

INFORMATION ON FORESTS AND FORESTRY IN THE CZECH REPUBLIC BY 2012



MINISTERSTVO ZEMĚDĚLSTVÍ

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AND FORESTRY
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BY
2012**



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I GENERAL MACROECONOMIC CONDITIONS AND FORESTRY POSITION IN NATIONAL ECONOMY

I.1 General Macroeconomic Conditions of the National Economy

Economic Growth

Contrary to a slight improvement in 2011, the gross domestic product experienced a year-on-year decline in 2012, namely by 1.2% at constant prices. The situation even worsened in the course of the year and the drop in GDP in the Czech Republic was more profound than both in the EU 27 as a whole and the euro area.

Calculated from the Eurostat preliminary data, the Czech Republic reached, in 2012, 80% of average GDP volume index per capita in the purchasing power parity for the EU 27. Converted at the current exchange rate, this represents a ratio of 57%.

In 2012, supplies contributed to the overall economic growth at constant prices adjusted for season variations mainly through household expenditure, which was 3.5% lower than in the preceding year. Formation of the gross fixed capital noted a year-on-year decline by 1.6%, while foreign trade had a positive effect on GDP with export of goods and services growing by 4.1% and imports by 2.1%.

On the side of demands, the gross value added (GVA) at constant prices adjusted for season variations decreased by 1.1%, agriculture, forestry and fishery being the most significant sectors declining by 13.6%. The GVA of manufacturing industry remained constant representing 99.9% of the year 2011.

The general unemployment rate in 2012 increased by 0.3% against 2011 and reached 7.0%.



Macroeconomic indicators of national economic development¹⁾

National economy	Unit	2011	2012
GDP in current prices	CZK billion	3 841.4	3 843.5
	year-on-year index	101.1	100.1
GDP in constant prices 2005 (not adjusted for season variations)	year-on-year index	101.9	98.8
Relative GDP per capita ²⁾	EU 27 = 100	80	80
	EU 15 = 100	73	73
Average monthly earnings (nominal) ³⁾	CZK	24 436	25 101
	year-on-year index	102.4	102.7
Average inflation rate	%	1.9	3.3
Mean interest rates on bank credits ⁴⁾	%	3.94	3.69
Trade balance	CZK billion	90.3	145.8
Current account of balance of payments	CZK billion	-104.0	-94.0
Balance of the state budget	CZK billion	-142.8	-101.0
Consolidated gross debt in the sector of state institutions ⁵⁾	CZK billion	1 569.0	1 758.9
Deficit in the sector of state institutions ⁵⁾	% GDP	-3.25	-4.38
Debt in the sector of state institutions ⁵⁾	% GDP	40.84	45.75
Unemployment rate (mean) ⁶⁾	%	6.7	7.0
Parity (mean) – CZK/€	CZK	24.566	25.143
– parity (mean) CZK/\$	CZK	17.688	19.583

Notes:

- 1) Data published by 2 April 2013.
- 2) Purchasing power parity, preliminary data for 2012 (Eurostat).
- 3) Average monthly gross nominal earnings on a full-time equivalent number of employees in the national economy.
- 4) Interest rates – situations of trades, 12-month average.
- 5) Balance in the sector of state institutions (ESA 1995).
- 6) Share of unemployed persons in total labour force by Eurostat and ILO.

Source: Czech Statistical Office, Czech National Bank, Eurostat

Share of agriculture¹⁾, forestry²⁾, fishery³⁾ and food industry⁴⁾ on the GVA in basic prices (%)

Year	Agriculture	Forestry	Fishery	Food industry
Current prices				
2006	1.63	0.80	0.018	2.73
2007	1.66	0.71	0.014	2.45
2008	1.66	0.63	0.012	2.38
2009	1.38	0.52	0.015	2.73
2010	1.05	0.59	0.015	2.43
2011	1.41	0.72	0.020	2.38
2012	1.32	0.73	0.019	2.29
Constant prices of 2005				
2006	1.47	0.74	0.022	2.95
2007	1.02	0.62	0.016	2.52
2008	1.02	0.69	0.015	2.38
2009	1.51	0.64	0.018	2.34
2010	0.95	0.59	0.020	2.30
2011	0.82	0.61	0.025	2.30
2012	0.67	0.59	0.023	2.11

Notes:

- 1) Including game management and related activities.
- 2) Including related activities.
- 3) Including fish culture and related activities.
- 4) Production of food and beverages, and tobacco products.

Source: Czech Statistical Office, quarterly accounts results; revised data



1.2 Forest Ownership Structure

Structure of forest ownership in the Czech Republic in 2012

Ownership		Area of forest stands	
		(ha)	%
State forests		1 553 086	59.80
of which	LČR, s. p. (Forests of the Czech Republic, State Enterprise)	1 305 591	50.27
	Vojenské lesy a statky ČR, s. p. (Military Forests and Farms, State Enterprise)	124 164	4.78
	Ministry of the Environment (National Parks)	94 893	3.65
	Regional forests (secondary schools and other)	2 823	0.11
	Other	22 311	0.86
	Ministry of the Environment (Nature Conservation Agency of the Czech Republic)	1 195	0.05
	Originally state forests (*)	2 110	0.08
Legal persons		74 654	2.87
Communal and municipal forests		435 951	16.79
Forests owned by the Church and other religious entities		1 476	0.06
Forest cooperatives and associations		30 502	1.17
Forests owned by individuals		501 514	19.31
Other forests (not listed elsewhere)		4	0.00
TOTAL		2 597 186	100.00

Note:

(*) original large FMPs owned by the state – validity from 1981 to 1996, partly from 1997; private owners and municipalities manage their forests under an abstract from FMP and will have new FMPs upon their renewal.

Source: FMI

1.3 Principles of State Forest Policy

The Government of the Czech Republic adopted a policy document named “Principles of State Forest Policy” by Decree No. 854 of 21 November 2012.

The Principles of State Forest Policy follow the “Basic Principles of State Forest Policy” adopted under Government Decree No. 249 of 11 May 1994 and complement the State Forest Programme for 2013 approved under Government Decree No. 1221 of 1 October 2008.

The Principles encompass the most important propositions in the forest sector and define the primary mission of the forest. They determine long-term objectives of the State Forest Policy giving general considerations, including a potential of using public authority in forest matters. Finally, they establish the main measures aimed at reaching the mentioned long-term objectives. Their purpose is not to specify individual activities in the forest with precision but rather set the future trends in the forest sector in order to retain all forest functions.

The Principles of State Forest Policy delimit the new approach to enforcing public authority in forestry, which means, among others, that:

- forests determined to meet the defined public interests are above all those owned by the state,
- the public authority uses its powers only in such cases when the natural efforts of forest owners to duly manage and improve their properties do not suffice to secure the public interests defined by the State Forest Policy,
- instruments used by the public authority towards forest owners shall be adequate to fulfil the desired purpose. In cases when more than one instrument may be used, the authority shall decide for the one that is most reasonable but that also limits the forest owner's rights to the minimum extent.

Long-term Objectives of State Forest Policy

1. To preserve the forest and forest land for future generations.
2. To enhance competitiveness of forestry.
3. To enhance biodiversity in forest ecosystems, their integrity and ecological stability.
4. To reinforce the importance of the forest and forestry for rural economic development.
5. To reinforce the importance of education, research, and innovation in forestry.





2 FOREST SECTOR OVERVIEW

2.1 Recognised Sources of Forest Reproductive Material

Sources of identified reproductive material

As at 15 December 2012, the registered reduced tree area (i.e. the tree area fully useable for standing volume production) amounted to 70 950.40 ha of sources type "stand" in 6 611 recognised units. Total 427 recognised units of type "seed source" were registered. In comparison to the year 2011, the numbers of both sources of type "stand" and "seed" grew by 0.62% and 13.87% respectively. The increase in the number of trees in sources "seed" was more significant, namely by 22.36%.

Sources of selected reproductive material

As at 15 December 2012, the registered reduced tree area amounted to 75 890.96 ha of sources type "stand" in 7 458 recognised units. Stands of phenotype category A covered 9 312.09 ha, i.e. a reduction by 857.72 ha (8.43%) against 2011. The area of stands of recognised phenotype category B was 66 578.87 ha, i.e. a decline by 5 308.38 ha (6.0%) against the preceding year.

Sources of qualified reproductive material

Parent trees / clones

As at 15 December 2012, the Register of Recognised Sources of Reproductive Material listed total 9 334 clones. Conifers amounted to 6 310 plants, i.e. 67.61%, and broadleaves to 3 024 plants, i.e. 32.39%. Clones are registered for total 32 tree species, namely 10 coniferous and 22 broadleaf species. The total number of clones in the database increased by 15 against 2011, i.e. by 0.16%. The number of coniferous clones grew by 101, while the number of broadleaved clones dropped by 116.

Seed orchards

As of 15 December 2012, the Register of Recognised Sources of Reproductive Material listed total 142 approved seed orchards on total 320.72 ha. Seed orchards are established to produce seeds of 9 coniferous and 13 broadleaf tree species. Conifers involve 81.11% of the total area covering 260.14 ha of land. Broadleaf species are grown on 60.58 ha. The authorised entity newly registered four seed orchards in its database in 2012.

Clone mixtures

Total 29 approved clone mixtures for 6 tree species on 23.08 ha of land were registered in the Czech Republic in 2012. The tree species were the Wych Elm (1 clone mixture),

European Aspen (1), Norway Spruce (18), Black Poplar (5), improved poplars (2), and the White Willow (2 clone mixtures). No clone mixture was recognised or registered by the authorised entity in 2012.

2.2 Forest Nursery Practice

Licences

The basic prerequisite for handling with forest reproductive material (hereinafter referred to as "FRM") is a respective licence. As at 31 December 2012, the central register of seed suppliers of the Ministry of Agriculture listed total 596 licence holders, namely 316 individuals and 280 legal persons. Compared to 2011, the number of such licensees dropped by 24.

Area of forest nurseries

On the date of 31 December 2012, the total area of forest nurseries marketing FRM amounted to 1 809.68 ha, the actual production area covering 1 438.12 ha. In addition to open production areas, the records listed 4.01 ha of glass greenhouses, 19.01 ha of plastic greenhouses and 7.426 ha of hotbeds.



2.3 Forest Regeneration and Reforestation

The area of regenerated forest stands was reduced against the year 2011 by 1 366 ha and amounted to 25 464 ha. Compared to the previous two years, the area of regenerated forests was smaller as a result of reforestation that followed less intensive logging of 2011 and 2012. Natural regeneration increased to total 5 561 ha, which is a visible growth against the past years.

The share of broadleaves in artificial regeneration reached 38.3%, which represented a negligible decline compared with the preceding year. The share of spruce and beech in artificial regeneration remained comparable to the year 2011.

Forest regeneration (ha)

Method of regeneration	2000	2002	2004	2010	2011	2012
Artificial	21 867	18 120	19 042	21 859	21 755	19 903
of which: Replanting	4 371	3 212	2 766	3 087	3 712	3 751
Natural	3 422	3 940	4 802	5 127	5 075	5 561
Total	25 309	22 060	23 844	26 986	26 830	25 464

Source: Czech Statistical Office

Artificial regeneration by tree species (ha)

Artificial regeneration		2000	2002	2004	2010	2011	2012
		ha					
Total*		21 867	18 120	19 042	21 859	21 755	19 903
of which	Planting	21 486	17 676	18 733	21 686	21 570	19 818
	Sowing	381	444	309	173	185	85
of which	Spruce	9 479	7 941	8 495	9 171	9 987	9 034
	Fir	895	923	1 032	1 274	1 188	974
	Pine	2 597	2 267	2 361	2 171	2 128	1 933
	Larch	739	417	327	206	196	221
	Other conifers	200	182	124	145	164	128
	Total conifers	13 910	11 730	12 339	12 967	13 363	12 290
	Oak	2 428	1 780	1 965	2 607	2 494	2 263
	Beech	3 386	3 143	3 406	4 899	4 485	4 064
	Lime	397	264	237	264	261	252
	Poplar, aspen	46	61	50	33	29	50
	Other broadleaves	1 700	1 142	1 045	1 089	1 123	984
	Total broadleaves	7 957	6 390	6 703	8 892	8 392	7 613
	% broadleaves	36,4	35,3	35,2	40,7	38,6	38,3

Note: including underplanting.

Source: Czech Statistical Office

2.4 Cleaning and Thinning

Cleaning practices were carried out on total 46.2 thousand ha of forests while thinning on 94.4 thousand ha. Both areas declined against 2011, particularly the area managed using thinning practices.

Cleaning and thinning (1 000 ha)

Year	Cleaning	Thinning	Total
2000	47.7	115.5	163.2
2001	49.7	131.1	180.8
2002	34.9	103.2	138.1
2003	41.2	79.3	120.5
2004	43.4	91.1	134.5
2005	40.7	92.3	133.0
2006	39.7	83.7	123.4
2007	37.8	53.4	91.2
2008	42.8	66.7	109.5
2009	40.6	85.2	125.8
2010	43.6	85.7	129.3
2011	47.5	101.6	149.1
2012	46.2	94.4	140.6

Source: Czech Statistical Office, FMI



2.5 Timber Harvest

The raw timber harvest in the Czech Republic totalled 15.06 million m³ in 2012. Compared to the year 2011, this represents a reduction by 0.32 million m³. Priority was given to salvage cutting (3.24 million m³) and supply of timber to wood-processing industries.

The proportion between planned and salvage cutting was relatively more favourable in the last two years. The share of salvage cutting in total felling reached 25.4% in 2011 and 21.5% in 2012. The conditions for planned forest management were thus more favourable than before 2011.

Comparing the volumes of logged timber in individual species, the volume of harvested broadleaves stagnated, reaching approximately 13% of total felling. The proportion of harvested hardwood and softwood is mainly given by the structure of available reserves in mature stands and by the demand on the timber market.

Total annual timber harvest

Harvest	Unit	2000	2002	2004	2006	2008	2010	2011	2012
Conifers	million m ³	12.85	13.01	13.92	16.12	14.88	15.07	13.34	13.06
Broadleaves		1.59	1.53	1.68	1.56	1.31	1.67	2.04	2.01
Total		14.44	14.54	15.6	17.68	16.19	16.74	15.38	15.06
Per capita	m ³	1.41	1.43	1.53	1.72	1.55	1.59	1.47	1.43
Per 1 ha of forest		5.48	5.5	5.9	6.67	6.10	6.30	5.78	5.8

Note: volumes are given in m³ under bark, minimum top diameter 7cm.

Source: Czech Statistical Office

2.6 Forest Protection

From the point of view of forest protection, the year 2012 may be generally considered as rather favourable, particularly when compared to the preceding years characterised by salvage cutting due to natural disasters and subsequent outbreaks of wood borers. This mainly applies to Bohemia, which did not suffer from drought so much as other regions. The principal damaging factors remained practically the same as in the previous years. Wind and snow break, and drought consequences dominated abiotic factors while outbreaks of woodborers on spruce stands and damage by excessive stocks of hoofed game prevailed among biotic factors. The course of the weather was generally unbalanced; extreme weather (sudden severe frost in February, drought in spring, maximum temperatures in August) mostly affected

the entire country but extreme drought hit particularly the regions of Moravia and Silesia. In 2012, the volume of salvage cutting in the country amounted to approximately 3.3 million m³, that is a reduction by 0.5 million m³ against 2011, when timber harvest totalled 3.8 million m³. The overall salvage cutting thus brought positive figures representing approximately 20% of the total timber harvest in the country.

Against 2011, the total damage caused by abiotic factors was lower by 20%, and the damage caused by biotic factors only noted a decline by approximately 5%. However, the situation varied largely in individual regions. While Bohemia recorded lower damage in all factors, the situation in Moravia and Silesia got generally worse with incrementing volumes of damage in both abiotic (mainly drought, partly wind and snow breaks) and biotic factors (bark beetle on spruce and honey fungus). The chronic problems relating to excessive stocks of hoofed game persisted in the entire country.

Salvage cutting by reason (million m³)

Year	Reason				
	Abiotic	Air pollution	Insects	Other	Total
	million m ³	million m ³	million m ³	million m ³	million m ³
2000	2.39	0.08	0.32	0.5	3.29
2001	1.49	0.06	0.23	0.6	2.38
2002	3.38	0.03	0.29	0.51	4.21
2003	6.12	0.06	1.26	0.76	8.2
2004	2.76	0.04	1.27	1.3	5.37
2005	2.3	0.04	0.98	1.21	4.54
2006	5.97	0.03	1.14	0.89	8.03
2007	12.65	0.04	1.56	0.64	14.89
2008	7.6	0.04	2.31	0.8	10.75
2009	3.25	0.03	2.62	0.73	6.63
2010	4.07	0.03	1.79	0.57	6.46
2011	2.17	0.02	1.05	0.57	3.82
2012	1.70	0.02	0.79	0.73	3.24

Source: FGMRI, Czech Statistical Office



2.7 Forest Certification

Overview of certified forests in the Czech Republic

Ownership	PEFC	FSC
	Area of certified forests (ha)	
State forests	1 500 326	35 649
Individuals	90 057	4
Legal entities	52 082	10 492
Municipal forests	184 861	4 039
Total	1 827 326	50 184

Source: FMI



2.8 Non-market Forest Products and Forest Visitors

Visits to forests accessible to the public 1994–2012

Year	Number of visits	
	per capita	per 1 ha*
1994	25.3	105.7
1995	22.4	93.4
1996	17.3	72.0
1997	23.4	97.4
1998	19.4	80.7
1999	21.6	89.9
2000	22.6	94.1
2001	23.1	96.3
2002	19.6	81.5
2003	19.3	80.4
2004	16.2	68.0
2005	20.4	85.9
2006	18.8	79.3
2007	18.9	79.6
2008	13.5	56.9
2009	16.5	69.6
2010	20.3	85.3
2011	23.1	98.5
2012	24.0	102.0
Average	20.3	85.1

Note:

* forest land accessible to the public (mostly excl. military forests and some other areas).

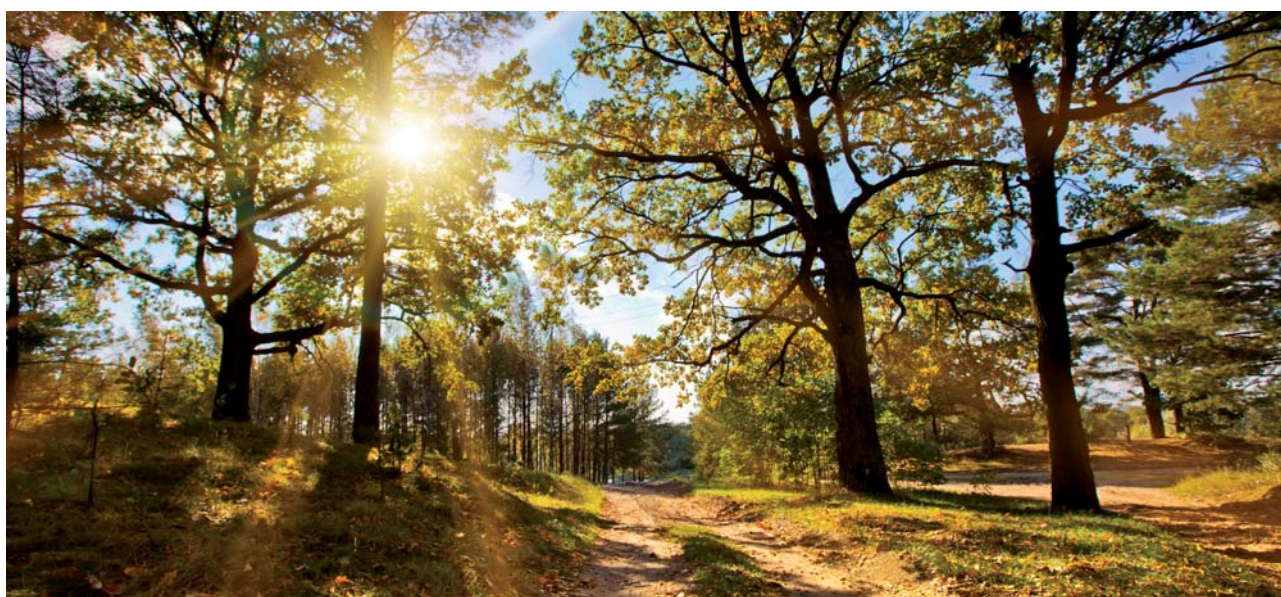
Source: Czech University of Life Sciences Prague



Total volumes of forest fruits and mushrooms picked by visitors in 1994–2012 (1 000 t)

Year	Forest fruits						
	Mushrooms	Blueberries	Raspberries	Blackberries	Cowberries	Elderberries	Total
1994	23.6	11.3	4.2	2.7	0.7	3.9	46.4
1995	29.7	15.0	5.8	2.8	1.3	3.9	58.5
1996	18.4	9.4	3.1	1.8	0.7	1.5	34.9
1997	17.8	8.7	4.0	1.7	0.9	2.2	35.3
1998	17.7	10.3	4.9	2.3	0.6	2.6	38.4
1999	20.2	13.0	3.5	2.3	1.2	3.2	43.4
2000	23.8	8.7	4.1	2.7	0.7	1.8	41.8
2001	23.4	8.9	3.7	2.3	0.7	1.4	40.4
2002	21.2	10.9	3.6	2.1	0.9	2.1	40.8
2003	13.5	6.5	2.6	2.0	0.4	1.4	26.4
2004	13.7	6.1	2.1	1.5	1.8	1.4	26.6
2005	19.5	7.6	2.6	1.3	0.8	1.3	33.1
2006	26.0	9.4	2.9	1.5	1.0	1.3	42.1
2007	29.8	10.0	2.6	2.0	0.7	1.8	46.9
2008	15.2	4.6	1.1	0.6	0.5	0.9	22.9
2009	16.2	7.5	1.0	0.9	0.5	1.3	27.4
2010	24.7	9.4	2.1	1.8	0.3	0.7	39.0
2011	29.6	8.9	2.1	2.3	1.1	2.3	46.3
2012	32.8	6.8	3.4	3.2	0.3	2.2	48.8
Average	21.9	9.1	3.1	2.0	0.8	2.0	38.9

Source: Czech University of Life Sciences Prague



3 MAJOR INDICATORS IN TIMBER PRODUCTION

3.1 Changes in Forest Land Area



Changes in forest land area

Year	2001	2003	2005	2007	2009	2010	2011	2012
Forest land area	2 638 917	2 644 168	2 647 416	2 651 209	2 655 212	2 657 376	2 659 837	2 661 889

Source: Czech Office for Surveying, Mapping and Cadastre, FMI

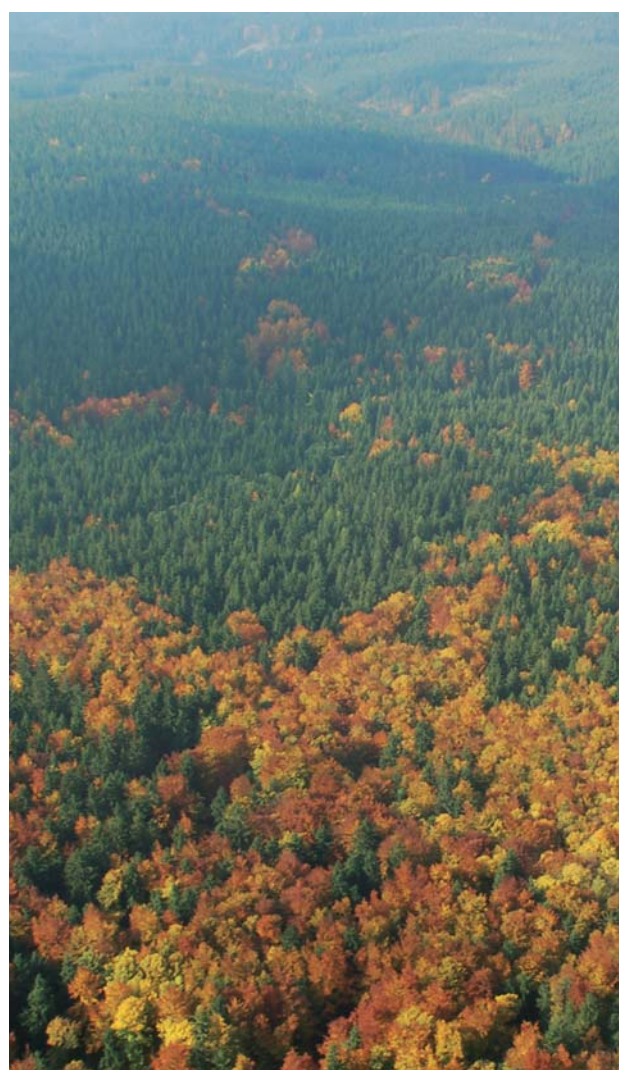
3.2 Forest Categories by Their Functions

Individual categories of forests are distinguished by their prevailing functions and the proportion of individual categories does not experience any marked changes. In the long term, the category of special purpose forests has been slightly increasing at the expense of production forests. A moderate decline in the category of protection forests reflects the fact that the current potential to designate new protection forests is not fully used under relatively invariable natural conditions.

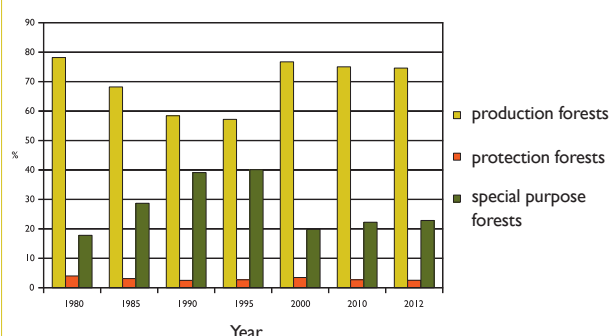
Forest categories (ha)

Forest categories	Production forest	Protection forest	Special purpose forest	Total
	1 938 129	65 730	593 327	2 597 186

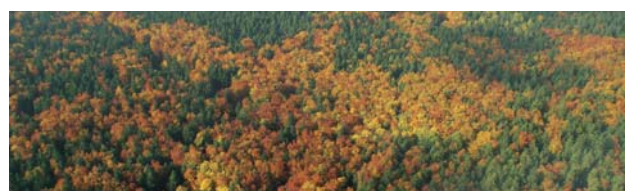
Source: FMI



Development of forest categories



Source: FMI



3.3 Species Composition of Forests

The total area of coniferous species has been constantly decreasing. For example, the area of spruce dropped by 62 595 ha against 2000. In contrast, the share of broadleaves, mainly oak and beech, has been growing thanks to the foresters' efforts to reach an optimum species composition of forests. These practices enjoy long-term support under a goal-oriented national subsidy policy.

Tree species composition of total timber land (ha and %)

Species	Year					
	2000	2004	2008	2010	2011	2012
	Timber land in ha and %					
Norway Spruce	1 397 012	1 381 407	1 362 205	1 347 239	1 341 421	1 334 417
	54.1	53.3	52.4	51.9	51.7	51.4
Fir	23 138	23 534	24 658	25 869	26 448	26 859
	0.9	0.9	1.0	1.0	1.0	1.0
Pine	453 159	447 013	440 188	436 308	434 202	432 915
	17.6	17.3	17.0	16.8	16.7	16.7
Larch	97 170	99 707	100 326	100 761	100 817	100 956
	3.8	3.9	3.9	3.9	3.9	3.9
Other conifers	4 586	5 617	5 964	6 352	6 581	6 941
	0.2	0.2	0.2	0.2	0.3	0.3
Total conifers	1 975 065	1 957 278	1 933 341	1 916 529	1 909 468	1 902 088
	76.5	75.5	74.4	73.9	73.6	73.2
Oak	163 761	169 150	175 495	178 466	180 597	182 327
	6.3	6.5	6.8	6.9	7.0	7.0
Beech	154 791	168 212	182 048	189 998	194 257	198 652
	6.0	6.5	7.0	7.3	7.5	7.7
Birch	74 560	74 447	73 764	72 264	71 169	71 026
	2.9	2.9	2.8	2.8	2.7	2.7
Other broadleaves	183 696	195 173	205 991	209 559	211 325	213 145
	7.1	7.5	7.9	8.1	8.1	8.2
Total broadleaves	576 808	606 983	637 299	650 287	657 348	665 151
	22.3	23.4	24.5	25.1	25.3	25.6
Total excl. unstocked areas	2 551 873	2 564 261	2 570 640	2 566 816	2 566 816	2 567 239
	98.8	99.0	99.0	98.9	98.9	98.9

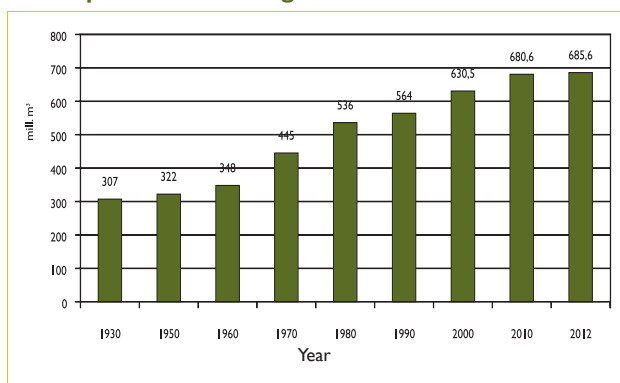
Source: FMI

3.4 Growing Stock and Increments

Growing stock volume (million m³)

Growing stock volume									
Year	1930	1950	1960	1970	1980	1990	2000	2010	2012
million m ³	307	322	348	445	536	564	630.5	680.6	685.6

Development of Growing stock volume



Note: Volume in m^3 u. b., min. top diameter of 7 cm.

Source: FMI

Total mean and total current annual increments

Increment	Year						
	1950*	1970	1980	1990	2000	2010	2012
	million m^3 u.b. annually						
Total mean	9.0	13.5	16.0	16.3	16.8	17.7	17.9
Total current	9.2	14.8	17.1	17.0	19.8	21.2	21.6
	m^3 u.b. per ha of timber land annually						
Total mean	3.7	5.3	6.2	6.3	6.5	6.8	6.9
Total current	3.8	5.8	6.7	6.6	7.7	8.2	8.3

Note:

* Including forests of under 10 ha in size, forests not intended for wood supply and afforested non-forest land.

Source: FMI





4 FOREST SECTOR ECONOMY

4.1 Economic Situation of Forest Owners

The economic situation of forest owners of all categories involved in forest management and other forest-based activities noted further improvement following the positive trend from 2010–2011 and recovering from a serious recession with unfavourable economic results in 2006–2009. Forests owned by the state generated the highest profit (including granted contributions and subsidies) (CZK 3 907/ha), followed by private forests (CZK 2 103/ha). Municipal forests recorded the lowest profit (CZK 1 452/ha). The considerable improvement in the economic situation of forest owners was mainly induced by the demand for raw timber, which remained constant despite the sharp growth of average prices of decisive timber assortments.

The economic result (profit before taxation) per one ha of forest land noted the highest year-on-year increase in the category of state forests (by CZK 193), followed by municipal forests (by CZK 171); private forests recorded the lowest growth (by CZK 77). The state enterprise Lesy České republiky a.s. (also referred to as Forests of the Czech Republic, state enterprise) played the crucial role in the economy of state forests generating historically the highest profit before taxation of CZK 5 478 million, i.e. a year-on-year increase by CZK 203 million. Financial contributions for forest management provided from the budgets of individual regions, reimbursement of certain mandatory costs from the state budget (under the Forest Act) and financial means allocated from the EU funds constituted again significant support for forest owners (tenants).

Average prime costs of selected operations (CZK/unit)

Operation	Unit	2009	2010	2011	2012
Forest regeneration	ha	72 986	68 854	77 825	66 221
Tending of young plantations	ha	9 331	9 036	9 173	9 051
Juvenile thinning	ha	8 353	7 798	8 401	8 493
Forest protection	ha	154	131	90	103
Total silviculture	ha of forest	1 867	1 836	1 822	1 820
Felling	m ³	267	267	202	193
Skidding	m ³	248	232	230	229
Hauling	m ³	175	149	181	174
Road repairs and maintenance	ha of forest	530	575	731	737

Source: Ministry of Agriculture

Profit of forest owners (excl. subsidies for forest management) (CZK/ha)

Profit before taxation	2009	2010	2011	2012
State forests	481	2 127	3 572	3 773
Municipal forests	-228	450	539	984
Private forests	772	1 521	1 594	1 652
Average	439	1 717	2 615	2 843

Source: Ministry of Agriculture

Profit of forest owners (incl. subsidies for forest management) (CZK/ha)

Profit before taxation	2009	2010	2011	2012
State forests	561	2 311	3 714	3 907
Municipal forests	480	1 051	1 281	1 452
Private forests	1 395	1 974	2 026	2 103
Average	748	2 031	2 922	3 103

Source: Ministry of Agriculture

**Profit of forest owners only from forest activities
(excl. subsidies for forest management) (CZK/ha)**

Profit before taxation	2009	2010	2011	2012
State forests	289	1 968	4 017	4 119
Municipal forests	984	2 695	2 696	2 523
Private forests	1 874	3 268	3 195	3 371
Average	778	2 395	3 610	3 698

Source: Ministry of Agriculture

**Profit of forest owners only from forest activities
(including subsidies for forest management) (CZK/ha)**

Profit before taxation	2009	2010	2011	2012
State forests	349	2 112	4 110	4 209
Municipal forests	1 596	3 172	3 305	2 937
Private forests	2 344	3 579	3 515	3 702
Average	1 023	2 632	3 839	3 895

Source: Ministry of Agriculture

4.2 Social Aspects in the Forest Sector
4.2.1 Labour Market in Forestry
Number of employees in forestry

	2009	2010	2011	2012
Total forest sector	16 041	15 150	14 138	13 792
of which				
State	5 574	5 130	4 937	4 967
Private	8 406	8 015	7 162	6 823
Municipal	2 061	2 005	2 039	2 002

Source: Ministry of Agriculture

4.2.2 Average Earnings in Forestry

Compared to the preceding year, the average monthly earnings of individuals working in the forest-based sector rose



by 4.0% and thus surpassed those in industry (by 3.5%) and in the national economy (by 2.7%). Nevertheless, in absolute numbers, the average earnings of individuals in forestry and forest-based activities, in both entrepreneurial and non-entrepreneurial entities, still lag behind the average earnings in industry (by CZK 1 885) and in the national economy (by CZK 1 225). The highest average earnings in forestry are recorded in the public sector, where they surpass the average of the private sector by CZK 7 311 and the sector of municipal forests by CZK 7 178. The data for 2011 in the chart below were updated in the category of industry and national economy (total specified by the Czech Statistical Office).

Average monthly earnings (CZK)

		2009	2010	2011	2012	2011/2012
		CZK				%
Forestry		19 856	21 074	22 154	23 037	104,0
of which	State forests	23 462	24 923	26 346	27 696	105,1
	Private forests	17 632	18 873	19 976	20 385	102,0
	Municipal forests	19 179	20 020	19 655	20 518	104,4
Industry		22 417	23 187	24 068	24 922	103,5
National economy total		22 637	23 004	23 628	24 262	102,7

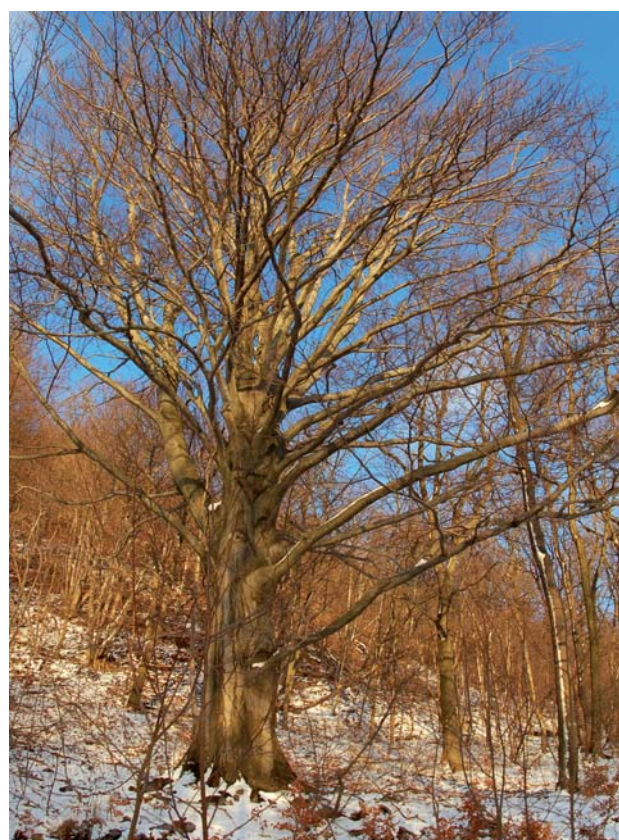
Source: Ministry of Agriculture

4.3 State Budget Funds for the Forest Sector

4.3.1 Government Financial Obligations Subject to the Forest Act

In the past 20 years, forestry in the Czech Republic has undergone fundamental changes in forest property as large forest areas were restituted by individuals and legal entities after 1989. With the aim to secure significant social and publicly beneficial interests in the course of the mentioned changes, and to establish enabling conditions for the main forest functions, the Government of the Czech Republic gradually elaborated and approved policy documents based on the Principles of State Forest Policy adopted in 1994. These were implemented by Act No. 289/1995 Coll. on forests and amendments to other acts (the Forest Act), as amended, and by related decrees adopted by the Ministry of Agriculture.

Through its very existence, forestry also brings benefits by fulfilling non-wood and social functions. Securing these functions usually requires expenses exceeding those incurred by forest owners in relation with regular forest management. The Czech Republic has an interest to maintain and develop



non-wood and social functions of its forests and provides support for certain activities, such as financial contributions for operations and measures that shall be covered by the state under the Forest Act.

In 2012, the state allocated total CZK 224.2 million under the obligations determined by the Forest Act.

The total amount of CZK 12.3 million was granted as part payment to cover the increased costs of planting the minimum number of soil improving and stabilising tree species, which sustained regeneration of such forest stands on 2 342 ha. The share of soil improving and stabilising tree species in regenerated forest stands ranged from 5 to 30%.

Total CZK 156.5 million was paid to cover the activities of licensed forest managers authorised by the state forest administration body. Such activities were conducted on an area of 400 970 ha.

The state reimbursed the costs of forest management guidelines for forests of under 50 ha owned by individuals and legal entities in case a forest management plan had not been elaborated. Such support related to 29 480 ha of forests and amounted to total CZK 20.6 million.

An amount of CZK 34.8 million was allocated to finance measures relating to torrent control in forests in the public interest. These measures involved 13 km of torrents, and repairs and construction of water reservoirs of the total water retention capacity of 20 thousand m³. Forest soil improvement through water regime control was not covered from the state budget in 2012. The technical units only involve actions finished in 2012 and supported from the state budget in the preceding years.

Government financial obligations subject to the Forest Act (CZK million)

Activities	2010	2011	2012
	Allocated		
Soil-improving and stabilising species	11.3	14.7	12.3
Licensed forest managers	163.1	157.2	156.5
Forest management guidelines	20.8	26.5	20.6
Soil improvement and torrent control	47.4	38.0	34.8
Total	242.6	236.4	224.2

Source: Ministry of Agriculture

State services supporting forest management (CZK million)

Type of service	2009	2010	2011	2012
Aerial liming and fertilisation	19	17	2	0
Aerial fire control services	1	28	28	27,7
Large-scale measures in forest protection	2	1	1	0,7
Consultancy	33	35	36	21,6
Other services	6	7	8	0,1
Total	61	88	75	50,1

Source: Ministry of Agriculture

4.3.2 State Services Supporting Forest Management

The state provides services free of charge to help forest owners improve the standards of forest management and ensure forest protection against damaging agents. Within its consulting services, the state mainly provides forest owners with up-to-date information concerning preventive protection of their forests and potential protective measures against damaging agents.

4.3.2.1 Subsidies from the State Budget

Support of forest management in form of subsidies from the state budget was provided under Annex 9 to Act No. 487/2009 Coll., on the state budget of the Czech Republic for the year 2011.



Subsidies for forest management granted from the budget of the Ministry of Agriculture and the budgets of individual regions by their purpose and ownership category (CZK million)

Purpose of subsidy	Ownership category	2009	2010	2011	2012
Regeneration of forests affected by air pollution	Municipal	0.8	8.5	8.5	7.3
	State	0.0	0	0	0
	Other	0.4	2.4	2.1	1.4
	Total	1.2	10.9	10.5	8.7
Reforestation, establishment of stands and their tending	Municipal	77.0	73.3	76.5	68.8
	State	0.5	0.1	0.5	0.2
	Other	150.0	129.0	132.4	118.5
	Total	228.0	202.4	209.5	187.5
Grouping of owners of small-size forests	Other	1.4	1.4	0	0
	Total	1.4	1.4	0	0
Green and environmentally friendly technologies	Municipal	8.1	6.2	4.9	4.3
	State	0.1	0.01	0.08	0.05
	Other	21.3	14.7	12.5	13.0
	Total	29.5	20.9	17.4	17.3
Support of endangered wildlife species	Municipal	0.1	0.0	0.01	0.01
	State	0.6	0.6	0.7	0.8
	Other	9.4	9.6	8.9	10.0
	Total	10.1	10.2	9.5	10.8
Elaboration of forest management plans	Municipal	6.3	11.0	8.5	10.2
	State	52.6	30.0	0	0
	Other	14.2	11.3	12.9	15.2
	Total	73.1	52.3	21.4	25.4
Other forest management	Municipal	0.0	0.01	0.06	0.06
	State	1.5	1.7	1.7	1.4
	Other	0.2	0.2	0.5	0.2
	Total	1.7	1.9	2.2	1.6
Breeding and training of national hunting dog breeds and hunting birds of prey	Municipal	0.0	0	0	0
	State	0.0	0	0	0
	Other	1.9	2.1	2.3	2.1
	Total	1.9	2.1	2.3	2.1
Total subsidies	Municipal	92.3	98.9	98.5	90.4
	State	55.4	32.5	2.9	2.5
	Other	199.0	171.1	171.6	160.6
	Total	346.9	302.5	272.9	253.5

Source: Ministry of Agriculture

4.4 Aids Co-financed by the EU under the Rural Development Programme of the Czech Republic for 2007–2013

The year 2012 was the sixth year allowing applications for the financial support from the European Agricultural Fund for Rural Development 2007–2013 under the Rural Development Programme of the Czech Republic for 2007–2013 (hereinafter referred to as the 'RDP'). The RDP is based on the National Strategic Plan of Rural Development drawn up in accordance with Council Regulation (EC) No. 1698/2005 and its associated secondary legislation. The document mainly focuses on forestry in Axis I – Improving the competitiveness of agriculture and forestry, which involves measure I.1.2. Investment in forests (year 2012 – 17th round of applications), and Axis II – Improving the environment and landscape. In 2012, Axis II continued to be open for applications for measure II.2.1 – Afforestation of agricultural land (see Chapter 6.6); entities could file their applications for the fifth time under measure II.2.2 – Payments within Natura 2000 forest areas, for the fourth time under measure II.2.3 – Forest-environment payments, and applications were being received under measure II.2.4 Restoring forestry potential after disasters and promoting social functions of forests (year 2012 – 17th round of applications).

Axis I of the RDP contains **measure I.1.2. Investment in forests**, which is further divided into submeasures **I.1.2.1. Forestry machinery**, **I.1.2.2. Technical utilities of business establishments**, and submeasure **I.1.2.3 Forestry infrastructure**. The strategic objective of the mentioned measure is to enhance the competitiveness of forestry, to support development of dynamic businesses in the forest sector, to reach higher efficiency of forest enterprises, to

restructure the forest sector, and to improve the protection of the environment related to forests. The supported actions should bring solutions to such challenges as low investments in the forest sector, obsolete and technically unsuitable equipment of forest enterprises, and other problems related to the existing insufficient infrastructure in forestry.

- **Submeasure I.1.2.1 Forestry machinery** – total 433 projects worth CZK 137 963 735 were approved in 2012.
- **Submeasure I.1.2.2 Technical utilities of business establishments** – total 59 projects worth CZK 78 814 893 were approved in 2012.
- **Submeasure I.1.2.3 Forestry infrastructure** – total 87 projects worth CZK 155 989 614 were approved in 2012.

For the fifth year in 2012, applications could be submitted under **measure II.2.2 – Payments within Natura 2000 in forests**, which consists of a single **submeasure II.2.2.1 Conservation of a forest management group from previous production cycle**. In 2012, 21 applications were filed for total 1 724 ha amounting to CZK 2.6 million. A total amount of CZK 1.5 million was paid based on 16 applications from the preceding years, which involved 1 002 ha of land. For the fourth time in 2012, applications for registration could be submitted under **measure II.2.3 – Forest-environment payments**, which consists of a single **submeasure II.2.3.1 Improving the species composition of forests**. Total 65 applications were filed for 3 185 ha in the amount of CZK 4.5 million. In 2012, total CZK 2.7 million was paid based on 48 applications submitted in the preceding years for 2 800 ha.

For the fifth time in 2012, applications could be submitted within the Rural Development Programme for **measure II.2.4 Restoring forestry potential after disasters and promoting social functions of forests**, which comprises 2 submeasures: **II.2.4.1 Restoring forestry potential after disasters and introducing prevention actions** and **II.2.4.2 Non-productive investments in forests**. Sixty-nine projects were registered and the applications for subsidies reached CZK 137 856 812. Total 66 projects were finally approved in that round amounting to CZK 134 107 965. The payments will be effected in the course of the following years based on applications for reimbursement.

- **Submeasure II.2.4.1 – objective a) Restoring forestry potential after disasters** – total 21 projects worth CZK 25 240 697 were approved in 2012.
- **Submeasure II.2.4.1 – objective b) Introducing prevention actions in forests and mitigation of flood damage** – total 15 projects worth CZK 82 573 656 were approved in 2012.
- **Submeasure II.2.4.2 Non-productive investments in forests** – all 30 registered projects worth CZK 26 293 612 were approved in 2012.



4.5 Aids for Afforestation of Agricultural Land

Support of afforestation enjoys a long tradition in the Czech Republic. Until 2003, subsidies for afforestation were provided only from the national financial sources. Since 2004, afforestation has been mainly supported from the European financial sources, first from the Horizontal Rural Development Plan of the Czech Republic for 2004–2006 (HRDP) and since 2007 from the Rural Development Programme of the Czech Republic for 2007–2013.

The Rural Development Programme of the Czech Republic for 2007–2013 involves **measure II.2.1 – Afforestation of agricultural land**, which consists of a single **submeasure II.2.1.1 First afforestation of agricultural land**. Government Decree No. 239/2007 Coll., on laying down conditions for granting subsidies for agricultural land afforestation, as amended, is the implementing national legal regulation.

The forenamed support gives space to diversification in pro-

duction, which reinforces the economic and social dimensions of sustainability of agriculture and rural areas and reduces the share of arable land while eliminating the risk that unmanaged agricultural land will grow in size. The mentioned submeasure offers potential support to owners or tenants of agricultural land determined for afforestation. Applicants may apply for subsidies for establishment of a forest stand and, when complying with further conditions, for subsidies to manage forest stands and for compensations for terminating agricultural production on afforested agricultural land. Total 244 applications for CZK 23.1 million were submitted in 2012 under the mentioned submeasure to support afforestation of agricultural land and 1 955 applications were filed to be awarded subsidies for management of an established forest stand and compensation for terminating agricultural production with a total amount of CZK 41.5 million (including obligations arising from the Horizontal Rural Development Plan). The amount paid in 2012 based on applications submitted in the preceding years (including obligations arising from the Horizontal Rural Development Plan) reached CZK 64.3 million.





5 TIMBER MARKET

5.1 Domestic Timber Market

The total timber supplies experienced a year-on-year decline by 320 thousand m³ amounting to 15 061 thousand m³, while softwood supplies represented 13 056 thousand m³ and hardwood supplies totalled 2 005 thousand m³.

Both softwood and hardwood supplies decreased against 2011 by 284 thousand m³ and 36 thousand m³ respectively. The overall timber harvest and subsequent supplies were affected by stagnating and declining production in the entire wood processing industry in the country. This situation has remained more or less the same since 2008, despite certain attempts for revival. The recession in domestic building industry mainly complicates the life of small and medium wood-processing enterprises. As a result, the domestic demand for wood products dropped by up to 30% and the enterprises are forced to export part of their production on demanding foreign markets, frequently on the edge of profitability.

Timber supplies (1 000 m³)

Supplied assortments (excl. imports)		2010	2011	2012
Roundwood *)		9 427	8 838	8 621
of which	Softwood	8 982	8 014	7 911
	Hardwood	445	824	710
Pulpwood **)		5 344	4 629	4 420
of which	Softwood	4 747	4 277	3 949
	Hardwood	597	352	471
Fuelwood		1 965	1 914	2 020
of which	Softwood	1 337	1 049	1 196
	Hardwood	628	865	824
Total timber supplies		16 736	15 381	15 061
of which	Softwood	15 066	13 340	13 056
	Hardwood	1 670	2 041	2 005

Note:

*) Including pole and mine timber.

**) Including groundwood.

The volumes of logging residues and chips of approximately 1.1 million m³ in 2010, 1.7 million m³ in 2011 and 1.9 million m³ in 2012 are not included in the total supplies of roundwood.

Source: Czech Statistical Office, Ministry of Agriculture



5.2 Timber Export and Import

Timber exports showed a year-on-year decline by 1 456 thousand m³ to the total volume of 5 316 thousand m³, with a decrease in exports of softwood roundwood (by 529 thousand m³), softwood pulpwood (by 524 thousand m³), and hardwood roundwood (by 154 thousand m³).

Against the preceding year, timber imports were also lower, namely by 838 thousand m³, and totalled 2 580 thousand m³. Imports of softwood roundwood declined most of all assortments (by 670 thousand m³).

The active balance of the foreign timber trade noted a year-on-year decrease by CZK 13 million reaching the value of CZK 4 425 million. Total 99.3% of all export was directed to the countries of the EU-27, principally to Austria (52.7%) and Germany (36.9%). The EU-27 also represented the principal importer to the Czech Republic constituting 86% of all timber imports, which mostly originated from Slovakia (34.8%), Poland (29.9%) and Germany (13.9%).

Compared to the year 2011, there was an overall decrease in timber exports (by 1 456 thousand m³), still with a rise of their value (by CZK 516 million). Equally, the total timber imports noted a reduction (by 838 thousand m³) with their total value incrementing (by CZK 529 million). The demand for timber obviously has a positive effect on the growth of its average price both in the Czech Republic and abroad.

As the domestic consumption of mainly softwood roundwood and pulpwood diminished, significant volumes of this material continued to be exported to foreign countries (32.5% of produced softwood roundwood and 35.3% of domestic timber harvest). In contrast, domestic sawmills and pulp mills

in certain regions of the Czech Republic had to face insufficient supplies of softwood roundwood and pulpwood, and were forced to import – mainly from Slovakia, Poland, and Germany.

Timber exports and imports in the Czech Republic

	Exports	Imports	Balance	Exports	Imports	Balance	Exports	Imports
	CZK			1 000 m ³			Average price CZK/m ³	
Total	8 764	4 339	4 425	5 316	2 580	2 736	1 649	1 682
of which								
EU-27	8 706	3 732	4 974	5 284	2 217	3 067	1 648	1 683
Germany	3 231	605	2 626	2 150	402	1 748	1 503	1 505
Austria	4 621	138	4 483	2 805	253	2 552	1 647	545
Slovakia	162	1 511	-1 349	117	775	-658	1 385	1 950

Source: Czech Statistical Office, Ministry of Agriculture



Annual volumes of timber exports and imports (CZK million)

Trade balance	2010			2011			2012		
	Exports	Imports	Balance	Exports	Imports	Balance	Exports	Imports	Balance
Total	7 556	3 351	4 205	8 248	3 810	4 438	8 764	4 339	4 425
of which EU	7 530	2 862	4 668	8 179	3 271	4 908	8 706	3 732	4 974

Source: Czech Statistical Office, Ministry of Agriculture

Timber exports and imports in the Czech Republic (1 000 m³)

Assortment		Exports	Imports
Softwood roundwood and pulp		3 611	1 749
of which:	Spruce	3 025	1 289
	Pine	450	452
	Other	136	8
Hardwood roundwood and pulp		301	126
of which:	Oak	46	15
	Beech	201	59
	Poplar	5	7
	Birch	7	6
	Other	42	39
Industrial roundwood		3 912	1 875
Charcoal		2	18
Fuelwood		115	53
Chips, particles		259	256
Sawdust		755	280
Wood waste		273	98
Total		5 316	2 580

Source: Czech Statistical Office, Ministry of Agriculture





6 RELATED ACTIVITIES AND SECTORS

6.1 Game Management

Hunting of main game species (pcs)

Game	2006	2007	2008	2009	2010	2011	2012
Red Deer	16 871	20 217	21 415	21 527	21 820	20 961	23 120
Fallow Deer	9 972	11 395	13 394	13 309	14 209	13 305	14 742
Mouflon	6 893	8 320	9 304	9 118	9 368	8 398	9 378
Roe Deer	99 074	108 992	127 213	131 875	120 206	113 915	108 616
Wild Boar	59 904	121 192	138 854	121 821	144 305	109 563	185 381
Duck	247 322	328 225	315 773	286 024	272 422	277 390	268 485
Pheasant	588 555	664 251	598 176	530 444	528 878	524 674	518 208
Hare	67 544	115 065	105 745	84 111	62 848	47 739	56 310

Source: Czech Statistical Office

Despite the higher numbers of hunted hoofed game (especially the Wild Boar) against 2011, the trend of reducing the stocks of these species down between minimum and standard will be reasonable. Notably, total 185 381 Wild Boar were hunted in 2012, which is a new maximum in the modern history of the Czech Republic, exceeding the record from 2010 by 41 076 hunted animals. In 2012, 12 589 Sika Deer were hunted against 10 910 animals in 2011. The stocks of the Sika Deer need to be reduced taking into consideration the damage they cause to forest stands and the negative effects they have on the geenpool of the Red Deer.

6.2 Timber Processing Industry

The timber processing industry processes almost exclusively domestic renewable material – raw timber, mostly softwood and hardwood roundwood. The production of softwood and hardwood sawn wood at sawmills experienced a year-on-year decrease by 195 thousand m³. The demand for sawn timber abroad persisted while the domestic consumption slackened (by 373 thousand m³). For this reason, export of softwood sawn wood amounted to 2 910 thousand m³ of the total production of 3 997 thousand m³. To satisfy the domestic consumption of 1 589 thousand m³, total 502 thousand m³ were imported from other countries.

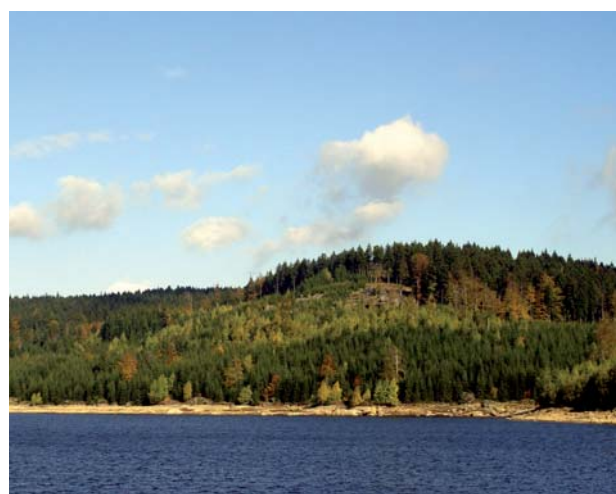
The total log breakdown in the Czech Republic reached the volume of 6.8 million m³ of softwood and hardwood roundwood, which was used to produce 3.997 million m³ of softwood sawn wood and 0.262 million m³ of hardwood sawn wood. The total production of softwood and hardwood sawn wood hence dropped against the preceding year by 195

thousand m³. Both export and import of softwood and hardwood sawn wood experienced a decline by 172 thousand m³ and 350 thousand m³ respectively. The domestic consumption of sawn wood was thus 373 thousand m³ lower. The production of particle boards, plywood, and fibreboards also decreased against 2011, namely by 19 thousand m³, 3 thousand m³, and 1 thousand m³ respectively.

Log breakdown and sawn wood production (1 000 m³)

	2010	2011	2012
Log breakdown	8 000	7 000	6 800
Sawn wood production	4 744	4 454	4 259

Source: Ministry of Agriculture



Market with timber products (1 000 m³)

Product	Year	Production	Import	Export	Consumption
Softwood roundwood ^{*)}	2010	8 982	786	1 658	8 110
	2011	8 014	1 670	3 100	6 584
	2012	7 911	1 000	2 571	6 340
Hardwood roundwood ^{*)}	2010	445	193	85	553
	2011	824	114	387	551
	2012	710	90	233	567
Softwood sawn wood	2010	4 492	700	3 166	2 026
	2011	4 153	741	3 084	1 810
	2012	3 997	502	2 910	1 589
Hardwood sawn wood	2010	252	335	245	342
	2011	301	289	240	350
	2012	262	178	242	198
Particle boards	2010	1 085	473	1 285	273
	2011	1 052	476	1 339	189
	2012	1 033	480	1 335	178
Plywood	2010	204	48	36	216
	2011	181	65	128	118
	2012	178	71	117	132
Fibreboards	2010	46	205	87	164
	2011	42	217	97	162
	2012	41	211	85	167
Softwood pulpwood ^{**)}	2010	4 747	1 100	2 104	3 743
	2011	4 277	1 087	1 564	3 800
	2012	3 949	749	1 040	3 658
Hardwood pulpwood	2010	597	21	94	524
	2011	352	22	74	300
	2012	471	36	68	439

Note:

*) Including pole and mine timber.

**) Including groundwood.

Source: Ministry of Agriculture

6.3 Pulp and Paper Industry

The consumption of softwood timber for pulp production reached 3 459 thousand m³, i.e. 2 287 thousand m³ of softwood pulp and 1 172 thousand m³ of softwood chips and particles.

Pulp and paper industry produced total 692 thousand tons of pulp in 2012, wood pulp representing 689 thousand tons. Compared to 2011 (total 704 thousand tons of pulp), there was an overall reduction in the production by 12 thousand tons.

The production of paper, paperboard, and cardboard under CEPI classification used in pulp and paper industry noted an increase by 106 thousand tons compared to 2011 and amounted to total 843 thousand tons.

Nevertheless, the production structure in the Czech pulp and paper industry still does not reflect the domestic demand. The Czech Republic exports half the production of pulp and imports short fibre pulp, which it does not produce. As to paperboard and cardboard, we mainly export goods with a lower value added (packing and wrapping paper) and mostly import expensive graphic and printing paper. This results in a significant drop in the foreign trade balance.

Consumption of wood for pulp production in (1 000 m³)

Timber assortment	Consumption		
	2010	2011	2012
Chips and particles	1 220	1 097	1 172
Pulpwood	1 980	2 479	2 287
Total	3 200	3 576	3 459

Source: Association of Pulp and Paper Industry

Pulp, paper, paperboard, and cardboard production (1 000 t)

Product	2010	2011	2012
Mechanical pulp	13	3	0
Chemical pulp	705	697	689
Pulp of other fibres	4	4	3
Total	722	704	692
Paper, paperboard, and cardboard	769	737	843

Source: Association of Pulp and Paper Industry, Czech Statistical Office

7 ABBREVIATIONS

CEPI	Confederation of European Paper Industries
CZK	Czech koruna (currency)
ESA	European System of Accounts
EU	European Union
FGMRI	(VÚLHM) Forestry and Game Management Research Institute
FMI	Forest Management Institute
FMP	Forest Management Plan
FSC CR	Forest Stewardship Council - Czech Republic
GDP	Gross Domestic Product
GVA	Gross Value Added
ILO	International Labour Organization
PEFC CR	Programme for the Endorsement of Forest Certification Schemes – Czech Republic
RDP	Rural Development Programme of the Czech Republic for 2007–2013
USA	United States of America
VÚLHM	(FGMRI) Forestry and Game Management Research Institute



8 CONTACTS TO SELECTED FORESTRY ORGANISATIONS

Ministry of Agriculture

Těšnov 17,
117 05 Praha 1
info@mze.cz
www.eagri.cz

Ministry of the Environment

Vršovická 1442/65,
100 10 Praha 10
info@mzp.cz
www.mzp.cz

Czech University of Life Sciences Prague

Faculty of Forestry and Wood Sciences
Kamýcká 1176,
165 21 Praha 6-Suchbát
www.fld.czu.cz/cs/

Mendel University in Brno

Faculty of Forestry and Wood Technology
Zemědělská 3,
602 00 Brno
www.ldf.mendelu.cz/

Forest Management Institute

Nábřeží 1326
250 01 Brandýs nad Labem
podatelna@uhul.cz
www.uhul.cz

Forestry and Game Management

Research Institute

156 04 Praha 5-Zbraslav
admin@vulhm.cz
www.vulhm.cz

The Association of Municipal

and Private Forest Owners in the Czech Republic

K Silu 1980
393 01 Pelhřimov
info@svol.cz
www.svol.cz

Lesy České republiky, s.p.

(Forests of the Czech Republic, State Enterprise)

Přemyslova 1106/19
500 08 Hradec Králové
lesycr@lesycr.cz
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Vojenské lesy a statky ČR, s.p.

(Military Forests and Farms, State Enterprise)

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