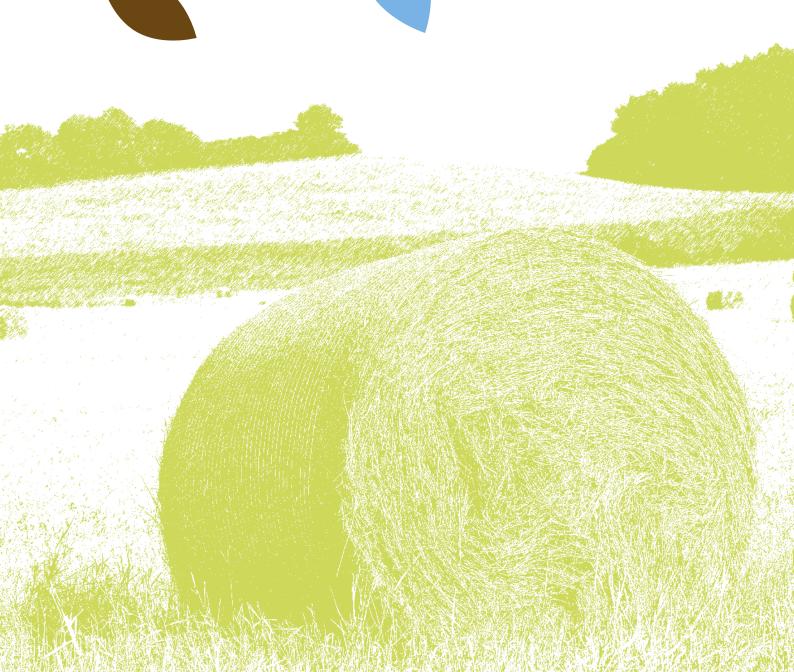




SUMMARY REPORT 2009





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SUMMARY REPORT 2009

Foreword



Dear Friends,

2009 was not an easy year for any business, farmers included. The economic recession hit the Czech Republic, the European Union and, indeed, the whole world with full force. In terms of economic growth, the situation was the worst since 1993. Gross domestic product declined, while unemployment rose.

All sectors were faced with difficulties. These adverse circumstances are also reflected in agriculture, which contributed 1.65% to the overall gross domestic product, down on the 1.93% recorded in 2008. The prices of agricultural products suffered, decreasing by 24.8% compared with the previous year. This is the worst record since 1993.

In 2009, there was a continuation of certain negative trends from recent years. Stocks of cattle and, in particular, pigs fell. Year-on-year egg production was also lower. The milk market contracted as Czech dairies bought less milk. The overpressure of supply on the European market worsened the opportunities for sales of domestic dairy products at home and abroad.

Foreign trade in agricultural products stagnated. For the first time since joining the European Union, the Czech Republic reported a year-on-year decline in the value of exports, while imports increased.

The recent recovery shows that the biggest problem in 2009 was the economic recession. Next year it is quite likely that we will be reading more upbeat numbers and statistics and I will be able to write a more positive foreword. Yet there are also figures for 2009 that actually read well. For instance, statistics confirm that increasing numbers of Czechs are interested in organic farming and organic food. The acreage of organically farmed land expanded in 2009. This was coupled with a rise in the numbers of farmers deciding to be more environmental in the care of their fields.

The aim of the Government, the Ministry and myself is to maintain and develop modern and competitive agriculture, a healthy environment, and a confident countryside. In this respect, the Ministry of Agriculture has supported hundreds of research and development projects. Almost 20,000 people have participated in training sessions organized and paid for by the Ministry. This is a rise by nearly 5,000 compared to 2008.

Agriculture will always have its ups and downs. This is absolutely normal for a sector that is dependent on the international situation, trade and the vagaries of the weather. What is important is that Czech farmers are able to concentrate fully on their fields, animals, ponds and forests, and to produce food and public goods. The true mission of the Ministry's management is to help them. Nevertheless, the idea that we can influence prices, the market situation and overall economic conditions is almost as illusory as the ability to influence the weather. The remaining space available, for example, to remove unnecessary bureaucracy, promote the products of Czech farmers, or emphasize good governance, thus protecting the soil and the landscape, gives us enough effective means to ensure that, in the coming years, Czech farmers will be able to look back on 2009 as a temporary blip, an opportunity to catch their breath before advancing at full steam.

> Ivan Fuksa Minister of Agriculture of the CR

AGRICULTURE 2009



Report on Agriculture of the Czech Republic in 2009

The national economy of the CR and the position of the agrarian sector

In 2009 the CR was hit by the economic recession and from the standpoint of economic growth this year was the worst since 1993. GDP fell throughout the year and the interannual fall in constant prices was 4.2%, which was 4.1% after removing seasonal effects. The fall in GDP in the CR roughly corresponded to the EU 27 average and that for the Eurozone (16 states).

In 2009 the general level of unemployment rose to 6.7% which is 2.3% more than in 2008. Despite this the average level of unemployment in the CR is still lower than the EU average (8.9%) and that of the Eurozone (9.4%).

The agricultural sector, according to national accounting statistics, made up 1.65% of overall GDP which represents an interannual drop of 0.28 percentage points. In the case of the food industry its share in GDP rose by 0.19 to 2.72%.

In 2009 price development for agricultural products was very unfavourable. The interannual fall was 24.8% on average, which is the largest recorded fall since 1993.

In the farming, forestry and fisheries sector there was a 5.1% interannual fall in the number of employees. At the same time, however, there was a slight growth in the share of the total number of employees, which was caused by a more marked fall in the overall number of employees (-5.9%). Agriculture is further characterised by a wage disparity and it lags behind the average for the CR in the level of wages (in 2009 it dropped to 73.1%). The growth in the nominal wage per worker was 0.2% and was 3.8 percent lower than the overall growth in wages in the CR. Considering the fact that the growth in nominal wages was lower than the rate of inflation there was a drop in real wages.



In 2009 the proportion of the state budget spent on agriculture rose by 0.5% to 4.3%. State expenditures to the agricultural sector rose interannually by 22.1%.

Supports for the agrarian sector and the countryside

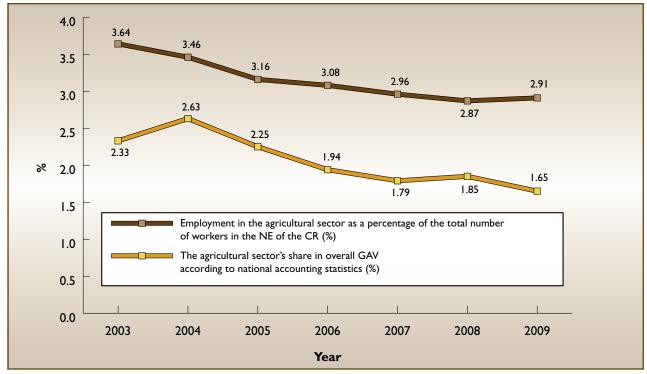
Supports within the rural development policy

The rural development programme (RDP) for 2007-2013 enables resources to be drawn for agriculture form the European Agricultural Fund for Rural Development (EAFRD). The overall amount of resources allocated from EAFRD is approximately € 2.8 billion, which, together with the contribution from the state budget, is roughly € 3.6 billion for the entire seven year period.

The aim of the RDP is to increase the competitiveness of agriculture, improve the state of the environment and reduce the negative effects of intensive farming, protect nature and develop the quality of life in the countryside.

Financing for projects from the OP Rural Development and Multifunctional Agriculture (programming period 2004–2006) came to an end on 31.12.2008. During the programming period beneficiaries received a total of CZK 5,406 billion. Resources from the EU budget, or from the National Fund account, came to CZK 3,381 billion throughout the programming period.

The agricultural sector within the national economy of the CR



Source: CSO, MF

 0 The agricultural sector including non-farming activities of agricultural holdings, hunting and related activities 2 GAV = gross added value, NE = National economy

Operational Programme Fisheries 2007-2013

The set measures within the priority axes of the Operational Programme Fisheries 2007–2013 (OP Fisheries) are intended to strengthen competitiveness, maintain the current level of fish production and keep the present level of employment in the fisheries sector. The OP Fisheries for the CR was processed on the basis of Council Regulation (EC) No. 1198/2006 on the European Fisheries Fund (EFF) and Commission Regulation (EC) No. 498/2007 laying down detailed rules for the implementation of Council Regulation (EC) No. 1198/2006 on the European Fisheries Fund and was approved by the EC on 11.12.2007. The aim of the OP Fisheries is to define the subsidy areas in the fisheries sector of the CR such that the measures realised in accordance with the regulation on the EFF contributed to achieving the general aims set out in Article 33 of the European Union Treaty and the aims defined as a part of the Common Fisheries Policy (CFP).

Direct payments

In the CR direct payments are provided per hectare of agricultural land farmed as registered within the LPIS from EU resources in the SAPS system (a simplified payment system fully separated from production). In 2008 the CR achieved 50% of these payments and in 2009 60% of the 2013 level of payments set out in the accession agreement. The level of direct payments in the CR in 2013 will be less than 80% of the level for the EU 15. Since 2006 the payments include a separate payment for sugar, since 2007 there is a support for energy crops and since 2008 a separate payment for tomatoes. Applications for support for processing energy crops were last accepted in 2009. Since the following year this support has not been provided. The phasing in system does not apply to these payments.

For the majority of the commodities supported in the CR an evening up was set for the rates of direct payments in the EU 15 countries thus: up to 80% in 2008 (sources: EU 50%, CR 30%) and up to 90% in 2009 (sources: EU 50%, CR 40%).

Besides direct payments there are also supports for selected commodities, approved by the EU as state aid, financed from the CR's resources. This aid is provided according to the Principles published on the basis of Sections 2 and 2d of Act No. 252/1997 Coll., on Agriculture.

Since I January 2009 direct payments have been provided as have some supports from axis II of the RDP and certain supports of the common organisation of the market in wine conditional on observing certain legal regulations within the cross-compliance control system.

Support for market prices within the CMO

Supports for market processes concern support for producers' prices (in the from of subsidised export, private storage support

and other price supports) and support for consumer prices. In 2009 there was a 15% interannual growth in expenditures for supporting food prices from the EU.

The overall amount of subsidy for exporting agricultural and food products in 2009 by means of the SAIF within the SOT was CZK 163.7 million, of which the subsidies for exporting unprocessed products came to CZK 148.5 million and subsidies for importing processed products was CZK 15.3 million.

In 2009 the share subsidies for exporting unprocessed products had in the overall amount of support for the Czech agrarian sector were 42.8% for sugar and milk, 9.3% for processed products and 3.7% for cattle.

Agriculture and rural development

As of I January 2009 there were 6,249 municipalities in the Czech Republic, just as in 2008. EU funds and national resources are used to support the modernisation, innovation and development of agriculture and the business environment in the countryside with a growth in the added value of human labour.

The **National Rural Network**, set up by the Ministry of Agriculture, supports building local partnerships and connecting the public to activities at the local and central level. It began activities in November 2008 and its main aim is to join together the actors in the area of agriculture and the countryside. In 2009 there were 49 projects registered in the National Rural Network at an overall value of CZK 12,706,000.

Agriculture, the environment and animal protection

The relationship between agriculture and the environment was not only affected by the agricultural policy measures but, above all, by the economic crisis. Interannually the use of industrial fertilisers fell considerably. There was also a slight fall in the use of plant protection preparations and energy use fell by about 9%. Agriculture also showed lower ammonia emissions as a result of lowering the number of farm animals.

The protection of animals against cruelty is an area that is realised on the basis of Act No. 246/1992 Coll., on the Protection of Animals Against Cruelty as amended (hereinafter the PAC Act). The PAC Act sets out the main animal protection bodies: the MoA, the Central Commission for Protecting Animals (CCPA) and the RVA together with the SVA CR.

In accord with the legal regulations a total of 14,688 controls were made on the animal protection and welfare of which 880 controls uncovered unsuitable care, which concerned 78,181 animals.

According to information from the Ministry of Justice in 2009 there were 29 people prosecuted in accordance with Section 203 of the Criminal Code and 19 were sentenced.

A recap of the expenditures to the agri-complex of the CR by the main support trends (CZK million)

6 (()!!! (67!()		2008			20091)		
Supports (million CZK)	CR	EU	Total	CR	EU	Total	
Direct payments 2)	7,079	11,673	18,752	6,344	14,201	20,545	
HRDP 2004–2006	0	0	0	0	0	0	
OP Agriculture 2004–2006	559	1,328	1,887	0	0	0	
RDP 2007–2013	1,854	6,559	8,413	3,186	11,223	14,409	
OP Fisheries	2	5	6	3	8	П	
Other state aid	6,939	0	6,939	7,601	0	7,601	
Market organisation (CMO)	74	1,621	1,695	33	1,872	1,905	
Total	16,506	21,186	37,692	17,167	7,304	44,471	

Source: data form the MoA, SAIF, SGAFF, and other institutions

otes: 1) Assumed up to 30. 6. 2010.

2) EU direct payments, Top-Up and commodity supports



The business structure of agriculture and processors of agrarian raw materials

By the end of 2009 there were more than 47,000 subjects – agricultural units -registered in the agricultural register of the CSO.

More than 1,500 agricultural businesses (3.3% of the total number) focussed solely on animal production (no agricultural land cultivated). The majority of them (85.3%) are physical persons. The remainder of the holdings farming without land pertaining to legal entities were predominantly business companies.

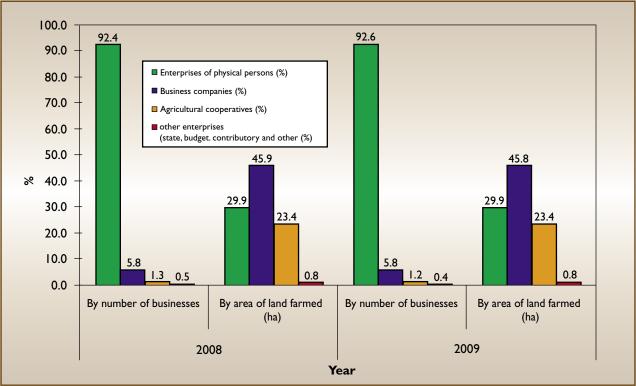
The size structure of agricultural holdings in the CR is very varied showing significant differences between physical persons and legal entities. Enterprises with up to 10 ha, regardless of the legal form, represented 65.7% of the total number of agricultural holdings with 2.2% of the total area of agricultural land. Holdings with over 500 ha made up just 3.8% of the total number of holdings, but they farmed 71.2% of the total area of agricultural land.

According to the CSO register the total number of business subjects manufacturing food products and beverages rose again in 2009, it reached 15,800 subjects (an interannual growth of 1,211 firms). The expansion of the business base of processors of agrarian raw materials was linked to another wave of rejuvenation in the area of regional production, which was chiefly manifested in holdings of physical persons. The number of firms with foreign capital involvement also expanded.

Science, research, education and consultancy

In 2009 there were 7 public research institutes and 2 state contributory organisations, set up by the MoA, engaged in research activities in the area of agriculture, the food industry, water and forest management and rural development issues. The research chiefly consists of carrying out research, development and innovation projects (hereinafter "projects") and research aims. Apart from these organisations there were also 13 larger private research institutions, public research institutions set up by other departments, the research workplaces of universities, a number of other smaller research institutions and institutions and private business subjects working on departmental research, development and innovations. In 2009 the Ministry of Agriculture supported 284 projects within four research and development programmes with a total of CZK 431.3 million special-purpose funds. In 2009, institutional funds were provided for 9 research aims of which 7 were newly initiated. In 2009 institutional support came to CZK 477 million. In the area of international research and

Business structure of agriculture in 2008 and 2009



Source: Agricultural register

development programmes the international cooperation continued in 2009, nominally in the 6^{th} and 7^{th} EU Framework Programme and other research programmes.

In the area of education the RDP training programmes for the 2007–2013 period were the most highly monitored and attended. The education was targeted so that the target groups and other potential applicants were informed of the principles and opportunities for rationally using supports from EAFRD, which enable the financial support for training projects aimed at meeting the CAP aims.

In all 19,529 people (about 4,652 more than in 2008) underwent a training event organised and financed by the MoA in 2009. CZK 6.9 million were invested into them.

A reform of the consultancy system was initiated in 2008 and realised to the full extent in 2009 on the basis of the new "Conceptual Framework for the MoA Consultancy System for 2007–2013". The changes were made in relation to Council Regulation (EC) No. 73/2009. The agricultural consultancy system includes four basic levels. Entry consultation, professional consultation, individual advice supported from measures 1.3.4 of the RDP and web consultancy.

The labour force and market in agriculture

In 2009 the trend towards a fall in employment in agriculture deepened. The interannual decrease in workers in agricultural holdings was 4.9% falling to 120 200. The percentage of people employed in agriculture is 2.4% of the total number of people employed in the national economy of the CR. This is a fall of 0.1 percent from last year.

This decrease in workers occurred in all legal forms of agricultural enterprise. The highest relative fall in workers was recorded by cooperatives (by 7.8%) and then business companies (by 4.8%).

There were no marked changes in the structure of employment according to the legal forms of business. Among farmers there is still a predominance of workers from business companies. In 2009 54.1% of farmers worked for them, just under a quarter (22.7%) worked in cooperatives (22.7%) and likewise just under a quarter (23.0%) in holdings of physical persons.

For a long time the age structure in agriculture has been unfavourable. Most agricultural workers are in the age category 45–59 years (46.8% of workers), 35.2% of workers are in the younger category 30–44 years, 10% of workers are in the youngest category, 15–29 years, and just 8.1% of workers are in the oldest age category, over 60 years.

Since 2005 the percentage of women in agriculture has stabilised at around 30%. The balance in this trend together with the overall reduction in the number of agricultural workers means that every year twice as many men leave the sector as women.

2009 recorded a further worsening in farmers' incomes. Whilst in the last quarter of 2009 industry and the national economy recorded a growth in wages of about 7% and 5% respectively,



agriculture fell by 0.7% below the level for the same period in the previous year (whilst the last quarter of 2008 had already recorded a stagnation in agricultural wages). The average monthly wage in agriculture converted to the number of employees for the whole year was CZK 17,259, for industry it was CZK 22,888 and for the national economy it was CZK 23,598.

Land and ownership relations

According to the records in the land register, as of 31 December 2009 the agricultural land fund (ALF) represented 4,239,000 ha, i.e. 53.7% of the country. Once again there was an interannual fall in the area of agricultural land by about 5,100 ha, i.e. about 0.1%.

In 2009 the interannual decrease in the ALF consisted of a fall in the area of arable land by about 9,000 ha, which is 2,000 ha more than in 2008. 3,000 ha of arable land were converted into permanent grassland (PG). About 2,000 ha were converted to forest land and 3,000 ha were shifted to the category "built up and other surfaces". The area of gardens (2 ha) and water surfaces (300 ha) is continually growing.

As of 31 December 2009 the are of agricultural land in the LPIS (land parcel identification system) was 3,525,000 ha, whilst there was an overall interannual fall in the area registered for drawing on supports by 590 ha. The difference between the records of agricultural land according to the LPIS and the COSMC,714,000 ha, is given by the differing methods for recording and updating the acreage of individual crops.

The overall area of agricultural land in less favourable areas (LFA) registered in the LPIS as of 31 December 2009 was 1,778,800 ha (50.5%) and has not changed significantly compared to 2008. According to LPIS records in the category PG a total of 367,000 ha is in mountainous areas, in the other LFA there are 309,000 ha and in specific areas there are 136,000 ha, representing an overall area of 812,000 ha.

Agrarian production

Plant production

Of the overall harvested area of **cereals** in the CR in 2009, i.e. 1,541,700 ha (an interannual fall of 1.1%) the largest percentage was taken up by wheat (831,300 ha - 53.9% of the overall area) and barley (454,800 ha - 29.5%). The third most important cereal was maize with an area of 105,300 ha (6.8% of the total area of cereals), the acreage taken up by the rest of the cereals was triticale (53,000 ha - 3.4%), oats (50,000 ha - 3.2%), rye (38,500 ha - 2.5%) and other cereals (8,900 ha - 0.6% of the overall area of cereals).

The volume of harvested cereal production in the CR attained 7.83 million tonnes, which is an interannual drop of 6.4%. The greatest volume of overall production came from wheat (4.36 million tonnes – 55.6%), 2 million tonnes of barley were harvested, 899,600 tonnes of maize and the other cereals (rye, triticale, oats and other) made up 581,300 tonnes.

The production area for **sugar beet** to make sugar reached a total of 46,500 ha i.e. 105.7% of the previous year. The hectare yields for sugar beet reached an average value of 60.64 tonnes (compared to 2008/9 it was 4.5% higher) and was the highest in the history of the Czech beet and sugar industry. According to preliminary results the sugar content of the beets was, on average, 16.85% (18.04% in 2008/9).

In the economic year 2009/10 the production area for **potatoes** in the CR fell interannually (including household areas) by 2.9% in all to 36,720 ha at an average yield of 25.29 t/ha. In 2009/10 the overall production of potatoes fell interannually by 1.7% (16,500 tonnes) and was 928,750 tonnes. Early potatoes were harvested from

3,290 ha and their production rose interannually by 2.6% to 57,070 tonnes. Other eating potatoes (including household areas) a total of 29,560 ha were harvested and production attained 782,080 t at a hectare yield of 26.46 t/ha.

The area of **oil plants** grew interannually in the CR by 0.6% from 483,850 ha in 2008/09 to 486,530 ha in 2009/10. The hectare yield rose by 6.5% from 2.47 t/ha in 2008/09 to 2.63 t/ha in 2009/10. In 2009/10 overall production of oil plants in the CR was 1,279,620 tonnes, an increase of 7.2%.

In 2009/10 oilseed rape was grown on an area of 354,830 ha, which is an interannual increase of 0.6%. The increase in production, from 1,048,940 t in 2008/09 to 1,128,120 t in 2009/10, was due, in part, to a 8.2% rise in yield per hectare (3.18 t/ha).

In 2009, according to CISTA data, hops were grown on 5,307 ha, i.e. 99.5% of the area from 2008. There are 135 subjects growing hops in the CR. The most common variety is still Žatecký poloraný červeňák, of which 4,627 ha (87.2% of the total growing area) were sown in 2009

In the CR the overall **fruit** production in 2009 was 417,500 t, an interannual rise of 2%. 258,900 t of apples were harvested (6% less than in 2008). Of the other kinds of fruit the annual harvest of strawberries was down on 2008 (by 14% to 10,800 t) as was that of currants (by 5% to 16,300 t) and walnuts (by 4% to 9,800 t). However, for the majority of fruits the 2009 harvest was larger than that for the previous year. The greatest increase was with apricots (by 55% to 14,000 t), plums and damsons (by 40% to 42,000 t) and pears (by 40% to 23,900 t). The harvest of peaches, cherries and sour cherries rose interannually by 2-7%.

The area used to grow **vegetables** on was the lowest ever, making up a mere 13,800 ha. Interannually the area shrank by a further 10%. This fall in area is connected to the decline in processing capacities, which primarily affects the sales of industrial vegetables (peas, cabbage, spinach, cauliflower). For all the species monitored there was a fall in the area under cultivation, except for tomatoes.

The production potential of **vineyards** in the CR is roughly 0.5% of the total area in the EU (3,700,000 ha). According to the CISTA register the area of vineyards in the CR was 19,638 ha of which 17,359 ha was under grape cultivation.

Animal production

In 2009, according to the Inventory of Livestock as of I April 2009 the **cattle** herd dropped by 38,400 head (i.e. by 2.7%) to I,363,200 head. The overall production of beef, including veal, dropped slightly by I.0% to 97,700 t of slaughter weight (hereinafter s.w.). The production of slaughter cattle per average cow fell by 2.8%, i.e. by 9.3 kg, compared to 2008.

The development of the **milk** market was characterised in 2009 by a marked fall in milk PAP, by a reduction in production and the continuing drop off in milk purchases by the domestic dairies. The strength of the milk supply on the European market aggravated the conditions for the sale of domestic dairy products on the domestic and foreign markets and led to a fall in milk PAP. The average annual price of 6.14 CZK/I and the dip to the monthly average of 5.89 CZK/I for June meant the lowest value since 1994.

The long-term fall in the number of **pigs** in the CR increased its tempo in the last two years. From 2007 to 2009, according to CSO data, the number of pigs in the CR, as presented in the Inventory of Livestock, fell by 30%, i.e. by 859,000 head. Of this there were 36.7% (82,500 head) less sows and the number of fattening pigs fell by 24.5% (245,400 head). As of I April 2009 there were a total of 1,971,000 pigs bred in the CR of which sows totalled just 142,000. There were 757,000 fattening pigs registered.



On an interannual comparison **poultry** numbers fell by 3.0% to 26.5 million. At the same time the number of fattening chickens fell by 1.9% to 15.9 million and breeding chickens fell by 13.3% to 3.0 million. In contrast the number of hens rose by 2.5% to 6.5 million. For the other poultry there was a rise in the number of geese (by 12.5% to 21,400) and ducks (by 1.7% to 504,400). The number of turkeys fell by 31.4% to 477,700).

In 2009 the overall production of poultry meat fell by 7.1% to 229,300 t s.w. Home-grown and small-scale sales dropped interannually and is estimated at 7,500 t s.w.

In 2009 the overall production of eggs, including domestic farms, fell by 2.4% interannually to 2,583.6 million. According to CSO figures interannual egg production in the agricultural sector fell by 3.1% to 1,667.4 million (of which 332.4 million were eggs for hatching). The average annual clutch of eggs per hen in a battery farm rose by 1.9% to 290, in domestic farms, according to a CSO estimate, it stayed at the same level as in 2008, that being 195 eggs per hen per year.

As of I April 2009 a slight fall in the number of sheep had taken place and there was a slight growth in the number of goats. In all 183,084 ewes and rams were registered, which is a drop of 534 head (0.3%). However there was a growth in the number of ewes, from 91,500 in 2008 to 98,700 in 2009. There were 16,674 animals registered in the category of goats, a 0.3% drop from the previous year.

Renewable energy sources (RES)

Directive 2009/28/EC of the European Parliament and Council on the promotion of the use of energy from renewable sources and amending and subsequently repealing Directives 2001/77/EC and 2003/30/EC was published in April 2009. The basic aim $\,$ - for 20% of all of the EU energy needs to be from renewable sources by 2020 - was confirmed. Likewise it affirmed the aim to achieve at least 10% of energy for road and rail transport from RES.

The growth in energy from certain kinds of RES was marked in the years 2008–2009. The volume and structure of the overall energy from renewable sources did not change fundamentally. The overall proportion of renewable energy for primary power sources was 5% in 2008, which is slightly more than in the previous year (4.8%). By far the greatest share of energy from RES (77.8% in 2008, 81.8% in 2007) still comes from biomass combustion.

In 2008 a total of 1,171 GWh of electricity were generated by combusting 865,100 t of biomass (of which only 15,000 t were non-agglomerated plant material). The number of briquettes and pellets from plant materials rose interannually by 2.8% (from 16 to 24 thousand t). A further 20,000 t of pellets and briquettes were made of wood materials.

The use of bio-fuels in transport in the Czech Republic is currently primarily governed by the legislative duty to add them to mineral propellants (in 2009 a 4.5% addition of FAME was set for diesel and for petrol 3.5% of bio-ethanol was set).

In all 89,625 t of bio-ethanol were produced in 2009. Of this amount about 50,953 t were exported and 32,939 t were imported. After taking into account the initial and final supplies the supply to the market in the CR was 74,936 t. According to the Union of Distilleries of the CR estimate 118,890 t of cereals (wheat) and 634,891 t of sugar beet were consumed for bio-ethanol production.

I54,923 t of FAME were produced in 2009. 24,221 t were exported and 10,866 t were imported. After taking into account the initial and final supplies the actual rough consumption of FAME in 2009 in the market in the CR was I41,262 t, of which 6,259 t were used for about 22,945,000 l (i.e. ca 19,400 t) of blended diesel fuel (BDF30) and about 125 t of FAME as a pure fuel for combustion engines.

Price developments on the agrarian market

In 2009 there was an interannual fall in the prices of agricultural products of 24.8%. The fall in prices for plant commodities mostly affected cereals, oil plants and fruit, from animal commodities it was primarily milk. The development of industrial products in all corresponded to the development of consumer prices. Consumer prices for food and beverages fell by 3.9% in comparison with 2008. The price for agricultural inputs fell interannually by 7.4%.

The prices for agricultural producers (PAP) in plant production dropped by 32.2%, primarily as a result of a considerable fall in the price of cereals (by 41%) and oil plants (by 35%). A 5% fall in the PAP was recorded by growers of potatoes and sugar beet. For fruit there was another interannual fall in prices by 24.4%. Growers of vegetables and flowers recorded a slighter fall in prices in 2009.

The average price for agricultural producers of animal commodities fell in 2009 to 84.9% of the 2008 price. For all of the basic commodities, except for cattle, a fall in prices was recorded. The highest fall in price was recorded for milk (29.3%) and poultry (9%). Only the price of cattle rose slightly (0.3%).



Agrarian foreign trade (AFT)

In 2009 the turnover of AFT in the CR stagnated in the interannual comparison (a growth of CZK 1,617.4 million represented just 0.7%). For the first time since EU accession the CR recorded an interannual fall in the value of exports (by CZK 1,582.7 million, i.e. 1.5%), whilst imports grew by CZK 3,200.1 million (2.5%). As a consequence of these developments the AFT imbalance grew by CZK 4,782.8 million and the level of import coverage by export fell to 79%.

The proportion of agrarian products in the overall foreign trade of the CR was below-average in comparison with the values after EU accession. Agrarian export rose by 0.62 percentage points to 4.94% of overall exports and the corresponding indicator for import grew by 1.33 percentage points to 6.74%. The fall in overall imports and exports, 13.8% and 17.7% respectively, had a marked part to play in this development.

In all Czech AFT recorded a rather unfavourable development in 2009. There was another very distinct deepening of the passive balance with meat and offal. The trade in milk and dairy products has also shown negative development in recent years (with the exception of soured milk products). This concerns trade with both the EU 27 and third countries.

In 2009 the EU 27 made up 92.6% of Czech agrarian export and hardly changed at all in comparison with the previous year. The EU 15 share rose by 2.3 percentage points to 47.9% and the participation of the EU 12 dropped by 1.8 percentage points to 44.7%. The EU 27 took up 93.4% of agrarian imports to the CR, with the share of the EU 12 growing by 1.2 percentage points to 29.4% and that of the EU 15 falling slightly by 0.2 percentage points to 64%.

For a long time the most important importers of agrarian products from the CR have been Slovakia (26.5% in 2009), Germany (22.4%), Poland (9.9%), Italy (6.7%), Austria (5.4%), and Hungary (4.4%). Of the third countries the most important trade partner is Russia with 1.3% followed by Croatia, Japan, Ukraine, Switzerland, the US and Norway.

The main export commodities from the CR were KN 2402 20 Cigarettes, KN 1001 Wheat, KN 0401 uncondensed milk and cream, KN 2203 Beer, KN 1205 Beet, etc.

The agrarian commodities most commonly imported to the CR are KN 0203 Pork meat, KN 1905 Bakery products, biscuits, wafers, etc, KN 2106 Other food preparations, KN 1806 Chocolate and other food preparations with cocoa, KN 0406 Quark and cheeses, etc.

The economic results of the agrarian sector

According to the NIPH production in the agricultural sector showed a significant interannual fall of 18.1%. Plant production fell by 18.3% and animal production by 18.9%. Intermediate consumption (manufacturing consumption) fell by almost 10%, gross added value by about 42%, net added value dropped by 20% of the level of the previous year. Despite the significant growth in the volume of production supports (the interannual growth indicator "other subsidies for production" by 17.4%) all of the other sectoral indicators dropped markedly. The other taxes on production fell by 6% especially the factor income (i.e. the net added value raised by the balance of other subsidies and the tax on production) by 20%. This tendency was projected into the final indicator of the NIPH the "entrepreneurial income from agriculture", which recorded its lowest value since the CR accession to the EU, that being CZK 3.2 billion (an interannual fall of almost 68%).

The economic crisis was also projected onto the labour costs. Converted to the Annual Work Unit (AWU) the number of workers in agriculture fell by 3.7% attaining a figure of 130,000 AWU. The employee replacements fell by 5%, which at the same time represents a fall in the individual costs per worker (by about 1.4%).

■ total expenditures on agrarian policy (billion CZK) of which: CR (billion CZK) 50.0 140.0 EU (billion CZK) agricultural production (billion CZK - current prices) entrepreneurial income (economic result) 45.0 of agriculture (billion CZK - current prices). 120.0 40.0 100.0 35.0 80.0 30.0 billion CZK 25.0 60.0 20.0 Ē 40.0 15.0 20.0 10.0 0.0 5.0 0.0 -20.0 2003 2004 2005 2006 2007 2008 2009 Year

Developments in entrepreneurial income, production and supports

Source: CSO - Overall agricultural accounts, IAEI

per AWU). This also influenced the indicator "factor income per worker" (246,600 CZK/AWU), which fell for the first time since 2004

In 2009 the value of individual groups of plant and animal commodities fell in comparison with the average for 2004–2008. The overall value of production for plant production was CZK 7.4 billion lower than the average. Of this the greatest fall was recorded for cereals (CZK -6.1 billion), then sugar beet (CZK -1.3 billion) and potatoes (CZK -0.7 billion). Only oil plants recorded a value slightly above average (CZK 0.2 billion) thanks to a record harvest. In animal production there was an analogous fall of CZK 7.0 billion of which the greatest fall with regards to the average came from milk (CZK -5.0 billion) and pigs (CZK -2.5 billion). For the other animal commodities the values were close to the averages (cattle CZK 0.5 billion, poultry CZK -0.1 billion, eggs CZK 0.1 billion)

Considering that the interannual prices of material inputs fell by 7.4% (for the first time since 2004) and intermediate consumption fell by 10%, there were savings in the physical amount of inputs into agriculture of 2.6%. This means that agricultural producers reacted to the economic crisis through "savings" in material inputs, which led to a positive (though relatively low) economic result in the agricultural sector for 2009.

Overall assessment of agrarian policy

In 2009 the trend towards a growth in supports since EU accession has continued. In comparison with the pre-accession year of 2003 overall supports have more than doubled. Of these supports those going to the agriculture and fisheries sector have risen by more than 2.5. Compared to 2008, overall supports rose from CZK 37.7 billion to CZK 44.5 billion in 2009 i.e. by 18%, of these supports those going to the agriculture (incl. fisheries sector) from CZK 35.5 billion to CZK 40.4 billion, i.e. by 14,0%. Higher EU expenditures (by CZK 6.1 billion, i.e. by 28.9%) contributed most to this interannual change accompanied by increased MoA expenditures, especially in its grants programmes (26.6% increase).

The largest share of supports goes, in the long-term, to direct payments: 49.8% in 2008, 46.2% in 2009. The fall in the proportion of direct payments in 2009 was accompanied by an interannual increase in supports within the HRDP, the operational programmes and the RDP by 5.1 percentage point. In both years the share of state aid (without supplementary state payments) was just under a fifth of the supports. The proportion of EU finds for the agrarian policy in the CR increased from 56.2% in 2008 to 61.4% in 2009.

According to the EU classification the largest part of supports focuses on Pillar I (support for prices and enterprises' incomes). Supports in this pillar represented 56.7%, supports within Pillar II were 35%.

The greatest proportion of longer-term supports falls on supports for enterprises incomes (53–55%). The second greatest proportion of supports concerns improving farming's relationship with the environment and the countryside (their share in recent years has stabilised at 22–25%). A considerable part of these supports are, however, formed by LFA payments, which besides their environmental effects also directly increase farm enterprise's incomes.

In all, transfers of public funds to agriculture (including fisheries) have made an important part of the sector's economy. After EU accession the agricultural policy of the CR is, by means of Pillar I, still more focussed on support for agricultural holdings' incomes rather than supports aimed at further restructuring agriculture, even though in this direction there was a slight interannual improvement of relations.



ORGANIC FARMING 2009



Organic farming in the Czech Republic

Current state of organic farming in the CR

The development of organic farming

The overall area of organically farmed land as of 31 December 2009 rose to 398,407 ha, which is about 9.38% of the total agricultural land in the CR (see Tab. I). The area in the previous period was 26% of this (i.e. 103,964 ha). In absolute terms it is the highest interannual growth in the history of organic farming (an increase of 56,775 ha). Similarly the growth in the number of registered organic farmers, at a total of 2,689 subjects (a rise of 743), represents the highest absolute growth since 1990. At the end of 2009 over 8% of the registered agricultural entrepreneurs in the CR were farming organically.

The average size of an organic farm fell to 148 ha in 2009 and has been falling continuously since 2001, when it achieved its all time high of 333 ha. It means that new farms are going organic with a smaller acreage and it is also given by current organic farms being split up into smaller units within the "young farmers" entry. Despite this it is still the case that the area of an average organic farm is almost twice that of a conventional farm, which is given by the higher level of permanent grassland (PG) in organic farming.

Size structure of enterprises in organic farming

From the standpoint of the size structure of organic farms the most common area is from 10 to 50 ha (34.1%), which is also the category with the greatest growth in the number of organic farms (by 376 compared to 2008, i.e. by 70%). In contrast the number of organic farms over 1,000 ha has stagnated (76 farms). Despite this the CR is a country where the average size of an organic farm considerably exceeds the European average, which is around 40 ha. When comparing organic farms by area the long-term dominant category is 200 to 1,000 ha (29.7%) However it is still valid to say that almost 60% of the area under organic farming is farmed by large agricultural holdings with a predominance of PG.

The production structure on organic farms

The most commonly grown crop on organic farms are cereals. In 2008 their production came to 27,000 tonnes. Roughly 40% (7,300 tonnes) of all production was exported as organic products. Pulses fared slightly better where 87% of the volume produced was sold as an organic product (the remainder is often used on the farm as fodder). 74% of this production remains in the domestic market. Among the other crops, such as vegetables, potatoes, herbs, seed



and even pears in 2008, then nearly all of their production was sold at organic quality. Unfortunately nearly all of the potatoes, carrots and herbs are sold outside of the CR.

The majority of organic animal products remain in the CR for further processing. An exception is cattle and sheep production, where about 14% of slaughter animals and about a third of calves and 13% of lambs are exported abroad. In addition, in 2008 34% of slaughter pigs were exported, all as organic food. Poultry meat production is insignificant and pork makes up just 0.02% of organic meat production. Organic cow's milk makes up 0.44% of total production (22% for goat's milk) and organic egg production is just 0.03% of total egg production. Even the main organic commodity — organic beef — made up just about 5.7% of total production in the CR in 2008.

Tab. I: The structure of the land fund in organic farming

Area	31.12.2008 area (ha)	31.12.2008 area (%)	31.12.2009 area (ha)	31.12.2009 area (%)
Arable land	35,178	10.30	44,906	11.27
Permanent Grasslands	281,596	82.42	329,232	82.64
Orchards	2,764	0.81	3,678	0.92
Vineyards	341	0.10	645	0.16
Hop fields	0	0.00	8	0.00
Other	21,753	6.37	19,937	5.00
Total	341,632	100.00	398,407	100.00

Tab. 2 The area of agricultural land under organic farming in the CR and the number of subjects farming organically

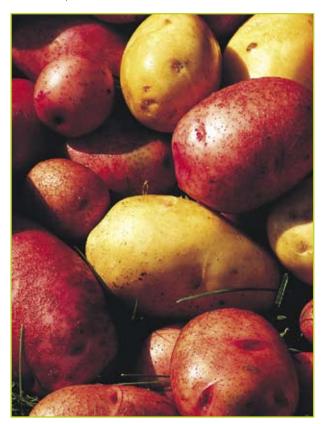
Date	Number of organic farmers incl. farmers in the transitional period (TP)	Area of land farmed organically and TP (ha)	Number of organic food producers	Percentage of soil under organic farming (%)
31.12.2007	1,318	312,890	253	7.35
31.12.2008	1,946	341,632	422	8.04
31.12.2009	2,689	398,406	501	9.38

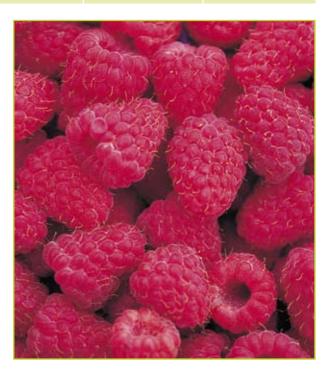
Organic food production

As of 31 December 2009 there were 395 subjects registered as organic food producers, or 497 production premises of which 84 premises only made up outlets for the supermarket chains that are registered so they can realise the in-store baking of organic bread or packaging milk products.

Compared to the end of 2008, when 345 subjects were registered (429 premises), the number of organic food producers rose by 14% (i.e. 50 new subjects), which represents a certain slowing in comparison with the 82% growth between 2007 and 2008. This slow down was particularly marked for wine producers in which just 15 new registrations took place in 2009, whilst in 2008 it was 45. In 2009 there was again a slight increase in the number of producers in the area of processing milk, as well as processing tea and coffee and producing non-alcoholic beverages.

The most commonly processed organic products are the prevailing activities of producers processing meat, producing bakery, confectionery and other flour products (chiefly fresh bread), milk processing, manufacturing milk products and cheeses and processing fruit and vegetables. Recently the number of registered wine producers has risen considerably, although the majority of them have yet to start wine production as the vineyards are in the transitional period.





Inspections on organic farming

The inspection of the registered organic entrepreneurs, organic product processors, retailers and other registered people in the sense of Act No. 242/2000 Coll., on Organic Farming, is ensured by three organisations appointed by the Ministry of Agriculture:

- KEZ o. p. s., www.kez.cz
- ABCERT AG, www.abcert.cz
- Biokont CZ, s. r. o., www.biokont.cz

The office responsible for overseeing the performance of the inspections is the Department of Environmental and Organic Farming at the Ministry of Agriculture.



Food Industry 2009



Situation in Food Industry in 2009

Characteristics of the sector

As the largest processing sector in the EU with a turnover of EUR 956 billion the food and beverages production sector represents an important pillar of the Union's economy with a 2% share in GDP. Half of the sector's turnover is produced by small and medium enterprises that make a key part of the business base and primarily process agrarian production. This sector has a positive trade balance in the EU and employs 4.4 million people.

In the CR the manufacture of food, along with beverages, makes up 2.7% of GDP. Similarly as in the EU in the CR too the food sector belongs to the supporting sectors of the processing industry with a sizeably segmented business structure. The importance of food is, however, primarily given by the fact that it secures inhabitants' nutrition through producing healthy, and quality products in a broad and available selection, including regional specialities and organic food. In 2009 CZK 170 million were invested into state control institutions (control at producers and other expenditures).

National marketing support for sales of food products is primarily ensured by means of the KLASA label, which is maintained by the SAIF. It concerns various promotional campaigns and presentation of foodstuffs. The list of labelled products and further documentation is provided by the SAIF and the SVA, which check that the products meet the conditions for being awarded this national quality label.

The uniqueness of many domestic products is documented by other labels and trade marks. Manufacturers of the best foods take part in a number of competitions and win awards for their products. The best domestic organic foods are presented at the Czech Organic Food of the Year competition.

The production of food products and beverages according to the newly implemented system CZ – NACE, is, from the, professional aspect, considerably rugged as it processes various agrarian commodities and satisfies a whole range of nutritional and other needs in many target groups of consumers.

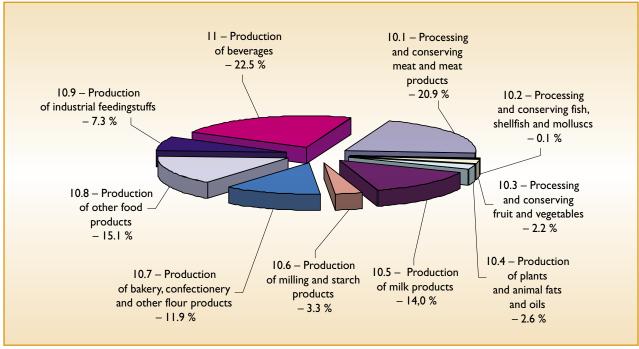
It concerns the following production sectors – sections or their groupings according to the CZ-NACE system:

- 10 Production of food products
- 10.1 Processing and conserving meat and meat products:
- 10.2 Processing and conserving fish, shellfish and molluscs,
- 10.3 Processing and conserving fruit and vegetables;
- 10.4 Producing of plants and animal fats and oils;
- 10.5 Production of milk products;
- 10.6 Production of milling and starch products;
- 10.7 Production of bakery, confectionery and other flour products;
- 10.8 Production of other food products;
- 10.9 Production of industrial feedingstuffs.
- II Production of beverages

Graph 1.1 gives the above sectors or their groupings and their share of overall sales revenues for selling their goods and services in 2009. The graph clearly shows that from the standpoint of production efficiency there are 4 key sectors, or their groupings, in NACE 10. They are: Processing and conserving meat and meat products (10.1), Production of other food products (10.8), Production of milk products (10.5) and Production of bakery, confectionery and other flour products (10.7). The other production has a lower share, though from the standpoint of covering the market in food or supplies for connected sectors, they are just as important.

The separate section II in the new classification is formed by Production of beverages with a 22% share in the entire food sector.

Graph 1.1 - The market share various sectors have for selling their goods and services in 2009* (current prices)



Note.: *breliminary value – own calculations (estimate) IAEI

The sector's position within the processing industry

According to preliminary data for 2009 the position of manufacturing food products (NACE 10) within the processing industry was significant, similarly to last year. Revenues for selling their products and services in current prices gave this industry a 7.7% share of the processing sector and for beverage production (NACE 11) it was 2.2% of the entire food processing industry (NACE 10 + NACE 11) 9.9%.

For the indicator "value added" the NACE IO share of the processing industry was 7.3% for the given year and 3.1% for NACE II making NACE IO + NACE II 10.4% in all. For the given year the share NACE IO had in employment for the processing industry was 8.1%, NACE II was just 1.3% and NACE IO + II was 9.4% in all.

Certain programmes were designated to support the development of food products and beverage manufacture. Among the key ones were:

- supports within the RDP and from EAFRD funds Measures I.I.3, this concerns measures for adding value to agricultural and food industry products. Support in 2009 was CZK 322 million of which the EU contributed CZK 241 million and the CR CZK 81 million (preliminary data). In 2008 this support was just CZK 87 million of which the EU contributed CZK 65 million and the CR CZK 22 million.
- state aid within Grants Programme 13 Support for Processing Agricultural Products and Increasing the Competitiveness of the Food Industry; this concerns a grant for 40% of the eligible costs for a project, up to a max. of CZK 10 million for each individual project and subject. In 2009 the grants came to CZK 158 million, in 2008 CZK 231 million was provided.
- Other MoA expenditures Supports for investment loans within the catch-up programmes Processor, Sales Organisations, Hygiene; it concerns a subsidy for the interest on investment loans paid by the Support and Guarantee Agriculture and Forestry Fund to food industry enterprises, where the beneficiary is a processor of agricultural products whose consumption of domestic agricultural products exceeds 70% of the total costs for raw materials. In 2009 the supports came to CZK 11 million (preliminary data), in 2008 they came to CZK 16 million.

- Programmes for small and medium enterprises provided by means of the Czech- Moravian Guarantee and Development Bank; this concerns supports for advantageous guarantees, loans and contributions to cover the interest from bank loans. Support in 2009 came to CZK 56 million, whereas in 2008 it was just CZK 40 million.
- SAIF expenditures (Marketing Fund); this concerns promotion of the KLASA label. Support in 2009 came to CZK 208 million, in 2008 it was CZK 184 million.

The volume of the supports provided in 2009, totalling CZK 755 million (preliminary data), is a third (35.3%) greater than that provided in 2008, CZK 558 million. This interannual increase in supports is primarily drawn from the RDP and EAFRD funds. It would be expedient to continue in this trend as it is focussed on SME. It is similarly valid for other supports. However, entrepreneurs cannot count on being included into the programmes if the projects they submit do not meet the set purposes and approved measures.

The main economic indicators

Price developments

Table I.I gives the price development for food products (CPA 10) broken up into the main product groups (CPA 10.1 to CPA 10.9) and for beverage products (CPA II) in 2008–2009. There is still a clear growth in the prices of industrial manufacturers of food products in 2008, (average from the start of the year), especially producers of plant and animal oils and fats and producers of flour-milling and starch products, even though somewhat lower than that for drinks producers.

In contrast the price index for industrial manufacturers of food products fell markedly in 2009, this being for the majority of food product producers and the hardest hit were those that had a marked increase in the previous year. A slight increase in the price index was recorded for drinks producers in 2009, whilst in 2008, as shown in the above-mentioned table, the increase was greater.

Table 1.1 - Price index for industrial manufacturers for 2008-2009

.,		Average from start of year		
Name	Code	2008	2009	
Cons. meat and meat products	CPA 10.1	101.9	98.6	
Proc., cons fish and seafood	CPA 10.2	100.6	100.2	
Process. and cons. fruit & veg.	CPA 10.3	103.5	100.1	
Plant & animal oils and fats	CPA 10.4	124.8	84.5	
Milk products	CPA 10.5	104.4	89.1	
Flour milling and starch products	CPA 10.6	120.9	79.5	
Bakery products and pasta	CPA 10.7	112.6	94.7	
Other foods	CPA 10.8	99.2	100.7	
Industrial feedingstuffs	CPA 10.9	119.8	82.8	
Food products	CPA 10	107.6	93.0	
Beverages	CPA II	105.6	101.1	

Source: CSO

Note: same period for previous year = 100

Basic production characteristics

Tables I.2, I.3 and I.4 give the basic production characteristics for CZ - NACE I0 and CZ NACE – II from 2005 to 2009. For sales revenues for selling products and services in the economically hard year of 2009 there was a fall in both production categories (NACE I0 and NACE II).

In contrast a favourable development was recorded for added value for both production categories (NACE 10 and NACE 11). Under pressure to reduce the number of employees and increase productivity there was an ongoing fall in employment in both production categories.



Table 1.2 - Revenues for selling their products and services in current prices 2005 - 2009*

(mil. CZK)	2005*	2006*	2007*	2008*	2009*
CZ-NACE 10	223,493.3	219,059.1	231,873.1	233,336.3	207,277.1
interannual index	100.0	98.0	105.8	100.6	88.8
CZ-NACE II	55,502.8	56,820.1	64,370.9	63,375.4	60,370.1
interannual index	100.0	102.4	113.9	98.5	95.3

Note.: *preliminary value from CSO; MTI estimate (2009)

Table 1.3 - Added value in current prices 2005 - 2009*

(mil. CZK)	2005*	2006*	2007*	2008*	2009*
CZ-NACE 10	45,639.2	45,018.1	49,428.7	48,877.3	51,266.6
interannual index	100.0	98.6	109.8	98.9	104.8
CZ-NACE II	19,509.8	20,260.5	21,217.7	21,294.0	22,049.4
interannual index	100.0	103.8	104.7	100.4	103.6

Note.: *preliminary value from CSO; MTI estimate (2009)

Table 1.4 - Number of people employed 2005 - 2009*

(people)	2005*	2006*	2007*	2008*	2009*
CZ-NACE 10	109,218.0	104,132.0	102,690.0	99,376.0	96,039.0
interannual index	100.0	95.3	98.6	96.8	96.6
CZ-NACE II	16,872.0	16,414.0	16,480.0	16,449.0	15,559.0
interannual index	100.0	97.3	100.4	99.8	94.6

Note.: *preliminary value from CSO; MTI estimate (2009)

Table 1.5 - Personnel costs in current prices 2005 - 2009*

(mil. CZK)	2005*	2006*	2007*	2008*	2009*
CZ-NACE 10	26,897.4	26,637.6	28,555.7	30,427.5	32,003.0
interannual index	100.0	99.0	107.2	106.6	105.2
CZ-NACE II	6,307.3	6,501.5	7,020.1	7,339.4	7,558.3
interannual index	100.0	103.1	108.0	104.6	103.0

Note.: *preliminary value from CSO; MTI estimate (2009)

Productivity and personnel costs

The productivity from the added value shown in table 1.6 for manufacturing food products (NACE 10) and beverages (NACE 11) with a growth in added value and a fall in the number of people employed grew over the years concerned. This contributed to maintaining the current level of competitiveness for the products. The share of personnel costs presented in table 1.6 in connection to wage developments had a relatively fluctuating development for both production categories with a rather assurgent trend.

Foreign trade

Foreign trade with food products, including the associated services and work, as shown in table 1.8, showed a considerably high deficit for 2009 at around roughly – CZK 34 billion. All of

the product groups contributed to this except for milk products and ice creams, which maintained a positive balance. The greatest trade deficit, almost 13 billion, was in the group processed and conserved meat and meat products, above all from the standpoint of the high import of these products, especially as a consequence of importing pork for further processing, poultry and certain meat products.

Through the influence of the afore-mentioned high imports of processed and conserved meat and meat products, as well as other food products, especially from the group of other food products (such as cocoa, confectionery, tea, coffee, spices and other products with a relatively high import price per kg) the overall import volume in 2009 reached an unprecedented level of CZK 91 billion. The export of food products in 2009 only came to CZK 57 billion, with the grouping other food products (chocolate and other products) and milk products (milk and cream, condensed milk products and cheeses) contributing the most.

Table 1.6 - Productivity from added value in current prices 2005 - 2009*

(thous. CZK/employ.)	2005*	2006*	2007*	2008*	2009*
CZ-NACE 10	417.9	432.3	481.3	491.8	533.4
interannual index	100.0	103.5	113.8	102.2	108.5
CZ-NACE II	1,156.3	1,234.3	1,287.5	1,294.6	1,417.1
interannual index	100.0	106.8	104.3	100.6	109.5

Note.: *preliminary value from CSO; MTI estimate (2009)

Table 1.7 - Share personnel costs had in added value in current prices 2005 - 2009*

(-)	2005*	2006*	2007*	2008*	2009*
CZ-NACE 10	0.589	0.592	0.578	0.623	0.625
CZ-NACE II	0.323	0.321	0.331	0.345	0.343

Note.: *preliminary value from CSO; MTI estimate (2009)

Table 1.8 - Foreign trade with products in current prices in 2009

	PA 3 places		Exports mil. CZK	Balance mil. CZK	Net weight kg	kg price in CZK
101	Processed and conserved meat and meat products	20,400.4	7,526.6	-12,873.8	455,422,209	44.79
102	Processed and conserved fish, shellfish and molluscs	3,596.2	925.5	-2,670.7	75,655,852	47.53
103	Processed and conserved fruit and vegetables	7,852.0	2,646.1	-5,205.9	346,179,732	22.68
104	Plant and animal oils and fats	9,908.9	3,245.1	-6,663.8	793,674,588	12.48
105	Milk products and ice creams	9,812.2	12,270.3	2,458.1	293,424,002	33.44
106	Milling and starch products	4,307.1	2,102.0	-2,205.1	345,667,249	12.46
107	Bakery, confectionery and other flour products	6,246.7	4,195.8	-2,050.9	137,290,027	45.50
108	Other food products	24,631.1	21,464.0	-3,167.1	521,909,001	47.19
109	Industrial feedingstuffs	4,062.2	2,736.3	-1,325.9	202,167,828	20.09
10	Food products incl. associated services and work	90,816.8	57,111.7	-33,705.1	3,171,390,488	
11	Beverages incl. sub-contracting work	9,405.0	11,920.1	2,515.1	608,178,855	

Source: CSO



Similarly to previous years, the group of beverages showed a positive foreign trade balance of about CZK 3 billion, where imports came to CZK 9 billion and exports almost CZK 12 billion. Beverage exports were primarily the traditional commodities, i.e. beer, spirit brands and also malt.

If we evaluate the foreign trade for the entire group of food products and beverages, then the deficit is roughly CZK -31 billion. Exports came to CZK 69 billion and imports attained a record level of CZK 100 billion. This makes the CR a country with high import demands in the area of food, despite having the necessary raw materials base and processing capacity for the majority of agrarian commodities. It does, however, show the need to increase competitiveness in the supply chain and prevent the import of food that does not correspond to EU standards and further set up the same conditions for economic competition in the EU common market and to strengthen marketing support.

Summary and outlook for the sector

Even in the economically difficult year of 2009 the manufacture of food products and beverages (NACE 10+11) belonged to the significant sectors of the processing industry in the CR. In all the sector's production indicators (revenues for selling its products and services) made up roughly 9.9% and 10.3% of the processing industry's structure. The sector, with a relatively extensive production, expertise and company base, has an important share of employment in all regions of the CR. From the standpoint of international comparisons within the EU 27, however, it shows the need for further increases in productivity in the monitored sectors in the CR. With an ongoing fall in employment the main factor in a rise in productivity should be an increase in economic efficiency in the production of food and beverages. A benefit from the standpoint of the range available on the domestic market are the positive trends with organic food that can be found in the raw materials base in the expanding organic farming. A marketing project to support regional food has also been realised. It is also a question of finding the best sales routes for these foodstuffs, such as farmers markets, supermarket chains, public houses, road service stations, etc., so that they can be dispatched to the consumers as quickly as possible and thus eaten when fresh.

The main marketing support is aimed at maintaining consumer interest in quality food. In this area the KLASA label plays an important role. Upon meeting the set conditions, SMEs and large companies too can use various support programmes that will help them in obtaining financial resources. The objective of the approved programmes is to add value to agrarian products, modernise the processing capacities and increase the competitiveness of production, the production categories and both sectors — food and beverages manufacture.

It is also necessary to further strengthen the competitiveness of the food and beverages manufacturing sectors. The rising trend for food imports to the CR documents an unfavourable state. Recently there have been no fundamental changes in the trade exchange for the goods category food and beverages with the surrounding countries or third countries, but partial changes have occurred in the range and prices. In all the foreign trade deficit for food and beverages in 2009 came to CZK -31 billion.

Among the priorities for national and European policies in the area of food for 2009 are both food safety, which is chiefly ensured and controlled as defined by the food and veterinary legislation, and food availability and quality.

Increasing the quality and added value of production will decide on the outlook for the manufacture of food products and beverages. One path is the use of unique products that meet the protection conditions in the EU (PDO, PDI, TSG) and products that bear the afore-mentioned KLASA label. In the following trends it will also be desirable to continue with organic and regional foods. Support for this production through suitable marketing tools should continue, which, after overcoming the recession, will positively project onto rejuvenating the business environment throughout the sector as a whole.



Forest Management 2009



Basis for the 2009 Summary Report for the Area of Forest Management

Forests are a national treasure and represent an irreplaceable component of the environment. Their management and use rests on the principles of sustainable management in forests accenting care for conserving the biodiversity of forest ecosystems, retaining forests' production capacity and their vitality along with developing their ecological, economic and social functions in accord with the needs of today's society and those of future generations.

The forestry sector has a great potential to contribute to a "greener" economy and sustainable development, above all when providing wood for construction, energy and environmental services

A green economy is understood to be the process of restructuring the enterprises and infrastructure for providing higher incomes on the basis of physical, human and economic capital investments whilst reducing greenhouse gases, with lower felling and use of physical resources and producing lower amounts of wastes and also reducing social disparities.

The forestry-timber sector can significantly contribute to achieving the aims of a green economy through a coupling of climate change policies, above all by means of reducing greenhouse gas emissions and expanding the objectives concerning renewable energy.

There are three main ways to ensure these objectives:

- energy from biomass,
- a green infrastructure and construction concerning forestry products,
- the role of forest resources in reducing carbon.

The ownership structure of forests in the Czech Republic is relatively stable

2009 did not bring any significant changes in the ownership structure of the area of forest stands. With a few exceptions the restitution process has come to an end, thus state owner-



ship is gradually decreasing. For some of the legally complicated cases the courts have so far decided on the rightfulness of the restitution claims in appeal procedures and outside of them.

The fall in the stand area owned by Forests of the CR, s.e. (Lesy ČR, s.p.) of about 16,137 ha has been projected on the growth in stand area of municipal forests and those owned by physical persons.

Forest ownership structure in the Czech Republic - 2009

Ownership		Stan	d area
		(ha)	%
State forests		1,564,538	60.32
of which	Forests of the CR, s. e.	1,313,762	50.65
	Military Forest and Farms of the CR, s. e.	123,855	4.77
	MoE forests (NP)	94,853	3.66
	other	22,449	0.87
	MoE forests (ANCLP)	1,178	0.05
Originally sta	ate (**)	4,645	0.18
Legal entities	s	67,577	2.61
Municipal and	d urban forests	425,143	16.39
Regional fore	ests (middle s schools et al.)	3,796	0.15
Church and r	religious societies' forests	1,679	0.06
Forest coops	and companies	30,619	1.18
Forests owned by physical persons		504,368	19.44
Other (uncat	egorised) forests	0	0.00
TOTAL		2,593,923	100.00

(**) original large forest management plan (FMP) under state ownership — valid from 1981 — 1996, partial validity from 1997, here private individuals and municipalities manage according to the statement from the FMP and will have their own, new FMP during the renewal of the FMP.

Source: FMI

The basic assumption of a successful artificial renewal of stands is quality reproductive material of forest tree species

In 2009 seed production was characterised by a standard yield of all the important forest tree species. For all species the harvest corresponded to the guiding values of annual consumption of seed material in forest management.

In the tree seed centre at Týniště nad Orlicí a total of 83 tonnes of seeds were processed in 2009. Likewise the centre ensured the stratification of three tonnes of seeds, primarily beech, fir and lime. For spruces there was ongoing cone damage caused by spruce needle miner, spruce seed moth and woodworm. In cooperation with the Forest Protection Service the extent and intensity of damage is resolved.

Seed and raw seed material stock at the seed production plant in Týniště nad Orlicí

T	Pure seed	Raw seed material			
Tree species	kg				
Norway spruce	8,329	5,323			
Scotch pine	2,915	500			
European larch	767	879			
Silver fir	5,708	0			
European beech	16,791	5,764			

Source: Forests of the CR, s.e.

The area of renewed forest stands has increased considerably

Compared to the previous year the area of renewed forest stands has risen by about 2,088 ha, above all as a consequence of reforestation after the relatively extensive salvage felling in the previous years. In connection with this there was a certain increase in the area of artificial renewal where the interannual growth was 1,012 ha. The marked growth in the extent of physical renewal also significantly contributed to the overall increase.

The development of the species composition used during artificial forest renewal can also be considered as relatively favourable. The proportion of coniferous trees fell to the advantage of deciduous tree species. The percentage of deciduous tree species during artificial renewal was 38.8% of which roughly a half was reforested with beech.

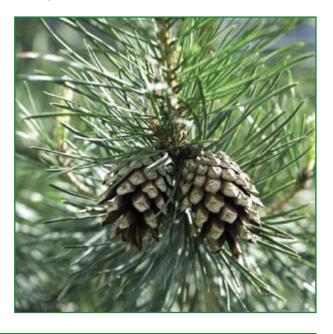
The purpose of rearing forest stands is to form and regulate the stand's species, age and spatial composition

The area of forest stands in which interventions were made by cleaning is at the same level as in recent years, that being 40,000 ha. A growth in the extent of thinning was recorded, 85,000 ha, returning to the level of 2007, i.e. before the period of extensive calamities, whose processing caused a certain fall in intentional subjective felling.

Cleaning and Thinning (1,000 ha)

Year carried out	Cleaning	Thinning	Total interventions
2000	47.7	115.5	163.2
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

Source: FMI, CZSO



Forest regeneration (ha)

Renewal method	2000	2002	2004	2006	2008	2009
Artificial	21,867	18,120	19,042	18,445	19,888	20,900
of which repeated	4,371	3,212	2,766	3,054	3,089	3,011
Physical	3,422	2,941	3,401	3,417	3,487	4,563
Total	25,309	21,061	22,443	21,862	23,375	25,463

Source: FMI, CZSO

Felling has returned to the level of average total annual extractions

In all, 15.5 million m³ of wood were felled in the forests of the CR, which, on average, corresponds to the total annual felling in this decade with the exception of the last few years were there was extensive salvage felling. The level of the total volume of annual felling is partly influenced by conditions on the market with timber and here, despite a slight rejuvenation, a certain effect of the fading sales crisis was apparent.

In the last year a relatively more favourable ratio between intentional and salvage felling was recorded. In 2009 salvage felling made up 42.8% of all felling, which formed better conditions for planned management in the forests than was the case in previous years.



Timber harvesting

Timber harvesting	unit	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Conifers		12.85	12.68	13.01	13.66	13.92	13.88	16.12	17.28	14.88	14.05
Broadleaves	mil. m³	1.59	1.69	1.53	1.48	1.68	1.63	1.56	1.23	1.31	1.46
Total		14.44	14.37	14.54	15.14	15.60	15.51	17.68	18.51	16.19	15.50
Total per capita	3	1.41	1.41	1.43	1.48	1.53	1.52	1.72	1.79	1.55	1.48
Per ha forest land	m³	5.48	5.45	5.50	5.73	5.90	5.86	6.67	6.98	6.10	5.84

Note: data is given in m³ of timber without bark. Source: CZSO

Forest protection in immission burdened Central Europe is gaining in importance

From the standpoint of forest protection it is possible to label 2009 as a less favourable year.

The main detrimental factors were similar to those in previous years. From abiotic influences it concerned wind-fallen trees and of the biotic agents it was primarily damage caused by infestations of bark insects. The meteorological conditions were also more balanced on the whole, the climatic extremes recorded (summer gales with downpours, wet snow at the start of the winter period) had a more regional effect and it cannot be said that they had as broad an effect as in the previous two years. The amount of salvage felling, which was 6.63 million m³ nationally, was significantly less than in 2008, where 10.75 million m³ were felled.

In the case of abiotic damaging influences there was an overall fall in the volume of damage, by about a third, compared to 2008.

For biotic harmful agents there was a predominantly low occurrence (mainly for leaf-eating insects and the majority of the fungal pathogens), however, there was a further worsening of the situation in bark pests on spruces (above all leaf eaters) and the enduring, chronic problems in association with the excess of ungulate game.

Preventive protection measures block the threat of an outbreak of harmful pests to forestry

Just as in every year a large number of controls on the occurrence of harmful forestry pests was carried out in 2009 too. They primarily focussed on insect pests, in accordance with MoA Decree No. 101/1996 Coll., as amended, laying down the details on forest protection measures. Within these controls the main agents monitored were calamitous pests among which are chiefly the European spruce bark beetle (*Ips typographus*) and the nun moth (*Lymantria monacha*).

According to the records the control of the occurrence of insect pests took place over an area of around 140,000 ha. According to the available records, during the control of the European spruce bark beetle about 84,000 traps were used and 600,000 m³ of trap trees, which is more than double that of the previous year. Controls for the nun moth took place on an area of over 95,000 ha.

In forests damaged by imissions remedial measures correct the impaired nutrition of the tree species in the forest stands.

Projects to chemically ameliorate forest soils take place in connection with the Resolution of the Government of the Czech Republic No. 22/2004. The aim is to remedy nutrition in forest stands in which the impaired nutrition is based on a lack of magnesium and calcium.

In 2009 the pine stands that were withering in the districts of Kolínsko and Chlumec nad Cidlinou were fertilised. A newly developed forest fertiliser, Silvamix PMC, was applied to a total area of 1,293 ha in the form of a semi-operational experiment in two doses — at 300 kg.ha⁻¹ and at 500 kg.ha⁻¹. It was applied by crop sprayer planes and small helicopters. The forest growth was not limed in 2009.

On the basis of the provisions of Section 46 (1) of the Forestry Act, the MoA uses its budget to cover aerial fire services that are available for all forest owners in the territory of the CR except for forests under the competence of the MoE and the MoD.

The aerial fires service is provided in close cooperation with the Ministry of Interior – the General Directorate of the Fire Rescue Service of the CR (GD FRS), employees from the company Lesy ČR, s.p. Hradec Králové and, since 2001, with the Flying Service of the Police of the CR. It covers an area of 2.4 million ha of forest plots – about 91% of the total area of forests – with the aim of protection against forest fires.

Of course this service could not be provided in 2009 due to objections to the selection process. despite this, aerial patrols and fire-fighting was partially provided using the helicopters of the Flying Service of the Police of the CR. In all the helicopters made 13 flights and discovered 7 fires. They effectively took part in extinguishing 13 fires making 188 flights with water, flying for 24 hours and 12 minutes in all.

In all there were 521 fires in 2009 with direct damages of CZK 6.3 million. 178 ha of forest vegetation was damaged or destroyed and 20 people were injured during the forest fires. No one died

In general the conditions for developing the health status of the forests were less favourable in 2009. The meteorological conditions were also stable overall and those climatic extremes that were recorded, were of a more regional character.

The amount of salvage felling, which was 6.6 million m³ in all, was significantly lower than in 2008, when salvage felling amounted to 11 million m³. Thus in 2009 salvage felling made up 42.8% of total felling in 2009.

Of the individual abiotic influences the greatest proportion, as usual, was wind damage, which came to 2 million m³. The volume of salvage felling caused by abiotic factors fell markedly compared to 2008 coming to a total of 3.25 million m³.

According to records in 2009 around 2.1 million m³ of wood were damaged by the effects of biotic agents. Just as in all other years bark insects on coniferous trees took the dominant role causing more than 90% of the recorded damage.

The volume of recorded spruce species attacked by bark beetles, including trap trees, was 2,621,000 m³

In 2009 2,621,000 m³ of wood was felled in the Czech Republic due to bark beetle attack, which is a growth compared to 2008, when the amount of wood attacked by bark beetle was around 2,360,000 m³. Of this volume 283,000 m³ were barked and 382,000 m³ were treated chemically, the remainder was taken off to wood yards and processed.

As in every year the greatest amount of wood was attacked by the European spruce bark beetle (*lps typographus*), the eighttoothed spruce bark beetle (*lps amitinus*) and the six-toothed spruce bark beetle (*Pityogenes chalcographus*) (2,407,000 m³). According to records 207,000 m³ were attacked by the northern bark beetle (*lps duplicatus*).

In the majority of locations in the country spruce bark beetles occurred at an elevated to calamitous level (a calculation of the bark beetle affected wood per hectare of spruce stands gave a value of 1.90 m³/ha, i.e. it exceeded the value for the basal rate, 0,20 m³/ha, by ten times).

In deciduous vegetation leaf eating insects were recorded on a total area of 810 ha.

In deciduous stands leaf-eating insects were recorded over an area of 800 ha (2008: 600 ha). The majority concerned a complex of leaf-eating pests of oak (*Tortrix viridana, Operophtera brumata, Erannis* spp., *Agriopis* spp), which is again one of the lowest values in recent years.

It can be stated that leaf-eating insects did not cause any significant damage to forest stands in 2009.



Recently the area of forests has increased continuously

Since the mid 1990's the area of forested, economically marginal agricultural land has gradually increased as has the area of reclaimed land at power station ash and sludge disposal sites.

The area of forest plots has grown slightly, but steadily. In 2009 it rose by 0.082%, which can be ascribed to afforestation of agricultural plots.

Salvage felling by reason

Year	Elemental	Exhalations	Insects	Other	Total
	mil. m³	mil. m³	mil. m³	mil. m³	mil. m³
2000	2.39	0.08	0.32	0.50	3.29
2005	2.30	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	7.60	0.04	2.31	0.80	10.75
2009	3.25	0.03	2.62	0.73	6.63

Source: FGMRI, CZSO

Changes in forest land area (ha)

Year	2005	2006	2007	2008	2009
Area of forest plots	2,647,416	2,649,147	2,651,209	2,653,033	2,655,212

Source: COSMC, FMI

The growth in overall timber supplies in the forests of the CR continued

Compared to 1930 the figures on the overall supplies of timber in the forests of the CR have more than doubled. In part this is due to the increasing increment, in part it is due to a refinement of the ways of acquiring data by introducing new methods and aids in the 1960's and 1970's.

The growth in the total supplies of timber in the forests of the CR continued after 2000. This is partly due to a growth in crop density and an increase in the stands of greater age, and partly due to the growth in the usual increment in Europe. However, not all supplies are equally available for felling. The extractability of wood supplies in a protected forest and special purpose forest is limited by meeting the conservation functions or the management objective; in reservations and the first zones of national parks felling is prohibited.

The average supply per hectare of forest land is 264 m³.



Growing stock volume (million m³)

Total wood supplies								
Year	1930	1950	1960	1970	1980	1990	2000	2009
mil. m³	307	322	348	445	536	564	630.5	678.0

Note: Supply is given in m³ without bark (mass of timber).

Following the marked fall in economic results in 2008 the economic situation of forest owners in the framework of forestry, including any subsidiary activities, improved slightly.

This fact has manifested itself at private forests and those owned by the state, whilst forests owned by towns and municipalities had a further fall in profit.

Profit of forest owners (including subsidies in forests management) (CZK/ha)

Pre tax profit	2007	2008	2009
State forests	646	520	561
Municipal forests	1,114	612	480
Private forests	1,746	1,077	1,395
Average	982	667	748

Source: MoA

The main cause of the tense economic situation for forest owners was a further drop in practically all of the average prices for the key kinds of raw timber as a result of the continuing sales crisis.

Interannually the economic results (pre tax profits) only fell for the category municipal forests by 132 CZK/ha to 480 CZK/ha, whilst for state forests they rose by CZK 41 to 561 CZK/ha and for private forests by CZK 318 to 1,395 CZK/ha of forest.

Forest management has also followed the trend for business subjects to concentrate into larger and financially stronger units

There are two kinds of business groups forming on the market, large multi-regional companies that own heavy forestry equipment and operate throughout the CR as well as abroad and small companies of local importance that usually provide services for small forest owners with traditional technologies or subcontract specific work for the inter-regional companies.

The statistics show 26 large economic subjects entered in the business register whose main area of activity is forestry, which they carry out on an area of 103,000 ha.

Forestry activities showed a loss of 139 CZK/ha of area managed.

Average costs for selected outputs in CZK/unit

Output – activity	unit	2007	2008	2009
Forest renewal	ha	70,525	71,850	72,986
Caring for forest cultures	ha	8,439	8,654	9,331
Thinning	ha	7,398	7,536	8,353
Forest protection	ha	170	149	154
Total silvicultural activities	ha of forest	1,681	1,745	1,867
Wood extraction	m³	211	258	267
Skidding	m³	236	225	248
Wood transport	m³	189	154	175
Repairing and maintaining forest paths	ha of forest	629	654	530

Source: MoA



The number of employees in forestry activities (i.e. in forestry and in associated activities) in physical persons at subjects in the business and non-business spheres is permanently decreasing.

Interannually there was a total fall in employees in forestry activities of 10.7%, whilst the greatest fall was seen in the private sector (15.3%) and there was a partial fall in the municipal sector (5.7%) and in the state sector (4.8%).

Interannually the total volume of work in the forestry sector fell slightly as a result of a fall in felling activities. The drop in employees was replaced by increased productivity (using wood harvesters, afforestation machines, etc.)

The average wage for employees as physical persons in forestry and associated activities grew by 5.7% compared to the previous year.

Thus, for once, the rate of growth in forestry wages overtook that of industry (2.2%) and in the national economy (3.5%).

The average wage of physical persons in forestry and associated activities in the business and non-business sphere is, however,

still lagging in absolute terms by CZK 2,514 compared to industry and by CZK 2,868 compared to the average wage in the national economy.

Within the sector of forest management (forestry) the highest average wage is in the state sector, which exceeds the private sector by CZK 5,830.

In all, CZK 239.2 million was provided from the state commitments stemming from the Forestry Act

CZK 12.9 million was provided for the partial cover of the increased costs for planting the minimum percentage of ameliorative and binding tree species. In this manner the renewal of about 2,500 ha of this forest vegetation was supported. It means that about 13,000 ha of mixed forest growth was supported of which these tree species made up 5 to 30%.

Likewise the state covers the costs for the activities of the professional forest manager accruing to forest owners up to a total of 50 ha if they don't choose him themselves and cover the costs for processing forest management plans. It further contributes to measures associated with amelioration and fencing torrents in the public interest.

Number of employees in forestry activities

Forest management		2006	2007	2008	2009
total		20,342	19,398	17,959	16,041
of which	state	5,698	5,783	5,850	5,574
	private	12,280	11,320	9,924	8,406
	municipal	2,364	2,295	2,185	2,061

Source: CZSO

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

Commitment	2007	2008	2009			
	provided					
Soil – improving and stabilising species	9.6	9.7	12.9			
Licensed forest managers	146.6	152.4	160.1			
Forest management guidelines	24.3	20	23.4			
Soil reclamation and torrent control	67.6	71.2	42.8			
Total	248.1	253.3	239.2			

Source: MoA

The state helps forest owners by freely providing and granting services to improve the management level in forests and ensuring forests are protected from damaging agents.

In 2009 fertilisers were applied aerially above the forest vegetation in demarcated parts of the Czech Republic – i.e. at Bílé Vchynice (on an area of 234 ha), Býchory I (522 ha), Býchory II (268 ha) and Komárov (269 ha).

In 2009 the provision of fire services was reduced to just a partial safeguard and there was a marked fall in the number of patrol flights and flying hours.

Large scale interventions in forest protection were carried out by the aerial appliance of sprays against the horse chestnut leaf miner on an area of 60 km at Sedlice u Blatné and in the Březka and Vlková reservations (Central Bohemia region) and against the spruce webworm in Benešov (near Pelhřimov) on an area of 221 ha.

The MoA covered the costs for providing expert and advisory services to forest owners and also participated in covering consultancy and training activities.

In other services compensation was provided for taking samples of soils and assimilation organs to research the state of forest soils and forest stand nutrition in selected physical forest areas.

Interannually the total supply of raw timber fell by 685,000 m³ to 15,502,000 m³, of this coniferous wood made up 14,047,000 m³ and deciduous wood 1,455,000 m³

The interannual growth in supplies was $830,000 \text{ m}^3$ for coniferous timber, whilst for deciduous timber it was $145,000 \text{ m}^3$. The total amount of wood felled and the subsequent supply of raw timber



was considerably influenced by the sales crisis throughout the forestry-wood processing sector, whilst Europe was appreciably hit by this crisis.

Services provided by the state to support forest management (millions of CZK)

Character of service	2006	2007	2008	2009
Aerial liming and fertilising	45	22	44	19
Aerial fire-fighting and fire services	15	10	25	1
Large scale forest protection interventions	2	I	I	2
Consultancy	23	23	21	33
Other services	6	3	6	6
Total services	91	59	97	61

Source: MoA

A considerable fall in demand for the key range of raw timber (especially coniferous logs and fibre) led to a sharp fall in its price throughout the year. Because the forests were not affected by serious calamities and the proportion of salvage felling dropped to 40% of total felling, there was no reason for forest owners to increase wood extraction and thus increase the supply of raw timber on the domestic market.

Following the marked fall in 2008, the prices for almost all kinds of raw timber further fell due to the predominance of supply over demand

The reduced demand and the subsequent drop in prices for both raw timber and the products made from it was a result of the **economic crisis** in the USA. This crisis hit Europe hard, especially predominantly exporting states.

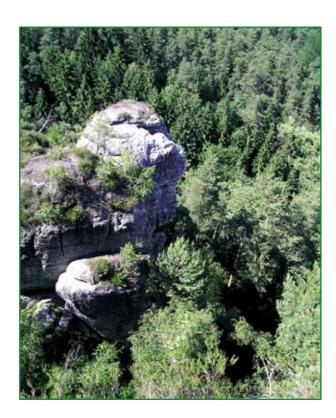
Compared to the previous quarter the overall index of average prices for coniferous and deciduous timber only fell in the I quarter (by 0.02%), whilst in the course of the next quarters these minimum prices rose.

Interannually the average prices for 2009 for the key kinds of raw timber fell again. In 2009 the average price for the sm III.A/B class (i.e. spruce logs for processing at a saw mill) was 1,473 CZK/m³.

On the day of the CR's EU accession the automatic licences for raw timber were annulled. These served to record the amount of timber exported

Interannually the export of raw material increased by $1,403,000 \text{ m}^3$ to $5,566,000 \text{ m}^3$, when there was primarily a growth in the export of coniferous logs (by $689,000 \text{ m}^3$) and coniferous fibre (by $1,198,000 \text{ m}^3$), whilst there was only a partial drop in exports of deciduous logs and fibre (by $20,000 \text{ m}^3$), chips, splinters, saw dust and wood waste (a total of $511,000 \text{ m}^3$).

The import of raw timber rose by $740,000~\text{m}^3$ to a total of $1,862,000~\text{m}^3$, where the growth was chiefly in coniferous logs and fibre (by $737,000~\text{m}^3$) and deciduous logs ($81,000~\text{m}^3$). The



foreign trade balance for raw timber fell slightly interannually to CZK 3.796 billion. 99.7% of the total exports went to EU-25 countries; the most going to Austria (61.4%), Germany (31.2%) and Slovakia (3.0%). Likewise imports of raw timber was primarily from EU-25 countries, that being 91.8% of the total import volume; mostly from Slovakia (52.5%), Germany (14.7%) and Austria (3.2%). Compared to 2008, there was an overall growth in the export of raw timber (by 1,403,000 m³) with a rise in export values (by CZK 921 million) and there was a rise in imports of raw timber (by 740,000 m³) at a value of (CZK 986 million).

Raw timber exports and imports in the CR

	Export	Import	Balance	Export	Import	Balance	Export	Import
	Million CZK				1000 m³	Average price CZK/m³		
Total	6,202	2,406	3,796	5,566	1,862	3,704	1,114	1,292
of which								
EU-25	6,186	2,208	3,978	5,564	1,778	3,786	1,112	1,242
Germany	1,933	353	1,580	1,449	272	1,177	1,334	1,298
Austria	3,810	77	3,733	3,779	87	3,692	1,008	885
Slovakia	187	1,264	-1,077	171	1,065	-894	1,094	1,187

Source: CZSO

Annual volumes of timber exports and imports (CZK million)

	2007			2008			2009		
Trade balance	Export	Import	Balance	Export	Import	Balance	Export	Import	Balance
Total	6,387	1,752	4,635	5,281	1,420	3,861	6,202	2,406	3,796
Of which	6,382	1,507	4,875	5,256	1,270	3,986	6,186	2,208	3,978

Source: CZSO



In 2009 there were 5,753 hunting grounds in the Czech Republic with a total hunting area of 6,861,933 ha, of which there are 195 game preserves with a total area of 45,840 ha and 287 pheasantries with a total area of 96,570 ha. The average hunting ground is 193 ha, game reserve is 235 ha and pheasantry is 336 ha

Spring stocks of the main game species in head

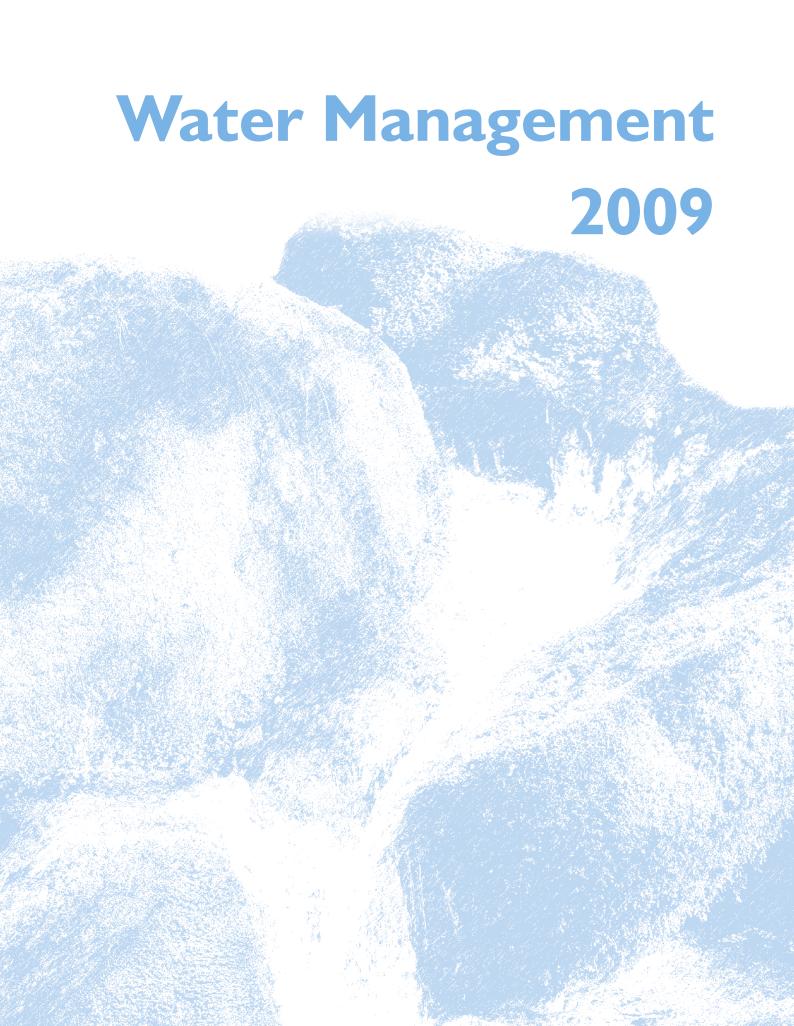
Game	2005	2006	2007	2008	2009
Red deer	28,550	27,812	28,977	29,266	29,895
Fallow deer	21,676	22,494	23,964	25,067	25,701
moufflon	18,274	18,689	20,510	20,182	20,738
Roe deer	302,694	296,509	310,920	318,252	317,596
boar	46,699	48,084	56,986	57,770	57,981

Source: MoA, MoE, CZSO

Hunting (shooting and trapping) of the main game species in head

Game	2005	2006	2007	2008	2009
Red deer	20,668	16,871	20,217	21,415	21,527
Fallow deer	-	9,972	11,395	13,394	13,309
moufflon	7,241	6,893	8,320	9,304	9,118
Roe deer	124,287	99,074	108,992	127,213	131,875
boar	100,608	59,904	121,192	138,854	121,821
duck	347,596	247,322	328,225	315,773	286,024
pheasant	588,513	588,555	664,251	598,176	530,444
hare	93,377	67,544	115,065	105,745	84,111

Source: MoA, MoE, CZSO



Basis for the 2009 Summary Report on Water Management in the Czech Republic

The Hydrological balance

2009 was had above-average temperatures. With an average temperature of 8.4 $^{\circ}$ C it exceeded the long-term average by 0.9 $^{\circ}$ C. The year was 0.5 $^{\circ}$ C colder than 2008 and about 0.7 $^{\circ}$ C cooler than 2007. It was the fifth warmest year in the CR since 2000.

From the standpoint of precipitation it was slightly above-normal. Due to the high precipitation in the period from May to July and also from February to March, the average total precipitation of 747 mm was about 9% greater than the long-term average for rain.

The outflow in 2009 was average to above-average with a significant flood situation at the end of June/July. The average annual through-flows were mainly between 70 to 110% of the long-term annual averages. This level was only surpassed by the average through-flows on the lower Lužnice and the lower Otava.

From the long-term perspective the groundwater regime was average to slightly below-average. There was a good and rapid subsidy for shallow aquifers, whilst for the deeper horizons represented by spring sources the conditions were not sufficient. Without doubt the driest areas were Northwest Bohemia, the wettest being Northeast Moravia. The situation in the Berounka river basin improved significantly where the levels rose interannually as did the discharge at all of the monitored buildings in the warning network – three quarters of the boreholes and a quarter of springs exceeded the long-term average.

The flood situation in 2009

In 2009 two flood situations were recorded attaining the 2nd and 3rd FAD (Flood activity degree). The main flood event of the year was the torrential floods at the end of June/start of July, which predominantly affected four areas — South Bohemia, Novojičínsko, Jesenicko and Děčínsko. During these floods there was a considera-

Renewable water resources in the period 2000-2009 (mil. m³)

Item	Annual values									
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Precipitation	54,733	63,960	71,298	40,695	53,629	57,730	55,837	59,544	48,818	58,676
Evapotranspiration	40,353	48,537	48,533	29,319	41473	42,872	37,617	46,194	37,394	44,090
Annual inflow 1)	573	761	1,341	524	640	781	1,070	637	462	714
Annual outflow 2)	14,953	16,184	24,106	11,900	12,796	15,639	19,290	13,987	11,886	15,300
Surface water 3)	4,789	6,600	6,506	3,758	4,270	5,489	5,317	4,673	4,503	5,112
Usable groundwater sources 4)	1,204	1,440	1,625	1,195	1,224	I 305	I 345	1,244	1,209	1,266

Source: CHMI (Czech Hydrometeorological Institute)

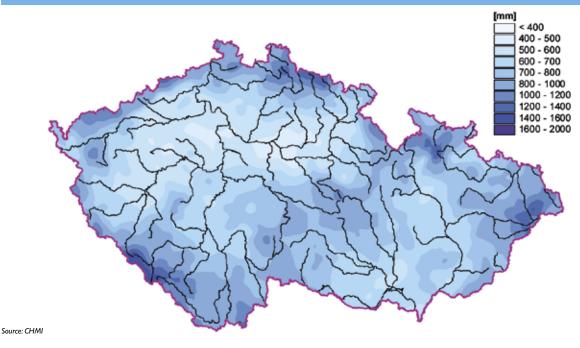
Note.: 1) Annual inflow to the CR form the surrounding states

2) Annual outflow from the CR

 $^{\rm 3)}$ Determined as the through-flow in the main river basins with 95 % safeguard

 $^{4)}$ This is a qualified estimate, an elaboration is published by the CHMI in the 2^{nd} half of 2010

Total precipitation in the CR in 2009 (mm)



2.3

ble exceedance of the 3rd FAD, even achieving the Q_{100} level. The second flood situation was the spring discharge episode attaining a 1st FAD occasionally the 2nd FD. In 2009 sub-programme 229 116 once again arose under the management of the MoA – "Removing the Consequences of the 2009 Floods"

Underground and surface water quality

Surface water quality

In the 2009 growing season the temperatures were slightly above-average. Water quality in reservoirs was influenced by two spring aspects – the typical increase in flow rates and the early onset of higher water temperatures. Eutrophication took place in a number of water reservoirs.

In cooperation with other organisations the AWMA ensures the operation of a state-wide monitoring system for ascertaining and assessing the state of surface waters. In 2009 it monitored a total of 967 profiles in the watercourses and small reservoirs. The water samples were taken to monitor the basic physical and chemical indicators enabling mild pollution from agricultural and communal sources to be identified in time, as well as contaminants indicating the possibility of environmental pollution by heavy metals and certain organic substances.

The most frequent problems with water quality are linked to the mass outbreaks of blue-green algae. Every year they lead to the notification of a swimming ban in some areas. A total of eight such notifications were made last year. The WHO recommendation was taken as the limit value for the "blue-green algae" indicator. i.e. a three-stage water quality assessment in which a ban is issued if an algal bloom is judged to be present by visual assessment.



Salmon and carp rearing water is legislatively declared surface water suitable for life and the reproduction of original fish species and other water animals. GR No. 71/2003 Coll., (just like Directive 23006/44/EU on fresh water) enables the meeting of the limits to be assessed according to maximum measured values for the given period. From assessments of the enclosed profiles of defined waters it was found that the immission standards of the GR had been met in 75% of these waters.

CLASSIFICATION UNDER CSN 757221 STANDARD

Water quality in watercourses in the CR 2008-2009

Basic classification Class I and II unpolluted and slightly polluted water III polluted water IV heavily polluted water V very heavily polluted water

Source: River Boards, s. e.

Overview of the number of buildings exceeding the criteria B and C values for at least one indicator in 2009

Buildings	No. of buildings	No. of buildings exceeding B or C	% of buildings exceeding B or C
Shallow boreholes	214	106	49.5 (46.1 in 2008)
Deep boreholes and springs	438	102	23.3 (16.1 in 2008)
All buildings	652	208	31.9 (25.9 in 2008)

Source: CHMI

Qualitative monitoring of suspended load and river sediments was realised within the surveillance monitoring programme at 47 profiles of the main watercourses in the CR and their important tributaries. The indicators monitored were heavy metals, metalloids and specific organic compounds including the majority of the priority pollutants that are relevant of the fixed matrix. The monitoring was carried out four times year for suspended load and twice a year for sediments.

In 2009 the contamination of biomass by harmful substances was monitored in 21 enclosed profiles of the main rivers of the CR as a part of the continual monitoring of surface water. Within the accumulative biomonitoring the biotic matrices were assessed: zebra mussel *Dreissena polymorpha* (18 localities), biofilms (21 localities), fish - Leuciscus cephalus (12 localities), the juvenile stage of fish – fingerlings (21 localities) and benthic organisms (21 localities).

Groundwater quality

The state monitoring network for groundwater quality observed 652 buildings consisting of 173 springs, 214 shallow boreholes and

265 deep boreholes. In all, 278 indicators were set out with a sampling frequency of twice a year in spring and autumn. With regards to Directive 2000/60/EC the results evaluation was chiefly focussed on hazardous substances.

Water treatment

In 2009, compared to 2008, there was a fall in the amount of surface water abstracted, from 1,608.2 mil. m^3 to 1,571.5 mil. m^3 , i.e. by 2.3 %.

Compared to 2008, the total amount of groundwater abstracted was more or less the same (a drop of 1.2%). This testifies to the fact that the increased pace of the drop in this category of abstraction peaked in the past – now there is stagnation.

In 2009 there were 1,993.6 mil. m³ of waste and mining water released into the watercourses. Compared to 2008 this was a growth of 1.2%. Similarly as in the previous years, due to unifying the data of the individual River Boards, s.e., water released from fishpond systems was not included in the abstraction of surface water.

Surface water abstractions in the CR 1980-2009



Source: MoA, River Boards, s. e., T.G.M.WRI, p.r.i.

Groundwater abstractions in the CR 1980-2009



Source: MoA, River Boards, s. e., VÚV T.G.M.WRI , p.r.i.

Pollution sources

The quality of surface water is primarily influenced by point source pollution (towns and municipalities, industrial plants, and buildings

with intensive animal rearing). The level of water protection from pollution is most commonly assessed by the development of pollution produced and released. Between 1990 and 2009 there was a fall in the indicators $\mathsf{BOD}_{\scriptscriptstyle 5}$ by 95.1%, $\mathsf{COD}_{\scriptscriptstyle Cr}$ by 89.1%, IS by 92.9% and DIS by 19.3% in the pollution released.

Waste water released in the CR 1980-2009



Source: MoA, River Boards, s. e., VÚV T.G.M.WRI , p.r.i.



The quality of surface water and groundwater is significantly influenced by non-point source pollution – especially pollution from farming, atmospheric deposition and erosion washing from the terrain. The importance of non-point pollution is growing with the continuing fall in point source pollution. Its share is significant, especially for nitrates, pesticides and acidification, though less for phosphorous. This proportion differs in different areas of the CR depending on the population density, the amount of waste water treatment, the intensity and manner of farming and the level of atmospheric deposition.

Water quality is likewise negatively influenced by polluting accidents, in 2009 the CEP recorded III cases of accidental pollutions or threats to water quality in the CR, of these four cases involved groundwater.

Administration of watercourses

The basic hydrographic network consists of about 79,000 km of watercourses. In the CR the water courses are divided up into major and minor. The key administrators of the watercourses are the River Boards, s.e., the AWMA and the FCR under the competence of the MoA, which ensures the administration of about 95.3% of the total watercourses in the CR. About 4.7% of the water courses are administered by other subjects such as the MoD, the Administration of the national parks and other physical and legal entities.

In 2009 the acquisition value of the long-term assets associated with watercourses came to CZK 49.26 billion. Compared to the previous period this value has increased by CZK 0.81 billion.

River Boards, State enterprise

In 2009 the interannual increase in overall revenues of the River Boards, s.e. came to 7.8% i.e. an absolute amount of more than CZK 321 million. As in every year a predominant part of this growth was due to payments for surface water abstraction.

Every year the financial needs for the pivotal activities of the River Boards, s.e. are supported by a number of grants of both an operational and investment character. Without state grants the consequences of the floods in the previous years could not have been removed nor could a systematic activity to realise antiflood measures, determine the flood zone and compile a number of conceptual studies have been initiated.

In 2009 the River Boards, s.e. invested CZK 2,225.6 million. For realising investments about CZK 950.2 million came from their own sources and then over CZK 1,274.5 million of investment funds were used.



Professional administration of watercourses

	Administrator	Length of wat	ercourse (km)
Category	Administrator	2008	2009
	Elbe River Board, s.e.	3,560.10	3,560.10
Major watercourses	Vltava River Board, s.e.	4,761.10	4,761.10
	Ohre River Board, s.e.	2,290.81	2,290.81
	Oder River Board, s.e.	1,111.39	1,111.39
	Morava River Board, s.e.	3,814.61	3,814.61
	Total	15,538.01	15,538.01
	AWMA	38,682.02	38,888.97
	Forests of the CR, s.e.	19,570.83	19,598.64
Minor watercourses	River Boards, s.e. in total	1,357.37	1,281.42
	Other *)	3,880.77	3,721.96
	Total	63,490.99	63,490.99
Total watercourses	79,029.00	79,029.00	

Source: MoA

Note.: *) includes the Administration of the national parks, the MoD (military area offices), municipalities and other physical and legal entities (e.g. mines).

The revenue structure of River Boards, s.e. in 2009 (thousand CZK)

Indicator	Elbe River Board, s.e.	Vltava River Board, s.e.	Ohre River Board, s.e.	Oder River Board, s.e.	Morava River Board, s.e.	Total
Payments for surface water abstraction	784,716	640,464	468 723	430,779	457,219	2,781,901
Electricity production	40,497	208,580	194,925	60,937	36,024	540,963
Incomes from using weir equipment	13,896	134,870	3,283	-	4,956	157,005
Other incomes	129,663	128,136	117,623	58,163	69,306	502,891
Grants from the state budget	65,819	38,165	160	3,699	318,687	426,530
Other operational grants	0	8,783	3,003	-	22,614	34,400
River Boards, s.e. in total	1,034,591	1,158,998	787,717	553,578	908,806	4,443,690

Source: MoA, River Boards, s.e.

Grants awarded to the River Boards, s.e. in 2009 (thousand CZK)

River Boards, s.e.	Operational grants	Investment grants	Total grants
Elbe River Board, s.e.	65,819	312,421	378,240
Vltava River Board, s.e.	46,948	405,155	452,103
Ohre River Board, s.e.	3,163 1)	45,810 1)	48,973 1)
Oder River Board, s.e.	3,699	354,479	358,178
Morava River Board, s.e.	342,064 ²⁾	127,922	469,986
River Boards, s.e. in total	461,693 ²⁾	1,245,787	1,707,480

Source: MoA, River Boards, s.e. Note: $^{-1}$ Overall usage in 2009, unused amounts are carried on to the next year.

Investments by River Boards, s.e. 2000-2009 (millions of CZK)

River Boards, s.e.	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Elbe River Board, s.e.	328.5	347.1	529.1	607.6	915.2	485.2	394.9	212.0	455.0	459.0
Vltava River Board, s.e.	115.2	114.1	199.3	321.6	219.0	362.4	236.6	275.2	611.3*)	761.1*)
Ohre River Board, s.e.	148.2	173.4	212.8	339.8	329.5	354.4	170.4	215.7	322.5	277.5
Oder River Board, s.e.	361.6	226.8	282.3	316.3	301.3	260.6	254.7	199.7	244.2	473.5
Morava River Board, s.e.	356.8	257.8	200.5	407.4	411.9	462.3	518.2	413.5	257.8	254.5
River Boards, s.e. in total	1,310.3	1,119.2	1,424.0	1,992.7	2,176.9	1,924.9	1,574.8	1,316.1	1,890.8	2,225.6

Source: MoA, River Boards, s.e.

Note: "Total fulfilment of investments was carried out in 2008 but they were financially settled in January 2009 (transfer of grant title 129 120 to 2009, an amount of CZK 19.5 million is counted in 2008)



²⁾ The difference in the amounts compared to the table Structure of revenues and yields is caused by the invoicing date of the grants.

The Agricultural Water Management Administration

The activities and work of the AWMA are, to a large degree, public beneficial acts of a non-profit character. They are services that care for state assets and the Ministry's interests in the areas of water management in the partial basins of agriculturally used landscapes ensuring their protecting, creation and ecological stability. As an organisational component of the state set up by the MoA, the AWMA supplied the 2009 report on minor watercourses of a predominantly agricultural character with a total length of 38,889 km and 512 water reservoirs. The purchase value of the LTA administered on the minor water courses is CZK 9,709 billion.

Forests of the Czech Republic, s.e.

The Forests of the Czech Republic, s.e. administers certain minor water courses and streams as one of the non-production functions of a forest. Currently the Forests of the Czech Republic, s.e. administers about 19,600 km of water courses. Caring for water courses within the Forests of the Czech Republic, s.e. represents administering the water management assets associated with water courses at an acquisition price of over CZK 2.8 billion.

Waterways

In accordance with Act No. 114/1995 Coll., on Inland Navigation, the MoT carries out its competence in caring for the development and modernisation of important waterways. The activities chiefly concern caring about the development of the Elbe-Vltava waterways, which are the most important system of waterways in the CR and is the only shipping connection of the CR with the Western European waterways. In 2009 significant financial resources were invested into caring for the development and modernisation of important waterways amounting to CZK 1,557 million.

Mains water supply and sewerage for public use

In 2009 there were 9.73 million people supplied by mains water, i.e. 92.8% of the total population. In all 653 million m^3 of drinking water were produced in all of the waterworks, of which 328.5 million m^3 of drinking water was for households. Losses from the water mains came to 125.1 million m^3 , i.e. 19.3% of the total water produced.

The highest percentage of inhabitants supplied by mains water was in Prague (100%) and in the Karlovy Vary Region (98.1%), the lowest percentage of inhabitants supplied by mains water was in the Pilsen Region (81.4%) and the Central Bohemia Region (83.5%)

In 2009 the mains water network was extended by 699 km attaining a total length of 72,866 km. Thus the new and ongoing construction of mains water systems increased the number of people connected by 68,794. The number of mains water connections rose by 43,791 coming to 1,923,798. The number of water meters rose by 45,182 to 1,934,920.

In 2009 there were 8.53 million people living in houses connected to mains water in the CR, that is 81.3% of the total population. A total of 496.4 million m³ of waste water was released into the sewers. Of this 95.2% of waste water was treated (not including rainwater), which is 472.7 mil. m³.

The highest percentage of inhabitant connected to the sewers was in Prague (99.0%) and the Karlovy Vary Region (91.1%), the lowest percentage was in Central Bohemia (66.55) and the Liberce Region (67.9%).

In 2009 the sewer network was extended by 1,063 km attaining a total length of 39,767 km. According to CSO data the overall number of WWTP rose by 67 compared to the previous year, amounting to 2,158 WWTP in the CR.

Water supplies from the water mains in 1989 and 2003–2009

Indicator	Unit	1989	2003	2004	2005	2006	2007	2008	2009
Inhabitants (median state)	1,000 inhab.	10,364.0	10,201.0	10,207.0	10,234.0	10,267.0	10,323.0	10,430.0	10,491.0
Inhabitants actually supplied with	1,000 inhab.	8,537.0	9,179.0	9,346.0	9,376.0	9,483.0	9,525.0	9,664.0	9,733.0
main water	%	82.4	89.8	91.6	91.6	92.4	92.3	92.7	92.8
M-:	mil. m³/year	1,251.0	751.0	720.0	699.0	699.0	683.0	667.0	653.0
Mains water produced	% of 1989	100.0	60.0	57.6	55.9	55.9	54.6	53.3	52.2
Total water invoiced	mil. m³/year	929.4	547.2	543.5	531.6	528.1	531.7	516.5	504.6
iotai water invoiced	% of 1989	100.0	58.9	58.5	57.2	56.8	57.2	55.6	54.3
C16	I/pers/day	401.0	224.0	211.0	204.0	202.0	196.0	188.0	184.0
Specific use of water	% of 1989	100.0	54.7	52.6	50.9	50.4	48.9	46.9	45.8
Specific amount of water	I/pers/day	298.0	163.0	159.0	155.0	153.0	153.0	146.0	142.0
invoiced in total	% of 1989	100.0	54.7	53.4	52.0	51.3	51.3	49.0	47.7
Specific amount of water	I/pers/day	171.0	103.0	102.0	98.9	97.5	98.5	94.2	92.5
invoiced for a household	% of 1989	100.0	60.2	59.6	57.8	57.0	57.6	55.1	54.1
Water losses per km	I/km day	16,842.0*)	7,783.0*)	6,113.0	5,770.0	5,673.0	4,893.0	4,889.0	4,705.0
Water losses per person	l/pers/day	90.0*)	52.0*)	45.0	43.0	42.0	36.0	37.0	35.0

Source: CSO

Note: ${}^{*}\!\!\!\!/$ Water mains data from the main operators

Removal and treatment of wastewater from the sewers in 1989 and 2003-2009

	11. %	Year								
Indicator	Unit	1989	2003	2004	2005	2006	2007	2008	2009	
Inhabitants (median state)	1,000 inhab.	10,364.0	10,201.0	10,207.0	10,234.0	10,267.0	10,323.0	10,430.0	10,491.0	
Inhabitants living in houses	1,000 inhab.	7,501.0	7,928.0	7,947.0	8,099.0	8,215.0	8,344.0	8,459.0	8,530.0	
connected to the sewers	%	72.4	77.7	77.9	79.1	80.0	80.8	81.1	81.3	
Wastewater released into the	mil. m³	877.8	558.1	539.7	543.4	542.0	519.3	508.8	496.4	
sewers (without rainwater) total	% of 1989	100.0	63.6	61.5	61.9	61.7	59.2	58.0	56.6	
Treated wastewater incl. rainwater 1)	mil. m³	897.4	782.7	821.5	841.5	857.4	841.2	807.5	842.9	
Total wastewater treated without rainwater	mil. m³	627.6	527.4	509.7	513.9	510.6	497.6	485.0	472.7	
	% of 1989	100.0	84.0	81.3	82.0	81.4	79.4	77.3	75.4	
Percentage of wastewater without rainwater ²⁾	%	71.5	94.5	94.4	94.6	94.2	95.8	95.3	95.2	

Source: CSO

Not: 1) in 1989 and 2003 this concerned the sewers of the main operators

²⁾ This concerns the percentage of water released into the sewers.

According to CSO investigations the average price for drinking water was 28.1 CZK/m³ without VAT and the average price for waste water was 2510 CZK/m³. Compared to 2008 there were price increases of 7.3% and 9.1% respectively

According to CSO investigations the highest average price for mains water was in the Ústí n. Labem Region, coming to 31.20 CZK/m³. It was thus 10.9 higher than the average for the republic. The highest average price for wastewater was in the Liberec Region, where, at 31.6 CZK/m³, it was 26% higher than the national average. In contrast the lowest price for drinking water (25.20 CZK/m³) was in the South Moravia and Moravia-Silesia regions. The lowest average price for wastewater (18.60 CZK/m³) was in the Pilsen Region



Fisheries and fish farming

In the CR fishing is divided up into two basic areas - production fishing and management in fishing grounds. In the territory of the CR there are more than 24 thousand fishponds and reservoirs, which represents approximately 52 thousand ha, of which 42 thousand ha are used for fish breeding. These fishponds have average annual production of around 470 kg of fish/ha. The species composition of marketed fish is relatively stable. Carp makes up 86.0% of the total volume of fish reared, herbivorous fish (silver carp, grass carp) 5.0%, salmonids 3.3%, common tench 1.3%, predator fish and other fish species 4.4%.

In 2009 the market production of fish in the CR was around 20,100 tonnes. Exports of live fish were about 45% of the total production. Annually 8 to 11% of the market production of freshwater fish is processed in the CR, this year it was 8.0%. There are 350,000 registered anglers in the various fishing clubs. Together they caught an estimated 4,100 tonnes of fish.

With accession to the EU there was an expansion in the possibilities for support in the fishing sector. Currently the main supports used are national departmental supports concerning aquaculture and freshwater fishing and the Operational Programme Fisheries 2007–2013.

State financial support for water management under the competence of the ministry of agriculture

In 2009 within the MoA programmes 229 310 "The Construction and Renewal of the Infrastructure of the Mains Water Supply and Sewers" and 129 180 "The Construction and Renewal of the Infrastructure of the Mains Water Supply and Sewers II", aimed at realising measures to meet the EU directives in the area of mains water supply and sewers, a total of CZK 1.8 billion was provided to support developing the mains water supply and sewers. According to the approved documents, programme 229 310 was planned for the period 2006–2010. With regards to the fact that in 2009–2010 this programme will deal with completing the cofinancing of multi-annual projects the MoA has prepared a new support programme to tie in – the programme 129 180, which is planned for the period 2009–2013.



In 2009 the MoA realised programmes intended to renew the water management assets of the watercourse administrators in the framework of removing flood damages from previous years, realising anti-flood measures, renewing, dredging and reconstructing fishponds and reservoirs, increasing the functionality of waterworks, renewing and building the irrigation details and optimising the irrigation network and ensuring care for the state assets in minor watercourses and the main drainage facilities. In this year the removal of the flood damages caused to legal and physical entities on the embankments and buildings of fishponds from 2006 was also financed.

In 2008 the MoA continued in administering programme 129 120 – "Support for Flood Prevention II", the MoA further realised programme 129 130 – "Renewal, Dredging and Reconstructing Fishponds and Building Reservoirs". State financial resources provided by the MoA in 2009 for capital and current expenses within the programme financing of programme 229 110 "Removing the Results of Flooding to State Water Management Assets" came to CZK 491.519 million, for programme 129 120 they were CZK 1,796.137 million and for programme 129 130 they came to CZK 618.62 million.

In all, 73 actions were financed with CZK 190.00 million coming from the state budget in non-investment resources and CZK 59.99 million in investment resources. CZK 282.18 million was drawn from an EIB loan in non-investment resources and investment resources came to CZK 86.45 million.

In 2009 the MoA initiated programme 129 160 – Sub-programme 129 162 "Support for the Renewal and Construction of the Irrigation Details and Optimising the Irrigation Network" in which 13 actions were supported with an amount of CZK 12.8 million. The MoA also initiated programme 129 170 "Support for Increasing the Functionality of Waterworks", in which two actions by Vltava River Board, s.e. were financially supported to the tune of CZK 8.61 million.

In 2009, within sub-programme 229 013, the AWMA realised the purchase of 21.7 ha of land in 51 actions for CZK 4.39 million and processed the planning documentation for modifying Loubní stream. In 2009, for the preparation of programme 129 190, the programme documentation was compiled and submitted to the MoF for approval. The programme systematically ties in with sub-

programme 229 013 and includes expenditures on acquiring and the technical renewal of the assets in the care of the MoA as administered by the state organisational component the AWMA.

State financial resources are likewise provided to other measures in water management in accordance with Section 102 (1), (b), (i) and (k) of the Water Act. Support is of a non-investment nature and is provided within the current expenditures for the specific indicator "Support for Water Management in All" of the MoA section for maintaining minor watercourses and dry reservoirs, for operating small watercourses and dry reservoirs and the associated buildings and further for the maintenance and operation of the main drainage equipment.

Legislative measures

In 2009 three acts influencing the form of the Water Act were published in the Collection of Acts of the CR and came into force:

- Act No. 157/2009 Coll., of 7 May 2009, on Disposing of Mining Waste and Changes to Certain Acts;
- Act No. 227/2009 Coll., of 17 June 2009, which amends some acts in connection with the passage of the Act on Basic Registers;
- Act No. 281/2009 Coll., of 22 July 2009, which amends some acts in connection with the passage of the taxation code.

Of the accompanying legal regulations only Government Resolution No. 203/2009 Coll., was published on the procedures when ascertaining and applying damages reimbursement and the procedure for determining their amount in areas intended for controlled flooding.

2009 brought a slight change to the Act on Water Mains and Sewerage Systems in the form of Act No. 281/2009 Coll., which amends certain acts in connection to the passage of the taxation code. The amendment concerns Section 34, which annuls Section 8 including the notes under the line no. 29b. Decree No. 428/2001 Coll., which accompanies the Act on Mains Water and Sewers, was not amended.

Priority tasks, programmes and core documents in water management

Planning in the area of water

In 2009 the first flood plans were elaborated and published in accordance with Article 13 of Directive 2000/60/EC of the European Parliament and Council of 23 October 2000 establishing a framework for the Community action in the field of water policy (the Water Framework Directive).

By the end of 2009 the representatives of the individual regions approved the first stage of the plans for the watershed areas compiled in accordance with Section 25 of the Water Act in the wording of Act No. 20/2004 Coll, and the requirements of the Water Framework Directive.

By approving plans for the watershed areas the real implementation of the Water Framework Directive began. Its ambitious objective is to attain a good state of water formations by the end of 2015, i.e. in the following two six-year cycles, in which it will be mainly necessary to meet those measures that have been primarily postponed for financial reasons.

Plans to develop the water mains and sewerage systems

The National Development Plan for Water Supply and Sewerage systems in the CR, processed on the basis of Section 29 (1) (c) of Act No 274/2001 Coll., on Public Water Supply Systems and Sewerage Systems and on amendments to some other Acts, as amended is located on the MoA internet pages. The MoA continued in issuing its positions on the valid and approved Plans for water supply and sewerage systems in the regions for the proposed changes of a technical solution for supplying drinking water, removing sewage and treating waste water.

WATER information system of the Czech Republic

In 2009 the MoA and MoE continued implementing the interdepartmental project entitled Information System for Public Administration – VODA, which was officially started in 2005. the main aim of this interdepartmental project is to try and provide the professional and general public with enough trustworthy and relevant information on water for decision-making, education and general information, if possible in a unified and effective form in one place.

www.voda.gov.cz www.water.gov.cz www.voda.gov.cz/wap



International cooperation in water protection

Cooperation in the UNECE framework

The CR develops the principles of water protection and management on the basis of the hydrological river basins and the hydrological regions crossing the borders of countries in accord with the UNECE Convention on the Protection and Use of Transboundary Watercourses and International Lakes and the Water Framework Directive and other EC directives.

The 5th session of the meeting of the parties to the UNECE, which takes place every three years, took place in Geneva on 10 – 12 November 2009,. The meeting adopted several important documents such as the "Guide to Implementing the Convention" and "Guidance on Water and Adaptations to Climate Change" and the "Risk Management for River Basins Crossing Borders in the UNECE Region".

International cooperation on transboundary water

In accordance with Article 14 of the Government Directive for negotiating, internal discussion, validating and annulling international agreements, approved by Government Resolution No. 131 of 11 December 2004, the Minister of Environment submits information on the documents for the year's agreements on cooperating on transboundary water to the members of the government by the end of every January.

Watercourses form thirty percent of the state border of the CR. Cooperation on transboundary watercourses, which are not only watercourses forming the border but also watercourses crossing these borders, is regulated by bilateral interstate or inter-governmental agreements and conventions. To ensure they are met there is a bilateral commission for water management issues on transboundary watercourses or a direct governmental commissioner for cooperation on transboundary watercourses.

The protocols from the bilateral agreements on cooperation on transboundary water are available at all of the departments concerned and are deposited at the MoE. The results are also available on the web page at www.mzp.cz/cz/voda.

International cooperation in water protection in the Elbe, Danube and Odra integrated river basins.

A significant part of the Czech Republic's international cooperation in water protection is cooperation within the international commissions for protecting the Elbe, Danube and Odra integrated river basins, that being on the basis of the "Agreement on the International Commission for the Protection of the Elbe", the "Convention on Cooperation for the Protection and Sustainable Use of the Danube" and the "Agreement on the International Commission for the Protection of the Odra from Pollution". By means of these activities the CR also contributes to protecting the North, Black and Baltic seas and takes part in the coordinated implementation of the Water Framework Directive in these international river basins.

Research and development in water management under the competence of the Ministry of Agriculture

In 2008 the MoA financed specific research and development projects in the area of water management amounting to CZK 43 million. For R&D projects started in 2007 an amount of CZK 5,605,000 was invested, CZK 24,766,000 was provided for R&D projects started in 2008 and R&D projects started in 2009 obtained CZK 12,529,000.

Eight new R&D projects dealing with water management issues were started in 2009. The R&D projects are primarily aimed at land and water protection with sustainable development in the agrarian sector, the creation, revitalisation and protection of cultural landscapes, forests and water bodies, rational water management and dealing with the impacts of climate change.





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