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MINISTÈRE
DE L'AGRICULTURE
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Indicators for the sustainable management of French forests



2005 Edition

Foreword

This is the third enhanced and updated edition of the report Indicators for the Sustainable Management of French Forests.

It pools the data and knowledge of managers, ecologists, researchers, statisticians, administrators and other stakeholders who are all striving to ensure that French forests will remain sustainable as a source of renewable resources, from economic, ecological, landscape and society perspectives.

Portraying forests with figures is a delicate operation – as clearly shown by the range of assessment criteria and monitoring indicators considered in this report.

The forest is rich, living and sustainable.

The present document was designed to provide a solid reflection of this environment.

I am certain that it will serve as a very useful instrument for enhancing awareness on our forest area, which currently accounts for 30% of the total area of metropolitan France.

This work is ongoing and will now have to be supplemented by a section on forests in the French overseas departments and territories. The extent of these forest areas is already well established, but special tailored operations and new updated assessment methods will be necessary for their measurement and monitoring.

Everyone who was involved in drawing up this report is thanked for his/her contribution.

Alain MOULINIER



Director General for Forestry
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A photograph of a dense forest with tall, slender trees and a canopy of green leaves, serving as the background for the top half of the page.

Preface

The United Nations Conference on the Environment and Development (UNCED, Rio de Janeiro, 1992) outlined the main principles for sustainable development. The Pan-European Forest Process (or so-called Helsinki Process) was launched as a follow-up to the Second Ministerial Conference on the Protection of Forests in Europe (Helsinki, 1993) with the aim of applying UNCED principles to European forests. The Third Conference (Lisbon, 1998) defined criteria and indicators for sustainable forest management in Europe that the signatory countries are committed to update and enhance on a regular basis. This commitment was confirmed in the Fourth Conference (Vienna, 2003), which also recommended that the criteria and indicators be integrated in national forest programmes.

France has been publishing *Indicators for the Sustainable Management of French Forests* every 5 years since 1995 to review the progress. This is the third edition. It consists of 35 quantitative indicators that were adopted at the Vienna Conference in 2003 and which are classified under the six sustainable management criteria delineated at the Helsinki Conference. Twenty-one supplementary indicators were added to this list to account for distinct features of French forests—some of these are new indicators. For clarity, the so-called Vienna indicators are presented separately from those specific to the French forest setting. Moreover, special effort was made to comply with the methodological recommendations of the Vienna Conference. Two major climatic events have had a serious impact on metropolitan French forests since the previous edition, i.e. the severe storms of late December 1999 and the drought-heat wave of 2003. An in-depth analysis of the impacts of these events is presented under Criterion 2 (Maintenance of forest ecosystem health and vitality).

It is still too early to analyse the qualitative indicators for sustainable forest management—they are designed to assess progress in institutional, legal, economic, financial and informational domains between the Vienna Conference (2003) and the next Conference to be held in Warsaw in 2008. Once this analysis is undertaken, it will be summarised in the national report to be presented at the Conference in 2007. This will provide an opportunity to outline the French *Loi d'Orientation sur la Forêt* (LOF), passed in July 2001, which established the legal framework for sustainable forest management in France. Moreover, development of a national forest programme has been under way since 2004, in collaboration with all stakeholders of the forest-wood-paper sector, and it should be completed in the near future. This programme will include a national forest biodiversity action plan.

Within the current pan-European setting, the present document is focused only on metropolitan French forests, as in the 1995 and 2000 editions. A separate publication should be devoted to French forests in the overseas departments and territories, considering their specific character and substantial size, i.e. covering a total area of 9.1 million ha in nine department-regions and communities. It could be based on the conclusions of the next *Livre blanc sur la forêt tropicale*, which will be included in the French national forest programme.

The Direction générale de la forêt et des affaires rurales (DGFAR) of the French Ministry of Agriculture and Fisheries assigned the Inventaire forestier national (IFN) with the task of producing this document. It was coordinated by a steering committee of members from organisations and institutions in the forest-wood-paper sector, and it benefitted from the contributions and suggestions of various other stakeholders in this sector and relevant associations (cf. attached list).



Cautionary note

- The indicator headings outlined in the 2003 Vienna Conference were copied word for word, but the data presented in the tables do not always fully mesh with the topics.
- The indicators for the Vienna Conference have two figures, while those specific to French forests have three. These latter indicators were attached to the most relevant Vienna Conference topics. Appendix 1 provides a list and origins of the sustainable forest management (SFM) indicators.
- The Inventaire forestier national (IFN) data presented in this document for the years 1989, 1994, 1999 and 2004 are those available on 1st January of the year. Given the frequency of the inventories undertaken in each department (12 years on average), they correspond to the mean years 1981, 1986, 1991 and 1996, respectively. The impact of the storms of December 1999 was thus only partially taken into account in the 2004 IFN data. Appendix 3 provides a list of departments and IFN survey dates corresponding to the four reference years. Some distribution criteria (structure, species, etc.) could not be determined in all the forest formations due to an absence of field inventories or for technical reasons. An "unspecified" line was thus added to ensure consistency. However, data from the Teruti survey of the Service central des enquêtes et études statistiques (SCEES) mentioned are expressed in real years, i.e. 1993, 1998 and 2003. This data source is thus used in Indicator 1.1 (Forest area).
The definition and methods used by IFN and SCEES (Teruti) are summarised in Appendix 2, and a summary of the IFN and Teruti areas is presented in Appendix 4.
IFN modified its inventory method in November 2004, so it is now based on systematic annual sampling, which should facilitate updating of the indicators.
- In the tables, figures and maps, the grouping categories for basic data are always defined while including the lower limit but excluding the upper limit. Annual variation rates are calculated on a compound interest basis. Finally, results expressed in euros for a given year correspond to constant euros.

Contents

1	MAINTENANCE AND APPROPRIATE ENHANCEMENT OF FOREST RESOURCES AND THEIR CONTRIBUTION TO GLOBAL CARBON CYCLES	11
	Forest area	
1.1-	Area of forest and other wooded land, classified by forest type and by availability for wood supply	12
1.1.1	- Forest area gains and losses	14
1.1.2	- Forest area by biogeographical area and elevation class	14
1.1.3	- Forest area by IFN forest structure	16
1.1.4	- Forest area by main tree species	17
	Growing stock	
1.2-	Growing stock on forest and other wooded land, classified by forest type and by availability for wood supply	19
1.2.1	- Growing stock by IFN forest structure	20
1.2.2	- Growing stock by tree species	21
	Age structure and/or diameter distribution	
1.3-	Age structure and/or diameter distribution of forest and other wooded land, classified by forest type and by availability for wood supply	23
	Carbon stock	
1.4-	Carbon stock of woody biomass and of soils on forest and other wooded land	26
1.4.1	- Annual carbon emission levels	28
2	MAINTENANCE OF FOREST ECOSYSTEM HEALTH AND VITALITY	29
	Deposition of air pollutants	
2.1-	Deposition of air pollutants on forest and other wooded land, classified by N, S and base cations	30
2.1.1	- Atmospheric pollutant emission patterns	34
	Soil condition	
2.2-	Chemical soil properties (pH, CEC, C/N, organic C, base saturation) on forest and other wooded land related to soil acidity and eutrophication, classified by main soil types	36
	Defoliation	
2.3-	Defoliation of one or more main tree species on forest and other wooded land in each of the defoliation classes: "moderate", "severe" and "dead"	38
	Forest damage	
2.4-	Forest and other wooded land with damage, classified by primary damaging agents (abiotic, biotic and human induced) and by forest type	42
2.4.1	- Regenerations protected from damage by large ungulates	49



3	MAINTENANCE AND ENCOURAGEMENT OF PRODUCTIVE FUNCTIONS OF FORESTS (WOOD AND NON-WOOD)	51
	Increment and fellings	
3.1-	Balance between net annual increment and annual fellings of wood on forest available for wood supply	52
3.1.1 -	Forest accessibility	54
	Roundwood	
3.2-	Value and quantity of marketed roundwood	55
3.2.1 -	Cellulose fibre recovery and recycling; by-product processing	56
3.2.2 -	Marketing wood felled in certified forests	57
	Non-wood goods	
3.3-	Value and quantity of marketed non-wood goods from forest and other wooded land	58
	Services	
3.4-	Value of marketed services on forest and other wooded land	61
	Forests under management plans	
3.5-	Proportion of forest and other wooded land under a management plan or equivalent	62
3.5.1 -	Forest area covered by a catalogue of sites and area covered by a simple species guide	63
4	MAINTENANCE, CONSERVATION AND APPROPRIATE ENHANCEMENT OF BIOLOGICAL DIVERSITY IN FOREST ECOSYSTEMS	65
	Tree species composition	
4.1-	Area of forest and other wooded land, classified by number of tree species occurring and by forest type	66
4.1.1 -	Purity of main species stands in basal area	68
	Regeneration	
4.2-	Area of regeneration within even-aged stands and uneven-aged stands, classified by regeneration type	69
	Naturalness	
4.3-	Area of forest and other wooded land, classified by "undisturbed by man", "semi-natural" or by "plantations", each by forest type	70
4.3.1 -	Area of very old regular high forests forming specific habitats	71
	Introduced tree species	
4.4-	Area of forest and other wooded land dominated by introduced tree species	73
	Deadwood	
4.5-	Volume of standing and lying deadwood on forest and other wooded land, classified by forest type	74

Genetic resources

- 4.6- Area managed for conservation and utilisation of forest tree genetic resources (*in situ* and *ex situ* gene conservation) and area managed for seed production 76

Landscape pattern

- 4.7- Landscape-level spatial pattern of forest cover 78
4.7.1 - Per-ha length of forest edges 79
4.7.2 - Per-ha length of forest edges by IFN national stand types 80
4.7.3 - Intensive cuts and clear cuts 80

Threatened forest species

- 4.8- Number of threatened forest species, classified according to IUCN Red List categories in relation to total number of forest species 82

Protected forests

- 4.9- Area of forest and other wooded land protected to conserve biodiversity, landscapes and specific natural elements, according to MCPFE Assessment Guidelines 84
4.9.1 - Deer population densities per 100 ha 86

5 MAINTENANCE AND APPROPRIATE ENHANCEMENT OF PROTECTIVE FUNCTIONS IN FOREST MANAGEMENT (NOTABLY SOIL AND WATER) 87

Protective forests – soil, water and other ecosystem functions

- 5.1- Area of forest and other wooded land designated to prevent soil erosion, to preserve water resources, or to maintain other forest ecosystem functions, part of MCPFE Class "Protective Functions" 88

Protective forests – infrastructure and managed natural resources

- 5.2- Area of forest and other wooded land designated to protect infrastructure and managed natural resources against natural hazards, part of MCPFE Class "Protective Functions" 89

6 MAINTENANCE OF OTHER SOCIOECONOMIC FUNCTIONS AND CONDITIONS 91

Forest holdings

- 6.1- Number of forest holdings, classified by ownership categories and size classes 92

Contribution of forest sector to GDP

- 6.2- Contribution of forestry and manufacturing of wood and paper products to gross domestic product 94

Net revenue

- 6.3- Net revenue of forest enterprises 95

Expenditures for services

- 6.4- Total expenditures for long-term sustainable services from forests 96

Forest sector workforce

- 6.5- Number of persons employed and labour input in the forest sector, classified by gender and age group, education and job characteristics 97





Occupational safety and health

- 6.6 - Frequency of occupational accidents and occupational diseases in forestry 98

Wood consumption

- 6.7 - Per-capita consumption of wood and products derived from wood 99

Trade in wood

- 6.8 - Imports and exports of wood and products derived from wood 100

Energy from wood resources

- 6.9 - Share of wood energy in total energy consumption, classified by origin of wood 101

Accessibility for recreation

- 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 102
- 6.10.1 - Population distribution by per-capita forest area segment within a 50 km radius 104
- 6.10.2 - Proportion of forest area by per-capita forest area segment within a 50 km radius 104

Cultural and spiritual values

- 6.11 - Number of sites within forest and other wooded land designated as having cultural or spiritual values 105

CONCLUSION

107

- Acronyms, symbols and abbreviations 108
- List of boxes, maps and figures 111
- Websites queried 113
- References 114

APPENDICES

119

- Appendix 1 - List and origins of quantitative SFM indicators in 2005 120
- Appendix 2 - Inventory methods and definitions 123
- Appendix 3 - French National Forest Inventory (IFN): dates of field surveys to record data available on 1 January 1989, 1994, 1999 and 2004 125
- Appendix 4 - Summary table of forest areas 127
- Appendix 5 - List of trees found in French forests 128
- Appendix 6 - List of forest species observed by the French National Forest Inventory (IFN) in its dendrometric surveys 130
- Appendix 7 - IFN logging classification 131
- Appendix 8 - Certified sustainably managed forest area 131
- Appendix 9 - List of threatened species 132
- Appendix 10 - List of arboreturns with public access 134
- Appendix 11 - Detailed tables by paragraph (IFN and Teruti data) 136