	**29998**

5.4 Reclassification into FRA 2005 classes

This step is not needed.

5.5 Data for National reporting table T5

FRA 2005 Categories	Volume (million cubic meters over bark)					
	Forest			Other wooded land		
	1990	2000	2005	1990	2000	2005
Growing stock	34.5	31.2	30.0	n.a.	n.a.	n.a.
Commercial growing stock	25.9	23.4	22.5	n.a.	n.a.	n.a.

(Note commercial growing stock is assumed to be 75% of the total growing stock)

Specification of country threshold values	Unit	Value	Complementary information
1. Minimum diameter at breast height of trees included in Growing stock (X)	Cm	5	
2. Minimum diameter at the top end of stem (Y) for calculation of Growing stock	Cm	10	
3. Minimum diameter of branches included in Growing stock (W)	Cm	20	
4. Minimum diameter at breast height of trees in Commercial growing stock (Z)	Cm	10	
5. Volume refers to “Above ground” (AG) or “Above stump” (AS)	AG / AS	AS	
6. Have any of the above thresholds (points 1 to 4) changed since 1990	Yes/No	No	
7. If yes, then attach a separate note giving details of the change	Attachment	NA	

5.6 Comments to National reporting table T5

Above excludes growing stock of rubber plantations for which no estimate is available.

6 Table T6 – Biomass stock

6.1 FRA 2005 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 living 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 biomass	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.

6.2 National data

6.2.1 Data Sources

References to sources of information	Quality (H/M/L)	Variable(s)	Year(s)
GPG, 2003. Good Practise Guidance for Land-use, Land-use Change and Forestry. IPCC.	H	Basic Densities, Root: Shoot Ratio, Dead to Live Ration	All
Sandra Brown, 1997. Estimating Biomass Change in Topical Forests. A Primer. FAO Forestry Paper No. 134.	H	Biomass Expansion Factor	All

6.2.2 Classification and definitions

There are no national definitions or classes relevant to this table

6.2.3 Original data

This table uses data form Table 5 and factors fro GPG (2003).

6.3 Analysis and processing of national data

6.3.1 Calibration

This step is not needed.

6.3.2 Estimation and forecasting

A. Stem biomass

Stem biomass has been calculated with "average wood density" of 0.5.

Variables	Forest		
	1990	2000	2005
Total Growing Stock (million m3)	34.5	31.2	30.0
Average Wood Density	0.5	0.5	0.5
Stem biomass (million tonnes)	17	16	15

B. Biomass Expansion Factor

The BEFs was calculated by using following formula of Sandra Brown (1997).

*BEF = EXP (3.213-0.506*LN(Stem biomass in tonnes per hectare))*

It provides a BEF value exceeding 5 which was considered as unrealistic therefore the maximum default value of 3.4 for tropical forest was adopted from GPG (2003).

C. Above Ground Biomass

The following estimates of "Above Ground Biomass" have been developed by using the above figures of stem biomass and BEF.

Variable	Unit	Forest		
		1990	2000	2005
Stem biomass	Million tonnes	17.3	15.6	15.0
BEF		3.4	3.4	3.4
Above Ground Biomass	Million tonnes	59	53	51

D. Below Ground Biomass

A default value of 0.24 for the Root to Shoot ratio (ratio of below ground bio-mass and above ground biomass) has been adopted from GPG (2003).

Variable	Unit	Forest		
		1990	2000	2005
Above Ground Biomass	Million tonnes	59	53	51
Root to shoot ratio		0.24	0.24	0.24
Below Ground Biomass	Million tonnes	14	13	12

E. Deadwood Biomass

It has been calculated by adopting a default value of 0.11 for dead to total live biomass (total of above and below ground biomass) ratio from GPG (2003).

Variable	Unit	Forest		
		1990	2000	2005
Total Live Biomass	Million tonnes	73	66	63
Dead to live ratio		0.11	0.11	0.11
Dead Wood Biomass	Million tonnes	8	7	7

6.4 Reclassification into FRA 2005 classes

This step is not needed.

6.5 Data for National reporting table T6

FRA 2005 Categories	Biomass (million metric tonnes oven-dry weight)					
	Forest			Other wooded land		
	1990	2000	2005	1990	2000	2005
Above-ground biomass	59	53	51	n.a.	n.a.	n.a.
Below-ground biomass	14	13	12	n.a.	n.a.	n.a.
Dead wood biomass	8	7	7	n.a.	n.a.	n.a.
TOTAL	81	73	70	n.a.	n.a.	n.a.

6.6 Comments to National reporting table

Above excludes biomass stock of rubber plantations for which no estimate is available.

7 Table T7 – Carbon stock

7.1 FRA 2005 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 living 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 biomass	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 a minimum diameter chose by the country for lying dead (for example 10 cm), in various states of decomposition above the mineral or organic soil. This includes the litter, fumic, and humic layers.
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.

7.2 National data

7.2.1 Data sources

References to sources of information	Quality (H/M/L)	Variable(s)	Year(s)
GPG, 2003. Good Practise Guidance for Land-use, Land-use Change and Forestry. IPCC.	H	Basic Densities, Root: Shoot Ratio, Dead to Live Ration	All

7.2.2 Classification and definitions

No national classification or definitions relevant to this table are available.

7.2.3 Original data

Information from Table 6 along with the default value (GPG, 2003) for carbon density of 0.5 has been used for this table.

7.3 Analysis and processing of national data

7.3.1 Calibration

This step is not necessary.

7.3.2 Estimation and forecasting

A. Carbon in live biomass

The carbon content has been calculated by using the GPG (2003) default factor of 0.5.

Variables	Units	Forest		
		1990	2000	2005
Carbon in Above Ground Biomass	million tonnes	29	27	25
Carbon in Below Ground Biomass	million tonnes	7	6	6

B. Carbon in Deadwood biomass

The carbon content has been calculated by using the GPG (2003) default factor of 0.5.

Variables	Units	Forest		
		1990	2000	2005
Carbon in Dead Wood Biomass	million tonnes	4	4	3

C. Carbon in litter

It has been calculated by using default value of 1 for tropical forest in GPG (2003).

Variables	Units	Forest		
		1990	2000	2005
Forest Area Table1 (less rubber)	000 ha	863	848	836
Carbon in forest litter/ha	tonnes/ha	1.0	1.0	1.0
Carbon in Forest Litter	million tonnes	1	1	1

7.4 Reclassification into FRA 2005 classes

This step is not needed

7.5 Data for National reporting table T7

FRA 2005 Categories	Carbon (Million metric tonnes)					
	Forest			Other wooded land		
	1990	2000	2005	1990	2000	2005
Carbon in above-ground biomass	29	27	25	n.a.	n.a.	n.a.
Carbon in below-ground biomass	7	6	6	n.a.	n.a.	n.a.
Sub-total: Carbon in living biomass	**36**	**33**	**32**	n.a.	n.a.	n.a.
Carbon in dead wood	4	4	3	n.a.	n.a.	n.a.
Carbon in litter	1	1	1	n.a.	n.a.	n.a.
Sub-total: Carbon in dead wood and litter	**5**	**4**	**4**	n.a.	n.a.	n.a.
Soil carbon to a depth of _____ cm	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
TOTAL CARBON	**41**	**37**	**36**	n.a.	n.a.	n.a.

7.6 Comments to National reporting table T7

It excludes carbon stock of rubber plantations for which no estimate is available.

8 Table T8 – Disturbances affecting health and vitality

8.1 FRA 2005 Categories and definitions

Category	Definition
Disturbance by fire	Disturbance caused by wildfire, independently whether it broke out inside or outside the forest/OWL.
Disturbance by insects	Disturbance caused by insect pests that are detrimental to tree health.
Disturbance by diseases	Disturbance caused by diseases attributable to pathogens, such as bacteria, fungi, phytoplasma or virus.
Other disturbance	Disturbance caused by other factors than fire, insects or diseases.

8.2 National data

8.2.1 Data sources

References to sources of information	Quality (H/M/L)	Variable(s)	Year(s)
Anon. 2004. Office record of Bangladesh Forest department and Bangladesh Forest Research Institute. Bangladesh.	M	Insect and Disease	2000

8.2.2 Classification and definitions

No national classification or definitions relevant to this table are available.

8.2.3 Original data

Currently, there is no data available on disturbances affecting fire. The annual average area affected by insects is about 73 ha and that from disease is 6 ha.

8.3 Analysis and processing of national data

8.3.1 Calibration

This step is not necessary.

8.3.2 Estimation and forecasting

This step is not necessary.

8.4 Reclassification into FRA 2005 classes

This step is not necessary.

8.5 Data for National reporting table T8

FRA-2005 Categories	Average annual area affected (1000 hectares)			
	Forests		Other wooded land	
	1990	2000	1990	2000
Disturbance by fire	n.a.	n.a.	n.a.	n.a.
Disturbance by insects	n.a.	0.073	n.a.	n.a.
Disturbance by diseases	n.a.	0.006	n.a.	n.a.
Other disturbance	n.a.	n.a.	n.a.	n.a.

8.6 Comments to National reporting table T8

9 Table T9 – Diversity of tree species

9.1 FRA 2005 Categories and definitions

Category	Definition
Number of native tree species	The total number of native tree species that have been identified within the country.
Number of critically endangered tree species	The number of native tree species that are classified as "Critically endangered" in the IUCN red list.
Number of endangered tree species	The number of native tree species that are classified as "Endangered" in the IUCN red list.
Number of vulnerable tree species	The number of native tree species that are classified as "Vulnerable" in the IUCN red list.

9.2 National data

9.2.1 Data sources

References to sources of information	Quality (H/M/L)	Variable(s)	Year(s)
Jalil, M. A. 2000. Country report submitted to the 18th Asia Pacific Forestry Commission, held in Australia during May 2000.	H	Native plant species	2000
Khan, M.S. 1977. Flora of Bangladesh. Report 4. *Camelinanceae*. Bangladesh National Herbarium, Bangladesh Agriculture Research Council (BARC), Farm gate, Dhaka.	H	Native plant species	1977
Khan, M. S., Rahman, M. M. and Ali, M. A. 2001, Red Data Book of Vascular Plants of Bangladesh, Bangladesh National Herbarium, Dhaka, Page 179.	H	Threatened species	2000
Latif, M.A., Alam, M. K. and Mostafa, M. 2001 Florestic Diversity Growth Characteristic and Indigenous Management Techniques of Traditional Home Garden in Bangladesh, Final Research Report, Page 135, BFRI and BARC.	H		2000
IUCN. 2004. Red List of Threatened Species. Gland, Switzerland: The World Conservation Union.	H	Threatened species	2004

9.2.2 Classification and definitions

No national information is available.

9.2.3 Original data

A. Native species

There about 1074 native tree species in forests.

B. Threatened Tree Species.

National publications indicate about 106 number of endangered forest species in Bangladesh. The IUCN Red list of 2004 indicates following 4 critically endangered species, 2 endangered species, and 6 vulnerable species.

Critically Endangered Species -4

1 Anisoptera scaphula
2 Dipterocarpus gracilis
3 Dipterocarpus turbinatus
4 Vatica lanceaefolia

Endangered Species – 2

1 Dipterocarpus alatus
2 Dipterocarpus costatus

Vulnerable Species -6

1 Aglaia chittagonga
2 Aglaia perviridis
3 Aquilaria malaccensis
4 Elaeocarpus prunifolius
5 Hopea odorata
6 Knema bengalensis

9.3 Data for National reporting table T9

FRA 2005 Categories	Number of species (year 2000)
Native tree species	1074
Critically endangered tree species	4
Endangered tree species	2
Vulnerable tree species	6

9.4 Comments to National reporting table T9

10 Table T10 – Growing stock composition

Species-wise break down of the growing stock for all the sub-national inventory areas is not available.

11 Table T11 – Wood removal

11.1 FRA 2005 Categories and definitions

Category	Definition
Industrial wood removal	The wood removed (volume of round wood over bark) for production of goods and services other than energy production (wood fuel).
Wood fuel removal	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)
Anon. 2004. Office record of Bangladesh Forest department and Bangladesh Forest Research Institute. Bangladesh.	M	Wood removal	2004
SYB. 1997. Statistical Year Book, 1997. Bangladesh Statistical Division. Ministry of Planning. Bangladesh.	M	Wood Removal	1987 to 1994
GOB. 1992. Forest Statistics of Bangladesh. Bangladesh	M	Wood removal	1985

11.2.2 Classification and definitions

No national definitions or classifications are available.

11.2.3 Original data

Type of wood	Wood removal in 000 m^3					
	1988	1989	1990	1991	1992	2004
Industrial roundwood	350	190	240	190	230	252
Wood Fuel	790	380	1080	370	190	986

11.3 Analysis and processing of national data

11.3.1 Estimation and forecasting

A five year average has been calculated for 1990. The averaged 1990 figure along with 2004 original figure has been used for linear interpolation and extrapolation to estimate and forecast figures for 2000 and 2005.

Category	Wood Removal in "000"m^3		
	1990	2000	2005
Industrial wood	240	249	253
Wood fuel	562	865	1016
Total	802	1113	1269

11.4 Reclassification into FRA 2005 classes

This step is not needed.

11.5 Data for National reporting table T11

FRA 2005 Categories	Volume in 1000 cubic meters of round wood over bark					
	Forest			Other wooded land		
	1990	2000	2005	1990	2000	2005
Industrial round wood	240	249	253			
Wood fuel	562	865	1016			
TOTAL for Country	802	1113	1269			

(Wood removal from Other wooded lands is included in forests)

11.6 Comments to National reporting table T11

12 Table T12 – Value of wood removal

12.1 FRA 2005 Categories and definitions

Category	Definition
Value of industrial wood removal	Value of the wood removed for production of goods and services other than energy production (wood fuel).
Value of wood fuel removal	Value of the wood removed for energy production purposes, regardless whether for industrial, commercial or domestic use.

12.2 National data

12.2.1 Data Sources

References to sources of information	Quality (H/M/L)	Variable(s)	Year(s)
Anon. 2004. Office record of Bangladesh Forest department and Bangladesh Forest Research Institute. Bangladesh.	M	Value of Wood removal	2004

12.2.2 Classification and definitions

12.2.3 Original data

Information was available for price of timber and fuelwood in 2004 which has been assumed for 2005 and projected backwards for 1990 and 2000.

A. Industrial Roundwood

	1990	2000	2005
Price in Takka/m^3	3644	4287	5043
Exchange	35.79	54.00	60.00
Price in \$/m^3	101.80	79.38	84.05

B. Woodfuel

	1990	2000	2005
Price in Takka/m^3	98.98	116.45	137.00
Exchange	35.79	54.00	60.00
Price in \$/m^3	2.77	2.16	2.28

12.3 Analysis and processing of national data

12.3.1 Estimation and forecasting

The prices in US dollars have been applied to quantity of wood removal in Table 11 to calculate value of removal.

FRA 2005 Categories	Value of round wood removal (1000 USD)					
	Forest			Other wooded land		
	1990	2000	2005	1990	2000	2005
Industrial round wood	24433	19732	21253			
Wood fuel	1554	1865	2321			
TOTAL for Country	25987	21597	23573			

(Value of wood removal from OWL is included in Forests)

12.4 Reclassification into FRA 2005 classes

This step is not necessary.

12.5 Data for National reporting table T12

FRA 2005 Categories	Value of round wood removal (1000 USD)					
	Forest			Other wooded land		
	1990	2000	2005	1990	2000	2005
Industrial round wood	24433	19732	21253			
Wood fuel	1554	1865	2321			
TOTAL for Country	25987	21597	23573			

(Value of wood removal from OWL is included in Forests)

12.6 Comments to National reporting table T12

13 Table T13 – Non-wood forest product removal

13.1 FRA 2005 Categories and definitions

The following categories of non-wood forest products have been defined:

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

13.2 National data

13.2.1 Data sources

References to sources of information	**Quality (H/M/L)**	**Variable(s)**	**Year(s)**
FAO. 2002. Non-Wood Forest Products in 15 Countries of Tropical Asia an Overview. EC-FAO Partnership Programme (2000-2002). FAO Regional Office for Asia and the Pacific. Bangkok. Thailand.	M	NWFP Removal	1998
Anon. 2004. Office record of Bangladesh Forest department and Bangladesh Forest Research Institute. Bangladesh.	M	Value of Wood removal	2004

13.2.2 Classification and definitions

No national definitions and classification relevant to this table are available.

13.2.3 Original data

Following information on annual removal of NWFP in 2004 is available.

National NWFP	Unit	Quantity	FRA 2005 Category
			Plant product /raw material
Golpatta	Metric ton	21410	Food
Casenut	Metric ton	1.5	Food
Velua	Metric ton	16.8	Other plant products
Hoglapata	Metric ton	2220	Other plant products
Sungrass/grass	Metric ton	9044	Raw material for utensils, handicrafts & construction
Nal khagra (Reeds)	Metric ton	1921	Raw material for utensils, handicrafts & construction
Cane	Metric ton	29.7	Raw material for utensils, handicrafts & construction
Bark	Metric ton	339	Raw material for utensils, handicrafts & construction
Dhansi	Metric ton	1613	Raw material for utensils, handicrafts & construction
			Animal Products/ raw material
Shell	Metric ton	1213	Hides, skins and trophies
Fishes	Metric ton	22981	Other edible animal products
Crab	Metric ton	705	Other edible animal products
Wax	Metric ton	0.9	Wild honey and bee-wax
Honey	Metric ton	89	Wild honey and bee-wax

13.3 Analysis and processing of national data

This step is not needed.

13.4 Reclassification into FRA 2005 classes

This step is not needed as matching FRA 2005 classes are already provided with original data.

13.5 Data for National reporting table T13

FRA 2005 Categories	Scale factor	Unit	NWFP removal		
			1990	2000	2005
Plant products / raw material					
1. Food		MT	n.a	n.a	21412
2. Fodder			n.a	n.a	n.a
3. Raw material for medicine and aromatic products			n.a	n.a	n.a
4. Raw material for colorants and dyes			n.a	n.a	n.a
5. Raw material for utensils, handicrafts & construction		MT	n.a	n.a	12947
6. Ornamental plants			n.a	n.a	n.a
7. Exudates			n.a	n.a	n.a
8. Other plant products		MT	n.a	n.a	2237
Animal products / raw material					
9. Living animals			n.a	n.a	n.a
10. Hides, skins and trophies		MT	n.a	n.a	1213
11. Wild honey and bee-wax		MT	n.a	n.a	90
12. Bush meat			n.a	n.a	n.a
13. Raw material for medicine			n.a	n.a	n.a
14. Raw material for colorants			n.a	n.a	n.a
15. Other edible animal products		MT	n.a	n.a	23686
16. Other non-edible animal products			n.a	n.a	n.a

13.6 Comments to National reporting table T13

The above table excludes some NWFP which are not measured in tonnes or whose measurement could not be converted in tonnes.

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

14.1 FRA 2005 Categories and definitions

The following categories of non-wood forest products have been defined:

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

14.2 National data

13.2.1 Data sources

References to sources of information	**Quality (H/M/L)**	**Variable(s)**	**Year(s)**
FAO. 2002. Non-Wood Forest Products in 15 Countries of Tropical Asia an Overview. EC-FAO Partnership Programme (2000-2002). FAO Regional Office for Asia and the Pacific. Bangkok. Thailand.	M	NWFP Removal	1998
Anon. 2004. Office record of Bangladesh Forest department and Bangladesh Forest Research Institute. Bangladesh.	M	Value of Wood removal	2004

13.2.2 Classification and definitions

No national definitions and classification relevant to this table are available.

13.2.3 Original data

Following information on annual removal of NWFP in 2004 is available.

National Category	Scale	Unit	Value	FRA 2005 Category
Plant/raw material product				
Golpatta (*Nipa* sp.)	1000	USD	50489.05	Food
Caseunut (mnd)	1000	USD	133.33	Food
Velua	1000	USD	9.38	Other plant products
Hoglapata (mnd)	1000	USD	760.38	Other plant products
Sungrass/grass	1000	USD	11023.5	Raw material for utensils, handicrafts & construction
Nal khagra (reeds)	1000	USD	531.53	Raw material for utensils, handicrafts & construction
Cane	1000	USD	363.4	Raw material for utensils, handicrafts & construction
Bark (mnd)	1000	USD	3396.33	Raw material for utensils, handicrafts & construction
Dhansi (mnd)	1000	USD	539.43	Raw material for utensils, handicrafts & construction
Animal Products/ raw material				Animal Products/ raw material
Shell (mnd)	1000	USD	541.72	Hides, skins and trophies
Fishes (mnd)	1000	USD	85275.15	Other edible animal products
Crab (mnd)	1000	USD	33459.78	Other edible animal products
Wax (mnd)	1000	USD	2793.83	Wild honey and bee-wax
Honey	1000	USD	10440.6	Wild honey and bee-wax

14.3 Analysis and processing of national data

This step is not needed.

14.4 Reclassification into FRA 2005 classes

This step is not needed as original data provided matching FRA 2005 categories.

14.5 Data for National reporting table T14

FRA 2005 Categories	**Value of the of NWFP removed (1000 USD)**		
	1990	**2000**	**2005**
Plant products / raw material			
1. Food	n.a.	n.a.	50622
2. Fodder	n.a.	n.a.	n.a.
3. Raw material for medicine and aromatic products	n.a.	n.a.	n.a.
4. Raw material for colorants and dyes	n.a.	n.a.	n.a.
5. Raw material for utensils, handicrafts & construction	n.a.	n.a.	15854
6. Ornamental plants	n.a.	n.a.	n.a.
7. Exudates	n.a.	n.a.	n.a.
8. Other plant products	n.a.	n.a.	770
Animal products / raw material			
9. Living animals	n.a.	n.a.	n.a.
10. Hides, skins and trophies	n.a.	n.a.	542
11. Wild honey and bee-wax	n.a.	n.a.	13234
12. Bush meat	n.a.	n.a.	n.a.
13. Raw material for medicine	n.a.	n.a.	n.a.
14. Raw material for colorants	n.a.	n.a.	n.a.
15. Other edible animal products	n.a.	n.a.	118735
16. Other non-edible animal products	n.a.	n.a.	n.a.
TOTAL			199757

14.6 Comments to National reporting table T14

1. The above table excludes some NWFP which are not measured in tonnes or whose measurement could not be converted in tonnes.

2. The amount in this table may not correspond to quantity in Table 13.

15 Table T15 – Employment in forestry

15.1 FRA 2005 Categories and definitions

Category	Definition
Primary production of goods	Employment in activities related to primary production of goods, like industrial round wood, wood fuel and non-wood forest products.
Provision of services	Employment in activities directly related to services from forests and woodlands.
Unspecified forestry activities	Employment in unspecified forestry activities.

15.2 National data

15.2.1 Data sources

References to sources of information	Quality (H/M/L)	Variable	Year(s)
FMP, 1993. Forestry Master Plan, Ministry of Environment and Forest, Government of Bangladesh. GOB.1993. Asian Development Bank (UNDP/FAO/BGD/88/025). Main and supporting volumes.	M	Extent	1985, 1990, 1991, 1992

15.2.2 Classification and definitions

No national definitions and classifications relevant to this table are available.

15.2.3 Original data

The FMP (1993) estimates that at the 1990 level of primary activities, the forest land annually provides employment to about 97,900 persons or about 0.1109 person years per ha.

15.3 Analysis and processing of national data

15.3.1 Estimation and forecasting

The total number of employment on forest land in 2000 and 2005 has been calculated assuming same level of activities (or number of persons per ha) as in 1990.

Variable	1990	2000
Forest land (000 ha)	882	879
Per ha person year employment	0.1109	0.1109
Employment on forest land in "000"	97.9	97.6

This total employment has been apportioned to the employment relating to the “provision of services” on the basis of percentage of area under conservation of biodiversity (Table T3) to total area of forest in 1990 and 2000 which is about 20.6%. The rest of the employment has been apportioned to the employment relating to the “production of goods”.

15.4 Reclassification into FRA 2005 classes

This step is not needed.

15.5 Data for National reporting table T15

FRA 2005 Categories	**Employment (1000 person-years)**	
	1990	**2000**
Primary production of goods	77.7	77.5
Provision of services	20.2	20.1
Unspecified forestry activities	nda	nda
TOTAL	**97.9**	**97.6**

15.6 Comments to National reporting table T15