Criterion 6

Maintenance of other socioeconomic functions and conditions

INDICATOR 6.1

Number of forest holdings, classified by ownership categories and size classes

Public forests

size (ha)	state-owned forests			other public forests governed by forest regulations			total public forests			
	number*	total area		number	total area		number*	total area		mean area
		ha	%		ha	%		ha	%	ha
0 - 1	13	10	0.0%	70	40	0.0%	83	50	0.0%	0.6
1 - 10	25	130	0.0%	1,561	8,700	0.3%	1,586	8,830	0.2%	5.6
10 - 25	43	800	0.0%	2,198	37,500	1.4%	2,241	38,300	0.8%	17.1
25 - 100	177	9,900	0.5%	5,068	284,100	10.3%	5,245	294,000	6.4%	56.1
100 - 500	466	130,500	7.1%	5,370	1,187,900	43.2%	5,836	1,318,400	28.8%	225.9
500 - 10,000	744	1,446,000	79.2%	1,223	1,229,300	44.7%	1,967	2,675,200	58.5%	1,360.0
10,000 and over	16	238,100	13.0%	0	0	0.0%	16	238,100	5.2%	14,881.3
Total	**1,484**	**1,825,440**	**100.0%**	**15,490**	**2,747,540**	**100.0%**	**16,974**	**4,572,880**	**100.0%**	**269.4**

* number of forests for state-owned forests; number of common owners for other public forests

(Source: ONF 2004 for public forests, based on the land register, which concerns all wooded and unwooded land governed by forest regulations. In this table, state-owned forests include forests assigned to different ministries.)

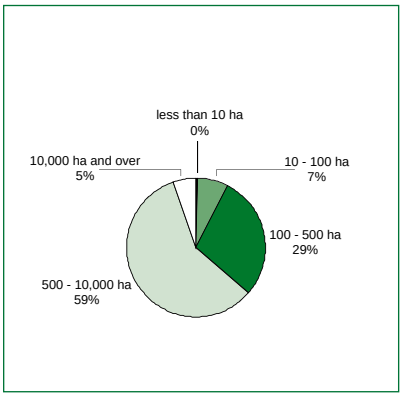


Figure 22: Public forest area by size class (source: ONF, 2004)

Commentary: the Office national des forêts (ONF) currently manages nearly 17,000 different forest units, including 15,490 that are owned by local authorities.
The mean unit size varies markedly according to the public forest category, i.e. estimated at 1,200 ha for state-owned forests but only 180 ha for community forests. More than 90% of the state-owned forest area is thus occupied by units of over 500 ha, while most other public forests (55%) contain units of less than 500 ha (Figure 22).
State-owned forests include 16 very large forest ranges of more than 10,000 ha (13% of the area), with the largest being the Orléans state-owned forest, which is almost 35,000 ha.

Small units of less than 100 ha account for only 7.4% of the public forest area but represent over half of all the units managed by ONF.

Private forests

size (ha)	1976-83					1999				
	number of owners (x 1,000)		area			number of owners (x1,000)		area		
			total (x1,000 ha)	%	mean (ha)			total (x1,000 ha)	%	mean (ha)
0 -1	2,360	64.2%	773	7.9%	0.3	2,361	67.8%	745	7.0%	0.3
1 - 10	1,165	31.7%	3,188	32.7%	2.7	934	26.8%	2,975	28.0%	3.2
10 - 25	100	2.7%	1,464	15.0%	14.6	120	3.4%	1,761	16.6%	14.7
25 - 100	42	1.1%	1,905	19.6%	45.4	58	1.7%	2,641	24.9%	45.5
100 and over	9	0.2%	2,410	24.7%	267.8	11	0.3%	2,498	23.5%	227.1
total or mean	**3,676**	**100.0%**	**9,740**	**100.0%**	**2.6**	**3,484**	**100.0%**	**10,620**	**100.0%**	**3.0**

(Sources: SCEES and land register of the Direction Générale des Impôts; 1976-83: survey on silviculture economic structures (SCEES/ESSES); 1999: survey on private forest property structures for properties of 1 ha and over (SCEES) and based on the land register for properties of less than 1 ha.)

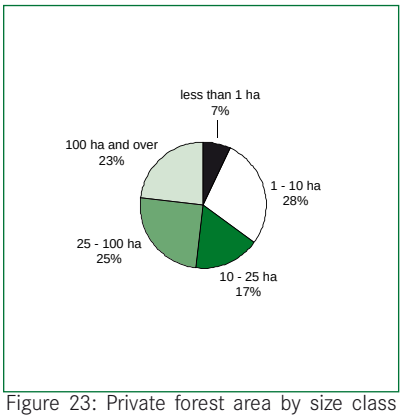


Figure 23: Private forest area by size class (source: SCEES, 1999)

⇨Note : the 0-1 ha class results are not comparable because the 1976-83 data are based on the Teruti survey whereas the 1999 data are based on the land register, because no elements were available from the 1999 SCEES survey. Moreover, the 1976-83 SCEES/ESSES survey was based on sampling points from the Teruti survey in which the owners were identified, thus explaining why the total area is underestimated (9.7 million ha as compared to 10.4 million ha surveyed).

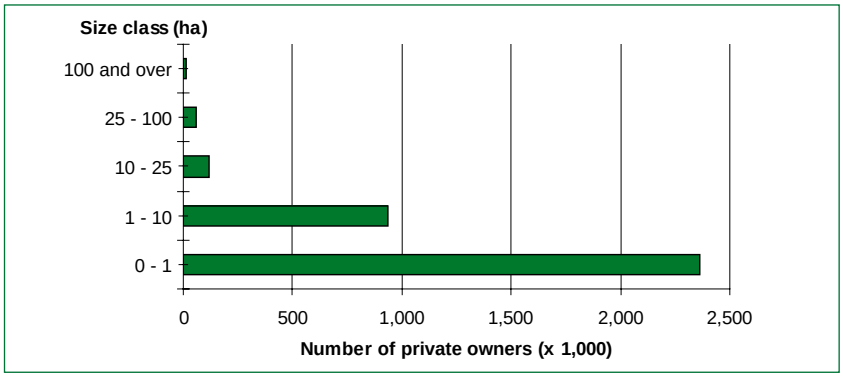


Figure 24: Number of private forest owners by property size class (source: SCEES, 1999)

Commentary: more than half of the private forest area (52%) consists of units of less than 25 ha (Figure 23). This proportion has decreased slightly since the 1976-83 survey in response to initiatives undertaken to promote private forest ownership consolidation. The mean size of private forest properties is now estimated at 3 ha, whereas it was 2.6 ha 20 years ago. The number of private owners is still very high (3.5 million), i.e. by far the highest rate in Europe, much ahead of Poland (844,000) and Italy (816,000) according to data from the TBFRA 2000 survey of UNECE/FAO. Very small forest units of less than 1 ha are owned by 2.4 million private owners, or more than two-thirds of all private forest owners in France (Figure 24).

A survey conducted by the Service central des enquêtes et études statistiques (SCEES) in 1999 on forest properties of over 1 ha revealed the legal status of private forest owners. Individual forest owners are the most numerous, i.e. 96% of the total for around 83% of the area. They are represented by individuals, communal matrimonial estates, joint- and co-owners. There are not many legal entities (4%), but they account for more than 17% of the area. Their units are quite large, i.e. 43 ha on average. These include forest management groups that own the largest units (mean 110 ha).

Land parcelling is a major private forest management problem, especially to generate commercial wood supplies. The French ministry for forests thus introduced a fiscal incentive to encourage investment in forests, with the aim of fostering land restructuring upon the initiative of owners and preventing the breakup of family forest management groups.
In addition to these land initiatives, which are long and difficult to implement, consolidation of owners with respect to wood supply is also being promoted. These are classified as "joint forest management and logging organisations", which have sufficient economic and technical clout to consolidate private forest property management, especially with respect to small properties. These bodies– cooperatives and owners' associations-qualify for public subsidisation.

All forest properties

size (ha)	ownership category	number* (x1,000)		area		
				total (x1,000 ha)	%	mean (ha)
0 -1	public	ε	ε	ε	ε	-
	private	2,361	67.4%	745	4.9%	0.3
	total	**2,361**	**67.4%**	**745**	**4.9%**	**0.3**
1 - 10	public	2	0.0%	9	0.1%	5.6
	private	934	26.7%	2,975	19.6%	3.2
	total	**936**	**26.7%**	**2,984**	**19.6%**	**3.2**
10 - 25	public	2	0.1%	38	0.3%	17.1
	private	120	3.4%	1,761	11.6%	14.7
	total	**122**	**3.5%**	**1,799**	**11.8%**	**14.7**
25 - 100	public	5	0.1%	294	1.9%	56.1
	private	58	1.7%	2,641	17.4%	45.5
	total	**63**	**1.8%**	**2,935**	**19.3%**	**46.4**
100 and over	public	8	0.2%	4,232	27.9%	541.2
	private	11	0.3%	2,498	16.4%	227.1
	total	**19**	**0.5%**	**6,730**	**44.3%**	**357.6**
total or mean	public	17	0.5%	4,573	30.1%	269.4
	private	3,484	99.5%	10,620	69.9%	3.0
	total	**3,501**	**100.0%**	**15,193**	**100.0%**	**4.3**

* number of owners for private forests and non-state-owned public forests; number of forests for state-owned forests

(Source: ONF 2004 for public forests, based on the land register for all wooded and unwooded land governed by forest regulations; SCEES 1999 (survey on private forest property structures) for private properties of 1 ha and over and the land register of the Direction Générale des Impôts 1999 for private properties of less than 1 ha. The 2004 update is not available for private forests.)

Commentary: private forests account for 70% of the metropolitan forest land area, and 74% when just considering the actually wooded area. The "all forest properties" results are thus marked by the high land parcelling in private forests– the mean unit size is only 4.3 ha for all metropolitan forests.

When the state is considered, along with the 11,000 forest-owning communities and 69,000 private owners of more than 25 ha, then around 80,000 decision-makers control two-thirds of the metropolitan forest area.

INDICATOR 6.2

Contribution of forestry and manufacturing of wood and paper products to gross domestic product

Activity sector	Added value excl. of VAT (million € 2001)		Sources
	1997	2001	
silviculture	2,326	2,435	1
logging	453	491	2
sawing, planing	741	1,005	2
other mechanised woodworking	2,433	2,640	3
total furniture making	*3,850*	*4,004*	4
including wooden furniture making	2,359	2,553	4
pulp, paper, cardboard	5,491	5,880	5
Total	**13,803**	**15,003**	
GDP France	1,308,755	1,475,600	6
Added value France	1,164,826	1,322,400	6
% GDP France	**1.05%**	**1.02%**	
% added value France	**1.18%**	**1.13%**	

(Sources: 1 INSEE, economic silviculture and logging accounts for 1997 and 2001, deduction for logging according to the sources presented in 2; 2 EAE-SCEES partial and overall assessment based on the 1997 EPEI; EAE-SCEES and DGI-BIC for 2001 (Agreste n° 130/2005); 3 Enterprises with over 20 employees, EAE-SESSI; enterprises with less than 20 employees, EPEI 1997 and DGI-BIC 2001 ("Le bois en chiffres 2004"); 4 Enterprises with over 20 employees, EAE-SESSI according to sorting by SESSI for wooden furniture making; enterprises with less than 20 employees, EPEI 1997 and DGI-BIC 2001; 5 Enterprises with over 20 employees, EAE-SESSI; enterprises with less than 20 employees, EPEI 1997 and DGI-BIC 2001; 6 INSEE, "Les comptes de la nation en 2002" publication.)

⇨ *Note : the added value of enterprises of less than 20 employees was estimated in 1997 on the basis of a survey of small commercial enterprises that INSEE (EPEI) conducts every 4 years. As this method was not considered satisfactory, it was replaced in 2001 by a new estimation based on fiscal declarations of business profits (BIC) to the Direction générale des Impôts. This will make it possible in future to develop an annual dataset. This methodological change complicates comparisons between the 1997 and 2001 datasets.*

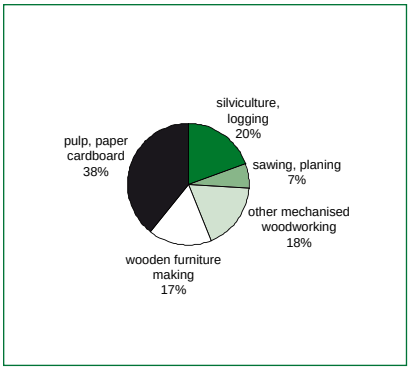


Figure 25: Added value (exclusive of VAT) per activity sector in 2001 (sources: cf. Table 6.2)

Commentary: the forest-wood sector, strictly speaking, includes the silviculture and logging sectors, and the timber and paper industries (woodworking, including sawmills, wooden furniture making and the paper industry). This currently generates an added value estimated at €15 billion per year, or 1.13% of the total added value for France. The pulp, paper and cardboard production sector predominates and accounts for around 40% of the added value (Figure 25). Silviculture-logging accounts for 20% of the total, woodworking 25% and wooden furniture making 17%.

Comparisons cannot be made with the 1997 data since the calculation method was modified for most sectors (cf. note). The silviculture sector alone represents 16% of the total added value of the forest-wood sector.

There are 5,800 logging companies, a third of which also run a sawmill. The sector is becoming increasingly concentrated from year to year, and the production from small companies logging less than 500 m³ per year is marginal. Conversely, the largest enterprises, which individually produce more than 20,000 m³ per year, account for two-thirds of the total production volume.

The timber and paper industry consists of three main sectors: woodworking (including sawmills), wooden furniture making and the paper industry. Each of these sectors has its own specific characteristics, which differ between sectors. Except for the pulp and paper industry and the wood-based panel industry, which are highly capitalistic and globalised, the other sectors are generally more dispersed and their performance varies substantially.

Wood sawing and planing activities have increased considerably in recent years, mainly due to an upswing in the building industry that started in 1997. This sector still consists of many small units but the trend is now towards corporate concentration, i.e. there are currently 2,400 small units as compared to 6,800 in 1970. Sawmills, whose output is more than 8,000 m³ per year, is the top activity in this sector. Two-thirds of sawmills are also involved in logging.

Mechanised woodworking, excluding sawmills, mainly involves wood-based panel making, framework, joinery and wooden package manufacturing.

The French wood-based panel industry ranks second in Europe behind Germany. It is a highly concentrated sector consisting of a small number of mainly medium-sized companies. The framework and joinery sector is, however, very dispersed, with two-thirds of the companies having less than 50 employees. Wooden package making companies are also quite dispersed, with 77% of the total number of companies involved in craftwork.

Wooden furniture making represents an important share of the general furniture manufacturing industry. This industry has begun growing again after a long recession, and most companies have less than 50 employees.

The French pulp and paper industry ranks 9th worldwide and 4th in Europe. Its overall production capacity increased by 25% during the 1992-2002 period and continued increasing in 2003.

INDICATOR 6.3

Net revenue of forest enterprises

Activity sector	Mixed income (million € 2002)		
	2000	2001	2002
Silviculture	1,107	857	832
Logging	1,094	964	819
Total	**2,201**	**1,821**	**1,651**

(Source: INSEE; LEF/IFEN, "Les comptes de la forêt - Enjeux et méthodes - 2005"; mixed income is the sum of the added value and production subsidies after deduction of employee compensation, taxes and fixed capital consumption)

⇨*Note : the available dataset was considered too small for calculation of the annual variation rate.*

Commentary: forest enterprise mixed income was estimated at €1.7 billion in 2002, shared equally between the silviculture and logging sectors. The marked decrease between 2000 and 2002 was mainly due to the impact of the 1999 storms. The high volume of wood logged in 2000, and to a lesser extent in 2001, generated surplus added value, but this was not maintained in 2002. In addition, the 1999 storms also had an impact on timber prices (cf. § 3.2).

INDICATOR 6.4

Total expenditures for long-term sustainable services from forests

Long-term sustainable services		amount (million € 2003)					annual variation rate
		1999	2000	2001	2002	2003	1999-2003
Forest fire protection	Prevention	30.3	30.7	31.1	32.8	27.4	-2.5%
	Control	75.4	76.8	83.0	95.6	179.0	24.1%
Subtotal Forest fire protection		**105.8**	**107.5**	**114.1**	**128.4**	**206.4**	**18.2%**
Mountain landscape rehabilitation		8.6	11.2	6.6	18.3	16.3	17.3%
Coastal dune protection		0.5	0.0	0.9	1.2	1.2	25.4%
Total		**114.9**	**118.7**	**121.6**	**147.8**	**223.9**	**18.2%**

(Source: French Ministry of the Interior for forest fire control; DGFAR for forest fire prevention, mountain landscape rehabilitation and coastal dune protection. Funding by agreement with ONF's RTM service is included in the amount noted.)

Commentary: the main long-term sustainable services from metropolitan forests are forest fire protection (prevention and control), mountain land rehabilitation and coastal dune protection. Total expenditures for these services in 2003 are estimated at €224 million. These expenditures have been steadily increasing since 1999, and sharply rose in 2003 as a result of the many forest fires that occurred during the summer drought-heat wave period (cf. § 2.4): forest fire control expenditures incurred by the French Ministry of the Interior thus reached €179 million, excluding those incurred by the departmental fire emergency services.

Expenditures for mountain land rehabilitation and coastal dune protection also increased, especially in recent years, but that allocated to forest fire protection takes by far the greatest share, even in average years.

Forest fire prevention policies are implemented by the French ministry for forests, in conjunction with other ministries representing the interior, the environment and equipment, territorial communities and forest owners. These policies focus on four issues:

- hazard forecasting
- forest fire monitoring for quick intervention
- equipment, development and maintenance of forest areas
- public awareness and professional training

Mountain landscape rehabilitation (RTM) and coastal dune protection operations are undertaken by the Office national des forêts (ONF) for the French ministry for forests.

RTM activities of ONF concern:

- active protection: torrent control, snow stabilisation on steep slopes, drainage of waterlogged soils
- close protection to complement active protection: containment or deviation of dangerous material flows (torrential lava, avalanches, rockslides).

ONF is also involved in various mountain hazard prevention operations for the French ministry for the environment: management of databases on mountain hazards, permanent avalanche monitoring in partnership with Cemagref, and drawing up hazard prevention guidelines, etc.

In addition, ONF stabilises and maintains dunes on the edges of state-owned forests by planting vegetation, installing windbreaks, safety fences and walking paths. Most of these operations are focused on dunes along the Atlantic coast.

ONF outlined initiatives to be implemented on the basis of three key objectives: controlling erosion in the dune environment and preserving or enhancing its biodiversity, providing public access without disturbing natural balances, and renewing forest stands essential for the management of coastal areas.

INDICATOR 6.5

Number of persons employed and labour input in the forest sector, classified by gender and age group, education and job characteristics

Activity sector	Number of persons employed (full-time equivalents)			Annual variation rate 1993-2001	Source
	1993	1997	2001*		
silviculture	13,300	13,700	13,000	-0.3%	1
logging	11,700	10,300	10,600	-1.2%	2
sawing, planing	20,100	21,900	24,700	ND	3
other mechanised woodworking	61,000	61,300	66,700	ND	4
total furniture making	*122,400*	*102,500*	*114,100*	ND	4
including wooden furniture making	69,200	66,500	72,700	ND	4
pulp, paper, cardboard	101,100	97,800	100,000	ND	4
total	**276,400**	**271,500**	**287,700**	**ND**	
total employed labour force (x 1000)	22,200	22,400	23,800	0.9%	5
% of total employed labour force	1.25%	1.21%	1.21%	ND	

* 2000 for silviculture and logging

(Sources: **1** Mutualité Sociale Agricole + ONF civil servants + forestry administration + forestry experts (CNIEFB members), without taking silviculturist forest owners' labour input into account. **2** Mutualité Sociale Agricole, data published in "Statistiques Forestières" of SCEES. **3** Enterprises with over 20 employees, EAE-SCEES; enterprises with less than 20 employees: EPEI-INSEE for 1993 and 1997, DGI-BIC for 2001; NAF 700 codes: 201A. **4** Enterprises with over 20 employees, EAE-SESSI; enterprises with less than 20 employees: EPEI-INSEE for 1993 and 1997, DGI-BIC for 2001; NAF 700 codes: 201B, 202Z, 203Z, 204Z, 205A, 205C (other mechanised woodworking) or NES114 grouping: F31; 361A to 361M (furniture making; for EAE data sorted by SESSI so as to only consider wood-using enterprises; NES114 grouping: C41); 211A, 211C (pulp, paper and cardboard manufacturing; NES114 grouping: F32); 212A to 212L (paper industry; NES114 grouping: F33); 2001 data are from Agreste n°130/2005. **5** INSEE.)

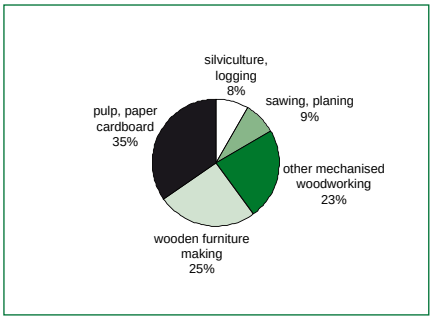


Figure 26 : Persons employed per activity sector in 2001 (sources: cf. Table 6.5)

Commentary: the forest-wood sector, strictly speaking (silviculture, logging, timber and paper industries), employs around 288,000 full-time equivalents, or 1.2% of the total employed labour force. The distribution per sector (Figure 26) clearly shows that the paper sector predominates, with 35% of the workforce, followed by woodworking (32%), wooden furniture making (25%) and silviculture-logging (8%). However, as noted above, taking the work carried out by silviculturist forest owners into account (estimated at 49,000 full-time equivalents by SCEES in 1999) would increase the share of the silviculture-logging sector to 22% of the total, i.e. 337,000 full-time equivalents.

In addition, according to a study carried out by the Association forêt-cellulose (AFOCEL) and Serge Lochu Consultants in 1998, 235,000 jobs have been indirectly induced by the forest-wood sector, especially in the construction, intermediate goods, energy and financial sectors.

The employed labour force involved in the forest-wood sector has been declining in a trend-setting way for several decades. For the 1993-2001 period, around 1,400 jobs have been lost in the silviculture and logging sectors. It is hard to analyse the trend in the timber and paper industries over this period because of the change in calculation method introduced in 2001 (cf. note). However, the decline seems to be ongoing, especially considering the enterprise concentration that is under way in the paper and wood-based panel sectors.

Small commercial enterprises with less than 20 employees have a considerable economic weight in the timber and paper industries, representing 23% of the total workforce, and as high as 35% if the paper sector is excluded. This sector is distributed throughout France and serves as an important social anchor in rural areas.

Personnel recruitment is still, however, a major concern of small company managers, i.e. around two-thirds of them declared that they had encountered problems in hiring staff. These problems seem to be linked with the shortage of qualified labour and with the unattractive public image of woodworking professions. It would be essential to seriously focus on providing young people with professional training, while boosting their awareness on the sector and associated occupations.

⇨*Note : a number of problems were encountered in evaluating the employed labour force involved in the forest-wood sector. First, work accomplished in the silviculture sector is especially hard to quantify because forest owners carry out much of the work themselves, and this is not accurately monitored by regular statistical surveys. However, the last survey of the Service central des enquêtes et études statistiques (SCEES) in 1999 on the private forest property structure enabled an estimate of silviculturist forest owner labour input at 11 million days per year, or 49,000 full-time equivalents. When salaried jobs are cumulated, the silviculture sector represents around 62,000 jobs. Secondly, the national statistical system is based on activity and service nomenclature, but the materials used are not always considered separately. The share of wood in furniture making is thus estimated using wood coefficients that can change from year to year, so these estimations should be considered with caution. Finally, in the timber and paper industries, the workforce in enterprises of less than 20 employees was estimated in 1997 on the basis of a survey of small commercial enterprises that INSEE (EPEI) conducts every 4 years. As this method was not considered satisfactory, it was replaced in 2001 by a new estimation based on fiscal declarations of business profits (BIC) to the Direction générale des Impôts. This will make it possible in future to develop an annual dataset. This methodological change complicates comparisons between the 1997 and 2001 datasets concerning the timber and paper industries.*

INDICATOR 6.6

Frequency of occupational accidents and occupational diseases in forestry

Forestry employees

		1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	annual variation rate 1992-2002
Number of work hours (x 1,000)		65,771	61,926	58,618	61,173	60,512	59,120	55,043	53,365	57,685	53,580	50,854	-2.5%
Occupational accidents with loss of time													
Number	**total**	**6,712**	**5,843**	**5,816**	**6,105**	**6,049**	**5,748**	**6,019**	**5,520**	**5,530**	**5,460**	**4,655**	**-3.6%**
	fatal	12	25	12	14	18	13	13	15	20	19	9	-2.8%
	non-fatal	6,700	5,818	5,804	6,091	6,031	5,735	6,006	5,505	5,510	5,441	4,646	-3.6%
Frequency rate	**total**	**102.1**	**94.4**	**99.2**	**99.8**	**100.0**	**97.2**	**109.4**	**103.4**	**95.9**	**101.9**	**91.5**	**-1.1%**
	fatal	0.18	0.40	0.20	0.23	0.30	0.22	0.24	0.28	0.35	0.35	0.18	-0.3%
	non-fatal	101.9	94.0	99.0	99.6	99.7	97.0	109.1	103.2	95.5	101.5	91.4	-1.1%
Occupational diseases with loss of time													
Number of cases	**total**	**25**	**26**	**34**	**33**	**52**	**63**	**64**	**84**	**86**	**130**	**127**	**17.6%**

(Source: MSA, only for employees; the "forestry works" sector concerns silviculture, resin tapping, logging, fixed sawmills and associated office staff; the accident frequency rate represents the number of accidents with loss of time per million declared work hours. Concerning occupational diseases, it is not relevant to relate the number of diseases to the number of work hours because times between the hazard exposure and recognition of the occupational disease can be quite long. Moreover, the allowance for these diseases varies markedly depending on the type of disease and the geographical location of the patient, so this is more an administrative follow-up indicator.)

Commentary: after a marked decrease from 1979 to 1988, the occupational accident frequency rate in the forestry sector levelled off until 2001, with a slight improvement beginning in 2002 (Figure 27).
The trends varied in the different subsectors. Logging is traditionally the worst subsector for accidents, with a rate of around 120, even in 2002. This rate sharply rose between 1988 and 1999, but has been declining since year 2000. Silviculture has ranked second in terms of occupational accident frequency since 1992, but this rank is now shared by the sawmill subsector, whose rate increased from 1994 to 2001. Finally, there was a substantial improvement in all subsectors in 2002.
The 1999 storms did not lead to a general increase in the occupational accident frequency rate in 2000 and 2001, but the proportion of fatal accidents markedly increased for these 2 years (0.35).

The spectacular increase in occupational diseases noted is generally linked to periarticular diseases, which were first taken into account in 1984. The Mutualité sociale agricole (MSA) proposed two explanations for this phenomenon, without giving the relative proportion of each factor:
- first, the modification in working conditions (work compartmentalisation, faster working pace, hiring of unqualified employees, etc.)
- secondly, employees more systematically declare their health problems, thus suggesting that this is mainly an "administrative follow-up" indicator of occupational diseases.

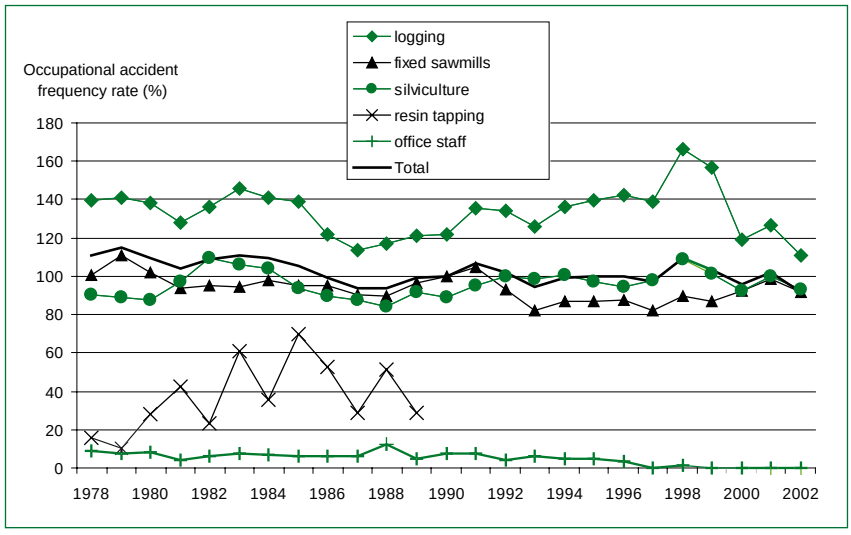


Figure 27: Variations in the frequency of occupational accidents for forestry employees (source: MSA)

INDICATOR 6.7

Per-capita consumption of wood and products derived from wood

Apparent consumption of wood and wood-derived products	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	annual variation rate 1993-2002
total (x 1,000 m³ roundwood equivalents)	62,274	62,181	63,749	59,090	61,055	68,405	69,102	80,135	69,445	63,805	0.3%
per capita (m³ roundwood equivalents per capita)	1.09	1.08	1.10	1.02	1.05	1.17	1.18	1.36	1.18	1.08	-0.1%

(Source: SCEES for the estimation of apparent consumption excluding self-consumption; INSEE/general population census; IFN for the self-consumption assessment, estimated at 14,418 thousand m³/year from 1993 to 1997 and 18,396 thousand m³/year from 1998 to 2002 - cf. paragraph 3.1)

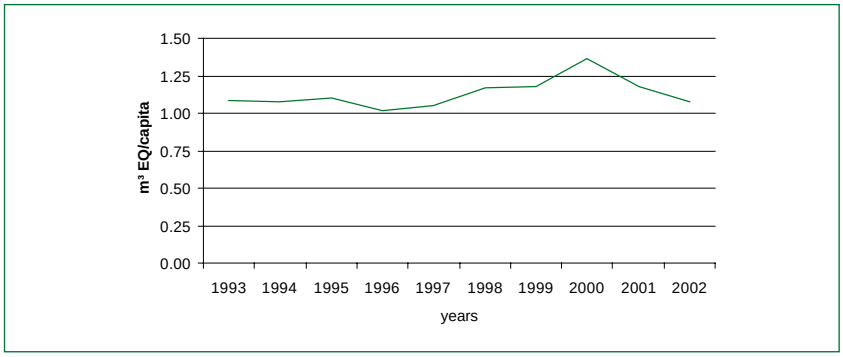


Figure 28: Variations in per-capita apparent consumption of wood and wood-derived products from 1993 to 2002 (sources: SCEES, INSEE and IFN)

⇨Note : the apparent consumption of wood and wood-derived products is defined as the sum of rough timber removals and the import/export balance for raw timber and wood-derived products.
- marketed removals was directly evaluated in m³ by the SCEES annual branch survey (cf. § 3.2).
- self-consumption was estimated by IFN on the basis of inventory comparisons and also expressed in m³. For consistency with § 3.1, values used in this paragraph were copied for the 1993-97 and 1998-2002 periods, i.e. 14,418 and 18,396 thousand m³, respectively; without more accurate data, self-consumption is thus considered as steady within these two periods (self-consumption is undoubtedly under-estimated for the "post-storm" years 2000 and 2001). The new inventory method (now annual) should enable regular updates of this evaluation.
- SCEES assessed French imports and exports of raw timber and, apart from a few exceptions (mainly furniture and prefabricated housing elements), of all products derived from raw timber. Volumes of these processed products were converted, using technical coefficients, into "roundwood equivalents", i.e. into raw timber volumes required to manufacture them, and added to imported or exported volumes of corresponding raw timber categories.

Commentary: France ranks 9th in the world for the consumption of wood and wood-derived products. Consumption in metropolitan France was estimated at 64 million m³ roundwood equivalents (EQ) in 2002, or 1.08 m³ EQ per capita (Figure 28). Construction timber takes the largest share with 37% of the total consumption, while industrial wood represents 31% and fuelwood 32% (29% just for fuelwood self-consumption).
The increase recorded in 1998 and 1999, and boosted in 2000 by the 1999 storms, was not confirmed in the 2002 results, likely due to a consumption whiplash effect of the storms– construction timber consumption dropped from 24.9 million m³ EQ in 1999 to 23.4 in 2002; similarly, industrial wood consumption slumped from 23.4 million m³ EQ in 1999 to 19.7 in 2002. A prime objective of the French wood sector is to promote wood materials and wood-derived products. This is mainly being done through two organisations in the construction and furniture manufacturing sectors, i.e. the Comité national de développement du bois (CNDB) and the Centre technique du bois et de l'ameublement (CTBA).
CNDB is an association of the main concerned professional groups and unions which is striving to capture new markets while protecting traditional wood outlets in the face of heavy competition. It has undertaken various initiatives aimed at revitalizing and promoting wood-use in construction projects. This primarily involves boosting stakeholder awareness, regional networking of wood construction specialists, participation in media events on this topic, etc. Wood use is also being promoted through the journal "Séquence Bois", the publication and dissemination of technical factsheets and manuals, and public awareness campaigns on the comparative advantages (especially ecological) of wood products.
CTBA focuses especially on technological development, market adaptation and enhancement of the quality of products generated by the timber, paper and furniture industries. It conducts targeted research, fosters product standardisation, develops tools and new products.

These two organisations are key players in the process set down in the "construction timber-environment" framework agreement, which recognises that carbon storage in wood products is essential for controlling the greenhouse effect. This agreement aims to boost wood use in construction by 10-12.5% before 2010.

Moreover, fuelwood use is especially being promoted by the Agence de l'environnement et de la maîtrise de l'énergie (cf. § 6.9).

INDICATOR 6.8

Imports and exports of wood and products derived from wood

	quantities (million m³ roundwood equivalents)										annual variation rate
	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	1993-2002
exports	23.5	22.3	21.7	23.7	25.7	26.1	28.4	33.4	33.4	34.6	4.4%
imports	39.0	35.1	35.0	35.1	37.4	40.6	43.1	49.3	44.6	44.6	1.5%

(Source: SCEES/wood product balance. This accounts for imports and exports of rough timber and, apart from a few exceptions (mainly furniture and prefabricated house construction components), all rough timber-derived products. The volumes of these processed products were converted, using technical coefficients, to roundwood equivalents, i.e. rough timber volumes required to manufacture these products)

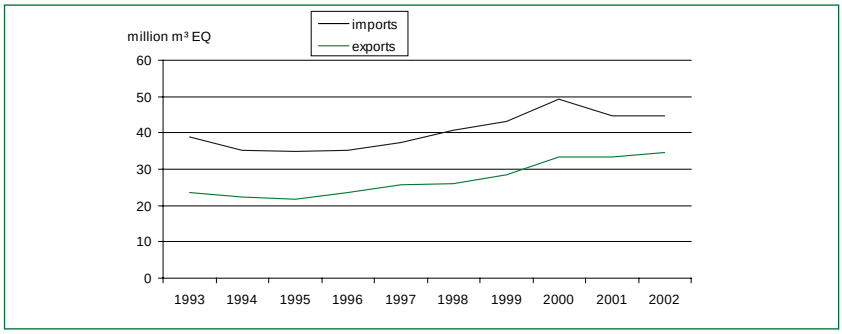


Figure 29: Variations in imported and exported volumes from 1993 to 2002 (source: SCEES)

Commentary: in 2002, imports of wood and wood-derived products involved 45 million m³ roundwood equivalents (EQ), while exports represented 35 million m³ EQ.
The respective shares of construction timber (16-17%) and industrial wood (83%) were the same in both categories.
Volume exports increased at a faster pace than imports, thus reducing the differential, but a value analysis highlighted a deterioration in the trade deficit (cf. infra).

Trade balance trends

	value (million € 2003)											annual variation rate
	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	1993-2003
exports	4,412	5,356	6,143	5,693	6,167	7,371	7,653	8,852	8,368	8,216	7,928	6.0%
imports	6,229	7,810	8,909	8,227	8,854	10,183	10,633	12,697	11,932	11,547	11,181	6.0%
Balance	**-1,817**	**-2,454**	**-2,766**	**-2,534**	**-2,687**	**-2,812**	**-2,980**	**-3,845**	**-3,564**	**-3,331**	**-3,253**	**-6.0%**

(Source: SCEES/foreign trade of wood and wood-derived products; transaction amounts are expressed in CIF values (cost, insurance and freight) for imports, and in FOB values (free on board) for exports; the nomenclature adopted is the 8-figure combined nomenclature used by all EU countries)

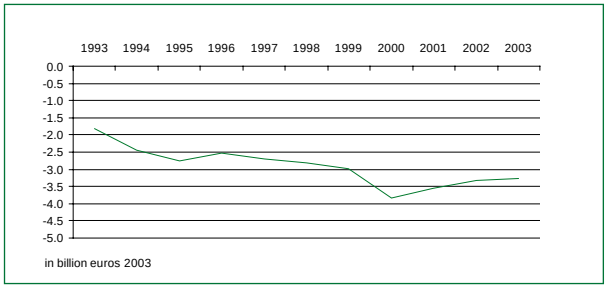


Figure 30: Trade balance trends from 1993 to 2003 (source: SCEES)

Commentary: France had a negative foreign trade balance of €3.3 billion for the entire wood sector in 2003. Import and export patterns in terms of value have increased at the same pace since 1993, thus deteriorating the deficit by 6% per year.

However, the trend has been improving since 2001 (Figure 30).
For many years, three sectors have accounted for most of this deficit but recent trends in these sectors differ markedly:
- for wooden furniture and chairs: the trade balance deterioration is ongoing
- for woodpulp and used papers: after a substantial deterioration in 2000, the balance has been improving since 2001, but remains negative
- for paper-cardboard: the balance is still negative but has been improving considerably since 1999.

The sawnwood sector had a modest impact with respect to the overall deficit until 1999, but the situation has been deteriorating, especially for sawn softwood. The main surplus sectors are wood-based panels (particle- and fibre-board) and plywood, whose balance improved in 2003, and rough hardwood and softwood timber (logs and pulpwood). The trade balance of the wooden veneer sector was positive until the downturn in 2001, after which it became negative.
A detailed analysis of the trade balance revealed that the deficit deterioration noted in 2000 was mainly a consequence of the sharp rise in prices of woodpulp and used paper.
The 1999 storms prompted a marked improvement in the rough timber trade balance in 2000, with a 50% increase in temperate rough hardwood timber, and an almost twofold greater increase in rough softwood timber. In parallel, the balance deteriorated for sawn softwood and hardwood–sawnwood imports increased by 20% while exports rose by only 12%. The surge in available timber induced by the storms clearly did not enable French sawmills to substantially boost their production capacity. The extent of disruption caused by the 1999 storms is becoming more obvious every year.

INDICATOR 6.9

Share of wood energy in total energy consumption, classified by origin of wood

Wood and wood-waste energy consumption	2001 KTOE	2002 KTOE	2003** KTOE	Variation 2001-03
households*	7,571	6,708	7,175	-10.2%
collective residential and service sector*	130	144	153	38.5%
electricity and industrial heating	1,572	1,603	1,634	8.0%
heating for agricultural use	40	40	40	0.0%
total	**9,313**	**8,495**	**9,002**	**-6.6%**
Household share in total wood energy consumption	**81.3%**	**79.0%**	**79.7%**	**-3.9%**
Total primary energy consumption*	266,900	266,300	271,700	3.6%
Share of wood energy in total primary energy consumption	**3.5%**	**3.2%**	**3.3%**	**-9.8%**
Total renewable primary energy consumption	19,378	17,711	18,214	-11.7%
Share of wood energy in total renewable primary energy consumption	**48.1%**	**48.0%**	**49.4%**	**5.8%**

* without climatic correction
** provisional

(Source: Observatoire de l'énergie; June 2005 update; data expressed in millions of tonnes of oil equivalent (MTOE) after conversion of gigawatthours into KTOE using the 0.086 electric energy coefficient. These data concern metropolitan France and the overseas departments (DOM).)

⇨*Note : wood and wood waste used for energy production encompasses a broad range of woody materials derived from silviculture and industrial processing: wood chips and sawdust generated by the timber and paper industries, black liquor generated by pulp and paper industries. Wood charcoal and peat were not recorded.*
The presented data are from studies undertaken by the Centre d'études et de recherches économiques sur l'énergie (CEREN), supplemented with data from the Agence de l'environnement et de la maîtrise de l'énergie (ADEME) concerning collective and industrial heating plants installed since 1994 within the framework of fuelwood programmes. In 2003, fuelwood consumption was thus estimated at 40 million m³, with 25 million m³ derived from forests. This latter figure is higher than the estimation of the Inventaire forestier national mentioned in § 3.1 (18.4 million m³), mainly because of the period assessed by IFN (1984-96) and the forest stands considered.

Commentary: fuelwood consumption in France was estimated at 9 million tonnes of oil equivalent (MTOE) in 2003. It represents 3.3% of the total primary energy consumption. This proportion rises to almost 50% of the total renewable primary energy consumption.
Household consumption, represented by domestic heating, accounts for a major share of the total consumption, at more than 7 MTOE (80%), with industrial consumption taking the lowest share (18%).

Overall fuelwood consumption remained steady at around 10 MTOE from 1990 to 1996 and has been hovering around 9 MTOE since 1997. This recent stagnation concerns household consumption, while consumption has been rising in industrial, collective residential and service sectors.

This was apparently a result of the reduction in wood consumed by traditional heating appliances (reduction in the number of wood-fired stoves and ranges), partially offset by an increase in wood used in inserts in association with alternative energy sources.
The promotion of renewable energy is a key focus in EU energy orientations, which are especially aimed at doubling renewable energy use before 2010. The French energy law of July 2005 aims to fulfil the same objectives. Hence, by 2010, the goal is:

- to meet 10% of energy needs via renewable energy sources
- to increase renewable heat production by 50%. This would result in a consumption rate of 12-13 MTOE, thus utilising an additional 12-16 million m^3 of wood.

To ensure sustainability of the fuelwood sector, full insight is required on the extent of available resources, their cost-effective extraction, supply structuring and technical and environmental enhancement of energy generation.

The Agence de l'environnement et de la maîtrise de l'énergie (ADEME) is addressing the main challenges through successive fuelwood programmes. The first one began in 1994, in 11 regions, and contributed to the development of collective wood-fuelled heating. The second, which spans the 2000-2006 period, concerns the entire country, and has a much broader scope, i.e. promoting collective and individual wood-fuelled heating, developing industrial fuelwood use (e.g. to produce heat for drying, electricity cogeneration), improving heating plant and electricity cogenerator energy output by 10%, thus leading to the creation of 1,000-2,000 direct jobs.

In this setting, ADEME sponsored a national study in 2002 to develop a method for estimating wood chip supplies from forests. Available resources were assessed by the Inventaire forestier national (IFN) and the technical-economic alternatives were evaluated by the SOLAGRO association. This study revealed that considerable unused wood chip supplies from logging waste are available. Further analyses are under way to determine the actual usable quantity of wood chips available at a competitive price relative to other energy sources, without being detrimental to other wood uses.

INDICATOR 6.10

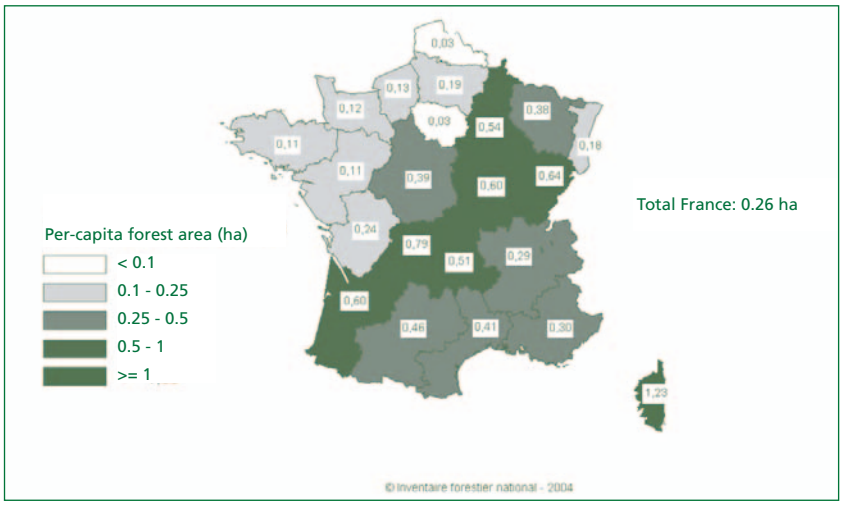
Area of forest and other wooded land where public has a right of access for recreational purposes and indication of intensity of use

Total per-capita forest area

	1993	1998	2003	Annual variation rate 1993-2003
population (x1,000 inhabitants)	57,369	58,299	59,635*	0.4%
forest area, including poplar plantations (x1,000 ha)	14,811	15,220	15,408	0.4%
per-capita forest area (ha)	0.26	0.26	0.26	0.0%

* provisional

(Source: SCEES/Teruti and INSEE/general population census, estimations on 1st January of the year; the data concern metropolitan France.)



Map 21: Per-capita forest area by administrative region in 2003 (sources: SCEES and INSEE)

Commentary: the per-capita forest area has remained steady for 10 years because the forest has generally been expanding at the same pace as the population. France, with 0.26 ha of forest per inhabitant, is slightly below the mean for Europe (0.30 ha/capita according to the TBFRA 2000 survey of UNECE/FAO), but ranks midway between Germany (0.13), Italy (0.17) and Poland (0.23) on one side, and Spain (0.34) and Austria (0.47) on the other, but far behind the Scandinavian countries (Finland 4.25; Sweden 3.07; Norway 1.97).
The situation varies in different French regions because of differences in percentage forest cover and population densities (Map 21). Corsica has the highest per-capita forest area (1.23 ha). Regions with a ratio of more than 0.5 ha/capita are located along a diagonal line running from southwestern to northeastern France, excluding Lorraine and Alsace. The lowest ratios occur in western and northern regions and Ile-de-France (0.03).

This first approach to the "forest supply" should be improved by including a property parameter because there is no public access to some private forests. Moreover, the distance between the population and the closest forest is a key factor with respect to accessibility. Forest access is also, and to an increasing extent, governed by different, and sometimes competing, forest uses, especially on weekends (hunting, hiking, etc.)–a rigorous spatiotemporal understanding of activity sharing in forests could enhanced the notion of public access to forests.

Public forests

ownership category	forest area devoted mainly to public access (ha)			Annual variation rate
	1994	1999	2004	1994-2004
state-owned forests	17,300	26,700	24,000	3.3%
other public forests governed by forest regulations	19,900	27,800	29,000	3.8%
Total public forests	**37,200**	**54,500**	**53,000**	**3.6%**

(Source: ONF, management plan datasets on public access while only considering the wooded area; the share of wooded area in the total area in 2004 was applied to the total areas of 1994 and 1999)

Commentary: the public forest area devoted in priority to public recreation has considerably increased in the last 10 years, thus reflecting a strong growth in demand. These formations, which are mainly located around large urban areas or famous tourist sites, are specially equipped and managed, in order to offset potential ecological problems arising as a result of overuse.

However, this assessment does not provide a suitable representation of the real situation–many public forests that are mainly managed for wood supply actually provide a high level public accommodation service. The slight reduction in public hosting areas in state-owned forests in the last 5 years is therefore not an indication that there has been a decline in public visits.

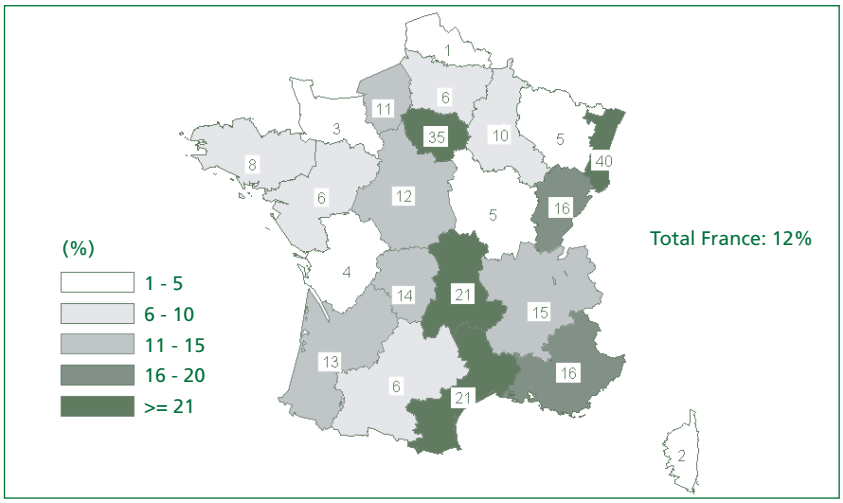
In addition to 700 public recreational areas equipped with wooden furniture, the Office national des forêts (ONF) has installed a considerable amount of equipment to meet the recreational demand in state-owned forests, especially:
- 11,000 km of hiking trails
- 8,000 km of cycling trails
- 9,000 km of horseback riding trails
- 500 km of cross-country ski trails

Social expectations of French people concerning the forest are complex and ever-changing. This situation prompted ONF, in partnership with scientific organisations, to undertake a large-scale assessment on social demand relative to forests. This work is aimed at clearly identifying and analysing expectations so that forest management can ultimately be tailored to meet these needs. A preliminary assessment, carried out in partnership with Cemagref, Bordeaux, showed that public expectations extended far beyond the recreational aspect of forests and could not be solely fulfilled by installing equipment associated with public accommodation. In 2004, a national survey on different images of forests in the public eye, conducted by ONF and the Université de Caen, concluded that the forest's role as a "heritage to pass on to future generations" is the top concern of French people (87%). Other projects are also planned, including surveys with detailed open-ended interviews and a PhD thesis on the social demand, based on case studies.
This work should ultimately result in the founding of an observatory on social expectations.

Public use of private forests of over 1 ha

	Number of owners (x 1,000)	Forest area (x 1,000 ha)
Total	1,118	9,848
including %		
providing free public access to their forests	86%	72%
where the forest is visited by the public	75%	84%
- low public use	51%	46%
- medium public use	19%	25%
- high to very high public use	5%	12%
considering the public causes no annoyance	87%	67%
tolerating picking of small products	88%	78%

(Source: SCEES, 1999, survey on private forest property structures; only forests of over 1 ha were monitored)



Map 22: Private forest areas with high to very high public use per administrative region (source: SCEES, 1999)

Commentary: according to a survey of the Service central des enquêtes et études statistiques (SCEES) conducted in 1999, most owners of private forests of over 1 ha (86%) declare that they provide free access to their forests, i.e. 72% of the total forest area. Prohibited access is usually enforced by legal entities, as displayed by warning signs (21% of areas) or by physical barriers (7%).

A very large proportion of private forests is actually used by the public (84%), but the visiting rate is only high to very high in 12% of the area and limited to 5% of owners. The results vary from region to region (Map 22)–the most visited private forests are located around large urban centres (Ile-de-France) or in regions where tourism is high (Alsace, Languedoc-Roussillon, Auvergne, Provence-Alpes-Côte d'Azur).

Finally, according to the same survey, many private owners consider that the public does not cause any annoyance and they tolerate picking of mushrooms, berries and other small products in their forests.

Number of visits in forests

Public activities	Total number of household visits (x 1,000,000)	Mean number of visitors per household (units)	Total number of individual visits (x 1,000,000)	Proportion of visits of 2 h or more (%)	Number of visits per person and per year (units/pers./year)
Walking	287	2.5	716	72%	12.5
Sports	51	2.1	109	65%	1.9
Animal walking	44	1.6	69	30%	1.2
Picking	21	2.5	51	88%	0.9
Hunting	10	1.7	18	74%	0.3
Fauna/flora	9	1.5	14	82%	0.2
Firewood	7	1.4	10	83%	0.2
Other activities	12	1.9	23	99%	0.4
Total	**441**	**2.3**	**1,010**	**70%**	**17.7**

(Source: LEF ENGREF/INRA, 2002. Survey on visiting patterns in French forests. "Other activities" includes graphic arts and photography, geology, forest maintenance, etc.)

Commentary: according to a survey conducted in 2002 in a sample of 2,575 French households representative of telephone subscribers, and concerning the year 2001 (Laboratoire d'économie forestière ENGREF/INRA, Nancy), 56% of French households had visited a forest at least once in 2001. There were a total of 441 million visits, two-thirds of which involved walks. Each household was composed of 2.3 members on average, which means there was a total of a billion visits by French people in 2001. Walking is most often associated with picking, usually in family groups, more than nature watching, rural activities (hunting, firewood collecting) or walking a dog. Excluding the time it takes to reach the forest (mainly by car, bicycle or on foot), the visiting time is often over 2 h, and 2.5 h on average. Recreational activities in the forest are thus extremely important for French people, who pay around €2 billion per year just to gain access to forests by car.

INDICATOR 6.10.1
Population distribution by per-capita forest area segment within a 50 km radius

per-capita forest area within a 50 km radius	population concerned (%)	proportion of public forest in the total forest area (%)
less than 0.01 ha	3.1%	53.8%
0.01-0.02 ha	19.2%	38.6%
0.02-0.05 ha	6.1%	24.9%
0.05- 0.1 ha	14.2%	18.6%
0.1- 0.2 ha	16.4%	26.4%
0.2-0.5 ha	28.8%	28.4%
0.5-1 ha	8.9%	25.2%
1-2 ha	2.4%	24.3%
2-5 ha	0.8%	28.3%
more than 5 ha	ε	54.2%
Total	**100%**	**26.5%**

(Source: ONF, IFN 1998, IGN, INSEE/general population census 1999; ONF assessment)

Commentary: the overall per-capita forest area ratio can be broken down by considering the population distribution by section of forest area within a 50 km radius. This breakdown highlights marked differences in situation, with a ratio of 1 to 500 from one extreme to the other (range 0.01 to 5 ha). More than 20% of French inhabitants have access to only 200 m^2 of forest within a 50 km radius around their homes. Conversely, 12% of inhabitants have access to more than 0.5 ha, or more than 5,000 m^2.
The proportion of public forests is much higher in zones where the per-capita forest area is low, e.g. within the green belt in the Paris region.

INDICATOR 6.10.2
Proportion of forest area by per-capita forest area segment within a 50 km radius

per-capita forest area within a 50 km radius	total forest area (%)
less than 0.01 ha	0.04%
0.01-0.02 ha	0.9%
0.02-0.05 ha	1.2%
0.05-0.1 ha	3.1%
0.1-0.2 ha	7.9%
0.2-0.5 ha	33.4%
0.5-1 ha	27.2%
1-2 ha	17.1%
2-5 ha	9.0%
more than 5 ha	0.1%
Total	**100%**

(Source: ONF, IFN 1998, IGN, INSEE/general population census 1999; ONF assessment)

Commentary: the distribution of French forests by per-capita forest area class within a 50 km radius provides an indication of the impact of human use on the natural environment.
More than half of the forest area is located in zones where the per-capita forest area within a 50 km radius is over 0.5 ha–the human impact is higher on 13% of the area for which this ratio is under 0.2 ha.

INDICATOR 6.11

Number of sites within forest and other wooded land designated as having cultural or spiritual values

Type of site	Number	Observations	Source
classified sites with wooded areas	275	with a total area of around 74,000 ha	1
arboretums with public access	87		2
biosphere reserves	6	Pays de Fontainebleau, Vosges du Nord, Cévennes, Mont Ventoux, Lubéron, Vallée du Fango	3
World Heritage sites	2	Vallée de la Loire (Domaine de Chambord); Scandola nature reserve in Corsica (maquis)	3
unusual trees in public forests	2,000	with 264 of national interest	4
unusual stands in public forests	200		4

(Source: **1** MEDD 2004, according to a database on classified sites. Sites were classified on the basis of five criteria: scenic, historical, legendary, artistic or scientific. Some sites were classified on the basis of several criteria. **2** ENGREF Arboretum National des Barres 2005. **3** UNESCO 2005; the Chambord site, classified since 1981, was included in the "Vallée de la Loire" site in 2000; maquis (other wooded lands according to FAO) covers part of the Scandola reserve. **4** ONF 2004)

Commentary: the forest has an important cultural and symbolic status in the French imagination. This is reflected in the main images that the forest brings to mind for people, as a "heritage to pass down to future generations" and a "nature reservoir", as revealed in a survey undertaken by the Office national des forêts and the Université de Caen in 2004.
Forest areas with a high cultural and symbolic value include sites that are classified as being partially wooded, arboretums with public access, biosphere reserves, World Heritage sites and unusual trees and stands.

✓ Classified sites are legally designated as sites whose conservation or preservation is of public interest from an artistic, historical, scientific, legendary or scenic standpoint. All forestry work that could modify the state or aspect of a classified site requires an authorisation from the minister responsible for these sites.
Around 275 sites are classified as being partially wooded, representing a total area of 74,000 ha. Two-thirds of them are classified with respect to all of the criteria mentioned above, with 20% considered as being "scenic". Most of them are located in Ile-de-France (21%), Bretagne (13%), Pays de la Loire (12%), in the Centre region (11%) and Provence-Alpes-Côte d'Azur (8%).

✓ French arboretums are relatively untapped biological heritage resources. They contain very high diversity (taxa and individual plants), rare species (endangered, vulnerable or symbolic) and very unique ecosystems. There is public access to 87 of these arboretums (cf. list in Appendix 10).
A French public arboretum network was set up with the aim of ensuring the sustainable management of this heritage. This network includes 10 arboretums managed by the Ecole nationale du génie rural des eaux et forêts (ENGREF), the Institut national de la recherche agronomique (INRA), the Office national des forêts (ONF), the Museum national d'histoire naturelle (MNHN) and the Université Paris-Sud.

✓ The United Nations Educational, Scientific and Cultural Organization (UNESCO) launched a scientific programme entitled Man and the Biosphere (MAB) in 1974, with the aim of gaining further insight into the relationship between man and the environment. Within the framework of this programme, UNESCO developed the "biosphere reserve" concept–sites where natural resource-friendly human developments are showcased and applied. There are currently 440 biosphere reserves worldwide, located in 97 different countries. France has 10 reserves, 7 of which are in metropolitan France. Six of these metropolitan reserves are forested, i.e. the biosphere reserves of Pays de Fontainebleau, Vosges du Nord, Cévennes, Mont Ventoux, Lubéron and Vallée du Fango in Corsica.

✓ The UNESCO World Heritage Convention was adopted in 1972. Its aim is to globally promote the identification, protection and preservation of cultural and natural heritage considered as having an outstanding value for humanity. Natural heritage sites have an outstanding universal value from scientific, conservation or natural beauty standpoints.
There are 30 World Heritage sites in France, two of which contain forests, or "other wooded lands" according to FAO. These are the Domaine de Chambord, which has been classified since 1981 and included in the Vallée de la Loire site since 2000 and, secondly, the Scandola nature reserve in Corsica, which is a remarkable example of Mediterranean maquis landscape.
In 2006, France should submit a request for classification of the Causses and Cévennes area as a World Heritage site–it covers a 639,000 ha area and contains many forests and other wooded lands.

✓ In 1996, the Office national des forêts (ONF) undertook an inventory of unusual trees in public forests. They were defined according to dendrological (size, age), aesthetic (stem shape, foliation, roots) or cultural (historical, religious, ethnographic value) criteria. These trees are generally not legally protected but they are taken into account in forest management plans.
ONF thus conducted local inventories with regional and national harmonization and four interest levels. Around 2,000 trees and tree groups were classified as unusual, 264 of which were considered as being of national interest. In addition, 200 unusual stands were recorded.