# **Europe and Forests**

#### **CEPF**

## **General facts about Forests in Europe:**

- Numbers
  - 70% is semi-natural;
  - 8% is plantation;
  - 58% is covered by mixed or broadleaved trees;
  - 42% is covered by naturally coniferous forests cover (particularly in Nordic countries and in mountain areas);
- Coniferous trees are mostly spruce or pine trees beech, maple, ash, oak or birch are typical broadleaf species.
- The total standing volume (over bark) in Europe's forests is 20 billion cubic meters and just 55% of the net annual increment is harvested. From this it follows that currently Europe's forests are expanding at an annual net area rate of 510,000 ha.
- Europe's annual increment is estimated at 2,287 million cubic meters, or almost two truckloads of wood a second.
- In total, nearly 10.8 million ha or 1% of Europe's forests and other wooded land were reported to be damaged by known causes.

## FAO STATE OF THE WORLD'S FORESTS 2007

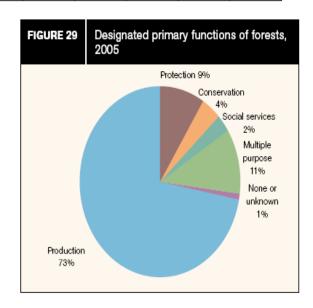
The net increase in forest area in Europe is a result, in large part, of substantial increases in several countries over 2000–2005, led by Spain (296 000 ha/year average increase) and Italy (106000 ha/year), followed by Bulgaria, France, Portugal and Greece. The largest percentage increases were reported by countries with low forest cover: Iceland (3.9 percent increase in forests per year) and Ireland (1.9 percent)

#### Extent and change of forest area

	Area (1 000 ha)			<b>Annual</b> (1 00	<b>change</b> 0 ha)	Annual change rate (%)	
	1990	2000	2005	1990-2000	2000-2005	1990-2000	2000-2005
Europe excluding Russian Federation	180 370	188 823	192 604	845	756	0.46	0.40
Russian Federation	808 950	809 268	808 790	32	-96	0	-0.01
Total Europe	989 320	998 091	1 001 394	877	661	0.09	0.07
World	4 077 291	3 988 610	3 952 025	-8 868	-7 317	-0.22	-0.18

#### Forest disturbances

	Disturbances affecting forests, average 1998–2002 (1 000 ha)							
	Other	Total						
Europe excluding Russian Federation	326	1 400	2 178	7 038	10 942			
Russian Federation	1 268	4 953	957	508	7 686			
Total Europe	1 594	6 353	3 135	7 546	18 628			



# Summary of progress towards sustainable forest management

Disturbing trends impairing sustainable forest management:

- Forest health is adversely affected by fire, storms, insect pests and disease, all of which may increase if global warming continues.
- Climate change poses a threat to Europe's forests, although some areas may well benefit, for example from longer growing seasons.
- Employment in the forest sector continues to decline as the workforce continues to age and labour productivity increases because capital is replacing labour as the most important production factor.
  - The *European forestry sector outlook study* (UNECE/FAO, 2005) concluded that European forests are sustainable in the long term, but with caveats in all areas of sustainable development economic, social and environmental.

# **European Countries**

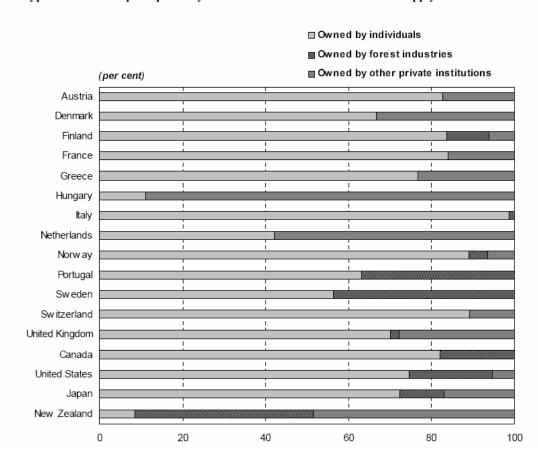
Country	Area	Population	Forest	Forest	Industrial
			Cover Ownership		roundwood
Austria	83 858 km²	8.3 million	4 million ha	81% Private	15.8 million
				15% State	m³ o.b.
			4% others		
Belarus	207 595 km <sup>2</sup>	9.8 million	7,8 million	100% Public	7.3 million m <sup>3</sup>
					o.b.
Belgium	30 158 km <sup>2</sup>	10.5 million	0,67 million	10% Private	3.76 million
			ha	54% State	m³ o.b.

Bosnia and	51 129 km²	3.8 million	2,1 million	38% others 78.6% Public	2.99 million	
Herzego-	0112/1111			21.4% Private	m³ o.b.	
vina				21.170 1111 410	m 0.0.	
Bulgaria	111 000 km²	7.7 million	about 3.4	78.6% state	3.07 million	
Duiguiu	111 000 1111	,,, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	million ha	10% municipalities	$m^3$ o.b.	
			in in inc	10.6% individuals	in o.e.	
				0.2% Private entit.		
				0.6% Church		
Croatia	57 000 km²	4.4 million	2,1 million	78.7% Public	3.66 million	
010.00	<i>C</i> , 000 mm		21.3% Private		$m^3$ o.b.	
Cyprus	9 000 km²	0.8 million				
- <b>3 F</b>						
Czech Rep.	79 000 km²	10.3 million	2,6 million	23% Private	16.3 million	
•			ha	60% State	m³ o.b.	
				17% others		
Denmark	43 094 km²	5.4 million	0,6 million	69% Private	0.9 million	
			ha	26% State	cbm	
				5% others		
Estonia	45 000 km²	1.3 million	2,2 million.	60% Private	7.5 million m <sup>3</sup>	
			ha	40% Public	o.b.	
Finland	338 000 km²	5.3 million	22,5 million	26% Public	59 million m <sup>3</sup>	
			ha	60% Private	o.b.	
				9% Private		
France	550 000 km²	60.9 million	15,5 million	71% Private	33.4 million	
			ha	10% State	m³ o.b.	
				19% Other		
Germany	356 854 km²	82.5 million	11 million	46 % private	54.5 million	
			ha	20 % municipal ent.	m³ o.b.	
				30 % 16 federal		
				states		
				4% Federal Gov.		
Greece	131 957 km²	11.1 million	3,35 million	65.5% State	0.4 million m <sup>3</sup>	
			ha	15 % private	o.b.	
				12 % municipal		
				4.5 % Church		
**	02.0001.2	10.1 '11'	1.07 '11'	3% Other	2.4 '11' 2	
Hungary	93 000 km²	10.1 million	1,85 million	58% State	3.4 million m <sup>3</sup>	
			ha	41% Private	o.b.	
Inclosed	70 000 12	4.2 million	0.600	1% Other	2.79 million	
Ireland	70 000 km²	4.2 IIIIIION	,			
			million ha	40% Private 2% Other	m³ o.b.	
Italy	301 263 km²	58.8 million	9,9 million	35% Public	3.8 million m <sup>3</sup>	
itary	301 203 KIII*	20.0 HIIIIIOH	ha	65% Private	o.b.	
Latvia	65 000 km²	2.3 million	2,943	50% State	10.5 million	
Latvia	05 000 KIII*	ااااااااا د.ع	2,943 million ha	50% State 50% Private		
Lithuania	65 300 km²	3.4 million	<u> </u>	16% State forests	m <sup>3</sup> o.b. 5.88 million	
Limuania	03 300 Km²	5.4 IIIIII10N	1,9 million			
			ha	reserved for restitu-	m³ o.b.	

				I	
			tion		
				50% State	
				significance	
				forests	
				34% Private	
Luxem-	2 586 km²	0.5 million	89150 ha	50% Private	0.135 million
bourg				30% Municipalities	m³ o.b.
				10% State	
				10% Other	
Malta	316 km²	0.4 million		100% Public	0
Nether-	41 864 km²	16.3 million	0,3 million	42% Other	0.86 million
lands			ha	33% State	m³ o.b.
				25% Private	
Norway	323 758 km <sup>2</sup>	4.4 million	12 million	80% Private	7.6 million m <sup>3</sup>
			ha	10% State	o.b.
			1100	10% Other	
Poland	313 000 km²	38.1 million	3,8 million	83.2% Public	31.7 million
1 Olailu	515 000 Kili	50.1 mmion	2,0 111111011	16.8% Private	$m^3$ o.b.
Portugal	92 072 km²	10.6 million	3,35 million	82% Private	10.4 million
1 of tugar	72 072 KIII	10.0 111111011	ha	8% other	$m^3$ o.b.
Romania	238 000 km²	21.6 million	6,4 million	69% State	11.4 million
Komama	236 000 KIII <sup>2</sup>	21.0 111111011	·	18% Private	
			ha		$m^3$ o.b.
				13% Municipali-	
	17.075.400	1.40.1 '11'	ties, Church		100 4 '11'
Russia	17 075 400	142.1 million	808 790 000	100% Public	129.4 million
	km²	~ /	ha	1001.0	m³ o.b.
Slovakia	49 000 km²	5.4 million	1,9 million	42% State	6.37 million
			ha	20% Community	m³ o.b.
				14% Private	
				11% Other	
				10% Communal	
				3% Church	
Slovenia	20 000 km²	2 million	1,26 million	27.7% Public	2.6 million m <sup>3</sup>
				72.3% Private	o.b.
Spain	504 782 km²	43.8 million	26 million	64.8% Private	15.7 million
			ha / prod.	28.8% other public	$m^3$ o.b.
			area 6	entities	
			million ha	4.6% State	
				1.8% Other	
Sweden	450 000 km²	9.0 million	27 million	51% Private	68.7 million
		- '	hectares	individ.	m³ o.b.
				6% Other private	
				18% State	
				1% Other Public	
				24% Companies	
				2+70 Companies	
Switzerland	41 284 km²	7.3 million	1,2 million	26% Private	5.66 million
BWILZCHAHU	+1 404 KIII	7.5 IIIIIIIIII	ha	74% Other	$m^3$ o.b.
Ukraine	603 700 km²	47.1 million		100% Public	
UKraine	003 /00 Km²	47.1 IIIIIIION	9,6 million	100% Public	6.66 million

					m³ o.b.
UK	242 500 km²	60.4 million	2.85 million	28% State	8.6 million m <sup>3</sup>
			ha	72% Private	o.b.

Share of types of ownership in privately owned forest available for wood supply in selected countries



 $Source:\ UNECE\ 2000\ \ \underline{http://www.unece.org/trade/timber/fra/pdf/fullrep.pdf}$ 

#### Austria

# FAO - Forest harvesting and environment in Austria

#### Forest ownership:

- 53% small private forests (<200 ha)
- 32% private estates (>200 ha)
- 15% federal forests

## Other data:

• About 60% of the commercial forest area is small private property dissected in small land parcels.

#### Belgium

# **CEPF Report**

Belgium has more than 120.000 privately owned forests. The average area of a private forest therefore scarcely exceeds 2,7 hectares

#### Bulgaria

## WWF Report from March 2007

### **Potential Perspectives for Small owners**

Small forest owners in Bulgaria

- Management of small forests in the country is very difficult and now it is going vulnerably and being done on unsustainable way. A credible forest certification is seen worldwide as a tool for addressing this challenges. This tool is also introduced in Bulgaria and supported by the public and state administration..
- The government commit in February 2006 for FSC certification of 1/3 of stateforest in the country during next 5 years. The expectations till the end of 2007 are having 150 000 hacertified state forest.
- There is also interest from the beginning within the private forest cooperative and big owners on implementation of forest management certification. Now several cooperatives with forest areas between 500 ha and 2400 ha and one company owned 1800 ha are in process of certification.
- Even the forest certification process in the country is permanently growing, it is not attractive enough for small owners. They have limited interest to manage on sustainable way their forests and haven't finances to make investments for improvement.

#### Denmark

# Nordic Family Forestry

#### **Forest Ownership in Denmark**

Private persons - ordinary Danish citizens - own 46 % of all forest land. The number of private forest holdings is about 25,000. This is the Danish family forestry. Companies and foundations own 26 % of the forests. The rest -28 % - are publicly owned, mostly by the State.

#### **Profitability of Danish forestry**

Danish forestry, and in particular the family forestry, is in a severe crisis. In 2003, after years of similar losses, private forest owners lost almost 100 Euro/hectare. The economy of Danish forestry is thus not sustainable.

# **Forest Certification**

About 10,000 hectares or 2 %, of the Danish forests are certified under the Danish PEFC-Scheme.

#### Estonia

## **CEPF Report**

• There are about 60 000 family forest owners in Estonia, each owning an average of 12 ha of forestland.

#### Finland

# Lähteet: Ripatti, P. Factors Affecting partitioning of Private Forest Holdings in Finland.

- The average size of forest asset is 31 hectares;
- 440 000 assets sizing over 2 ha
- 295 000 individuals own 1-5 ha of forest land
- 633 000 individuals own more than 5 ha of forest land

## Nordic Family Forestry

## **Forest Ownership in Finland**

- Private persons ordinary Finnish citizens own 61 % of all forest land. The number of private forest holdings of at least one hectare is about 440,000. The number of individual private forest owners is estimated at nearly 900,000, which means that one out of every five Finns is a forest owner.
- Finnish forestry is commonly termed *family forestry:* small-scale forestry run by ordinary families, and passed on as a legacy from one generation to the next.

#### **Family Forestry in Finland**

- The structure of family forest ownership is changing due to the age structure of rural population, urbanisation and inheritance. The proportion of farmer-forest owners has decreased, while the number of wage and salary earners and pensioners has increased. In 1970 farmers were still the biggest group to own private forest (76%) when today they share is only about 22%.
- Nowadays non-farmers own 78 % of the family forests and pensioners are the biggest forest-owner group. The number of women among forest owners is also growing. Despite of the changes, most forest owners still live in the countryside. The average age of forest owners is 57 years.

## **Profitability of family forestry**

- Average size of private forest holdings in Finland is 31,5 hectares. In southern Finland the holdings are smaller (27 ha) compared to the sizes in northern Finland (65 ha). For many forest owners forest earnings play an important part (an average forest holding under sustainable management may return an annual timber-sales income of about EUR 3,600).
- The profitability of wood production can be described using either stumpage price or the net income of private forests. Assessed with these indicators, the profitability of private forests varies both regionally and temporally.
- In 2000s the gross stumpage revenues obtained annually from the sales of roundwood in family forests have been about EUR 1.4-1,5 billion. In family forests, the per hectare net earnings in 1970–2000 before direct taxes and external capital costs were an average of EUR 80 (at 2000 prices). In eastern Finland, the net income of wood production was clearly higher than elsewhere. In northern Finland the net income was only one third of the average figure for the whole country.

#### France

- French forests are mostly privately owned: 71%, or 10.6 million hectares, of the forests are privately owned. State forests represent 10% of the woodland and the other public forests 19%.
- France is one of the European countries with the most important percentage of private forest, after Portugal and Finland.
- The proportion of public forest area has slightly decreased since the last century, which means that the increase in forest area is bigger in privately owned than in publicly owned ground

#### Private forests

	1976-83					1999				
number of		area			number of		area			
size (ha)	ow	ners ,000)	total (x1,000 ha)	%	mean (ha)	owners (x1,000)		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 silvioulture 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.)

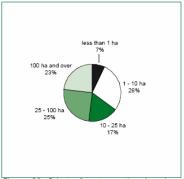


Figure 23: Private forest area by size class (source: SCEES, 1999)

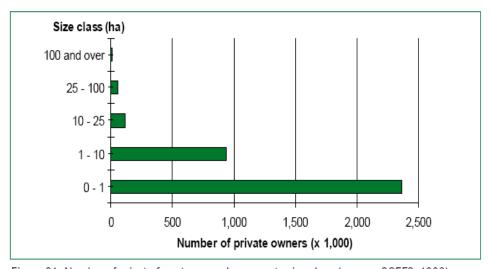


Figure 24: Number of private forest owners by property size class (source: SCEES, 1999)

#### Norway

## Nordic Family Forestry

#### The ownership structure

- There are a total of 125,000 forest holdings in Norway with more than 2,5 hectares of forest land. The average size is about 50 hectares. About 120,000 of these holdings are family owned. Small forest properties, the steep and varying terrain conditions and the alternating production possibilities have created great variations within the forest land-scape.
- Approx. 80 percent of the forest is owned by families, mainly farmers that manage their forest in combination with farming. State and community forests amount to 12 percent of the productive forest area, while 4 percent is owned by private companies.

#### **Family Forestry**

- The family forestry in Norway is being managed and operated through typical small-scale forestry operations. The variety of small-scale forestry creates good conditions for environmental biodiversity. The average sized felling area is 1.4 hectar.
- The forest owners often combine their forest work with other farming activity. About 15 percent of the forest owners/family members are actively engaged in their forest through felling and/or transport operations, the rest is done by contractors. A larger percentage though carries out reforestation and silvicultural work on their own property.
- With few exceptions, all farm and forest holdings are kept within the family. According to the Act of Allodial Rights, the firstborn child has the first option to the holding. Most farms are inherited through generations, establishing a feeling of responsibility and long-term considerations of keeping the value of the farm. This attitude is of great importance to the forestry management, where measures that are implemented to day only be seen after several decades in the future. On average, the rotation between planting and final harvest is between 70-100 years.

#### Sweden

# The effectiveness of FSC Group Certification / Nordic Family Forestry

- About half of the Swedish forests are private-owned by individuals and families.
- In all, some 350,000 people own forests, 1/3 are women.
- Today more than one third of forest owners live in a municipality other than the one where their woodland is situated.
- The average size of private forest properties is 50 hectares. 31% of holdings are less than 10 hectares in size and account for less than 2% of the total area, 86% of holdings are less than 100 hectares and account for 24% of the total area.
- Traditionally such ownership is called "private forestry", but on international level this concept also includes corporate ownership. For that reason the forest owners' associations in the Nordic countries use the word "family forestry" to denote private ownership on family level.

• About 150 000 forest owners are members of one of Sweden's four forest owners' associations. Taken together they own almost 90 000 pieces of afforested land.

## **References:**

**FAO** 

www.fao.org

**FAO** forestry division

http://www.fao.org/forestry/en/

**FAO State of the Worlds forests 2007** 

http://www.fao.org/docrep/009/a0773e/a0773e00.htm

**FAO: Problems of Europe's small woodlands** 

http://www.fao.org/docrep/x5386e/x5386e04.htm

FAO - Forest harvesting and environment in Austria

www.fao.org/docrep/W3646E/w3646e0b.htm

**FAO - Forest Resource Assessment** 

http://www.fao.org/forestry/site/32178/en/

For the representative bodies of private forest owners in the different European countries:

## **CEPF Family Forest Report**

http://www.cepf-eu.org/

The effectiveness of FSC Group Certification

http://assets.panda.org/downloads/fscgroupcerteffectiveness.pdf

## **European Union**

http://europa.eu/abc/european\_countries/eu\_members/netherlands/index\_en.htm

**CEPF** 

http://www.cepf-eu.org/

## **International Family Forestry Alliance**

http://www.familyforestry.net/

# Statistical figures on PEFC certification Information updated on 31/05/2007 www.pefc.org

## **Nordic Forestry**

http://www.nordicforestry.org/

# Ministerial process, MCPFE

www.mcpfe.org
Reporting on Sustainable Forest management 2007
<a href="http://www.mcpfe.org/documents/r\_2007">http://www.mcpfe.org/documents/r\_2007</a>

#### UNECE

http://www.unece.org/trade/timber/WorkArea2.html.

#### **French Forests**

**Inventaire Forestier National** 

http://www.ifn.fr/spip/IMG/pdf/IDG2005\_en\_crit6.pdf

#### **Swedish Forest Industries Federation**

 $\frac{http://www.forestindustries.se/LitiumInformation/site/page.asp?Page=17\&IncPage=4064\&IncPage2=1330\&Destination2=726\&Destination=727\&ohKatID=6\\ \frac{http://www.skogsindustrierna.org/LitiumInformation/site/page.asp?Page=16\&IncPage=712\&Destination=712\\ \frac{http://www.skogsindustrierna.org/LitiumInformation/site/page.asp?Page=712\&Destination=712\\ \frac{http://www.skogsindustrierna.org/LitiumInformation/site/page.asp?Page=16\&IncPage=712\&Destination=712\\ \frac{http://www.skogsindustrierna.org/LitiumInformation/site/page.asp.$ 

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