

### Ministry of Agriculture

**SUPPORTING OUR RURAL TRADITION & DEVELOPMENT** 



## THE CZECH REPUBLIC

In an international comparison the Czech Republic is a country with a higher than average proportion of arable land in relation to its total area and a marginally above average percentage of forested land, although only about half the value found in Scandinavian countries. In terms of built-up and other areas, the Czech Republic is rather below the average, particularly in comparison with Germany, the United Kingdom, France and Italy, where the percentage of built-up and other areas is high.

#### **FACTS AND DATA**

Area:	78 867 km <sup>2</sup>
Length of national borders:	2 303 km
Population:	10,512,208 (as of 30 June 2012)
Capital:	Prague (population 1,245,370 as of 30 June 2012)
Population density:	I33 inhabitants/km²
Time zone:	Central European Time
Political system:	parliamentary democracy
Member of EU:	since   May 2004
Currency:	Czech crown (koruna, CZK)

#### **INDICATORS FOR THE AGRICULTURAL SECTOR (2011):**

Agricultural land (thous. ha)	4,229
Arable land (thous. ha)	3,000
Arable land as % of agricultural land	71.4
Forest (thous. ha)	2,596
Number of agricultural workers (persons)	106,200
Agricultural foreign trade balance (CZK billions)	-34.7
Industry structure - natural and legal persons engaged in agriculture	
Total	47,233
Natural persons	43,543
of which - agricultural entrepreneurs	26,609
Legal persons - total	3,690
of which - companies - total	2,932
of which - limited liability companies	2,188
- joint-stock companies	706
- cooperatives	536
- other	222
Permanent grassland (ha)	989,292
Hop gardens (ha)	4,336
Vineyards (ha)	19,633
Plantations (ha)	22,500
Average farm size (ha)	83.6

# THE MINISTRY OF AGRICULTURE

The Ministry of Agriculture is the central public administrative authority for agriculture, the water sector and the food processing industry, and for forestry, game management, hunting and fishing.

The Ministry is also the central public administrative authority for **commodity exchanges** which organise trade in goods originating from agricultural and forestry production.

In addition to this, it acts as the central public administrative authority for veterinary and phytosanitary services, food safety and quality management, the prevention of cruelty to animals, and protection of rights in regard to new varieties of plants and breeds of animals.

The Ministry of Agriculture is in charge of the Czech Agricultural and Food Inspection Authority, the State Veterinary Administration of the Czech Republic, the State Phytosanitary Administration of the Czech Republic, the Central Institute for Supervising and Testing in Agriculture and the Czech Breeding Inspection Authority.

#### The seat of the Ministry of Agriculture

Originally, after 1918, the offices of the Ministry of Agriculture were scattered around Prague at various locations. Agricultural businessmen were unhappy with this situation, and they therefore pressed for a single, independent building. For this purpose, a four-storey building in the well-proportioned neoclassical style was erected on the former Petrské embankment. The foundation stone was laid on 18 May 1928 and the building was approved for use in 1932. The portal is decorated with four allegorical sculptures of seated female figures symbolising agricultural labour.







# Crop production

#### **CEREALS**

Cereal production underwent some very complex developments in the early 1990s. As a result of social changes, transformations, privatisations and numerous other causes, average yields per hectare and the levels of production of all cultivated cereals significantly decreased in comparison with harvests in the European Union.

However, this crop sector has gradually begun to stabilise in recent years. In 2011, cereals accounted for almost 49 % of total arable land use in the Czech Republic. Although cereal production fluctuates depending on the weather, its average for the period 2001–2011 was 7,390,000 tonnes, which is sufficient for the needs of domestic consumption.

The main cereal cultivated in the Czech Republic is **winter wheat**, which has a dominant position on the market, accounting for roughly 55 % of all cereal production. It is used in the production of food, feed mixtures, and as a raw material for the production of bioethanol. It is also an important export crop. The total area under wheat in 2011 was 863,000 ha, and production reached 4,913,000 tonnes.

In terms of barley species, the most commonly grown is **malting spring barley**. This is a typical export commodity (malt, beer and malting grain) for the Czech Republic, which has a 5 % share in total world exports of malt. The total area under spring barley in 2011 was 272,000 ha, and almost 1,346,000 tonnes was produced.

In the Czech Republic there continues to be increasing interest in the cultivation of **grain maize**. Over the last seventeen years its production has increased elevenfold. For example, in 2011 farmers harvested almost 1,064,000 tonnes of maize from 121,000 ha of land. As regards the use of **genetically modified organisms**, Bt maize has been cultivated for production purposes in the Czech Republic since 2005. However, this accounts for only a marginal share of total agricultural production.

#### **OILSEEDS**

Oilseeds have an important place among the crops grown in the Czech Republic both in terms of the area sown and the commodity's market value and export potential. The advantages of the Czech Republic as regards the cultivation of oilseeds are its favourable climatic conditions and its developed use of mass-production technology.

The area under oilseeds has increased more than threefold since the early 1990s reaching 464,000 ha in 2011. The most commonly cultivated oilseed crop in the Czech Republic is **oilseed rape**, accounting for approximately 80 % of the total area under oilseeds. As a result of growing domestic processing capacities and the increase in the percentage of components of vegetable origin used in biofuels, exports of rapeseed going to outside the Czech Republic decreased by almost 45 % in 2010 and 2011.

A relatively stable area of about 25,000 ha is sown with **sunflowers**, with a production level of 50-60,000 tonnes. Meanwhile, however, due to a significant decline in market prices the area sown with **poppy** has fallen from over 60,000 ha in 2009 to around half that in 2011.

#### **LEGUMES**

The cultivation of legumes has a long tradition in the Czech Republic. In recent years, however, the areas planted with these crops have been decreasing, and currently total 20,000 ha (0.8 % of arable land). Regardless of the ongoing decline in the area of cultivation, field pea remains the dominant legume in the Czech Republic.



#### **SUGAR - SUGAR BEET**

The Czech Republic is a traditional medium-sized producer of sugar and a net exporter, i.e. has a permanent balance of trade surplus. 2011, for example, was its most successful year in history. Whereas in 2010/2011 Czech farmers produced around 433,000 tonnes of sugar (i.e. 8.79 tonnes per hectare), in 2011/2012 this figure reached 564,000 tonnes (i.e. 11.25 tonnes of sugar from each hectare).

The area of fields planted with sugar beet for the fermentation of ethanol has been marginally increasing in the last few years. In 2011/2012 the area harvested in the Czech Republic was over 59,000 ha, of which more than 9,000 ha of crop was used for ethanol production.

#### **POTATOES**

Potatoes are a traditional Czech crop. In 2011, for example, an average yield of 29 t/ha was produced from an area of 33,580 ha, resulting in total potato production of almost 974,000 tonnes, of which over 52,000 tonnes were early potatoes and over 84,000 tonnes seed potatoes. Despite these figures, in the same year more than 151,000 tonnes of potatoes were also imported into the Czech Republic, while over 42,000 tonnes were exported.



#### **VEGETABLES**

Czech farmers have been losing interest in vegetable cultivation over the long term. Currently, the areas cultivated amount to just over 14,000 ha, which is roughly a 15 % decrease compared to 2007.

It is interesting to note that changing lifestyles and new eating trends have led to a drop in the consumption of the types of vegetables which are time-consuming to prepare in the kitchen. On the other hand, lettuce, cocktail and cherry tomatoes, kohlrabi, radishes, peppers and asparagus are becoming increasingly popular. However, the most commonly cultivated vegetables are still onions, head cabbage, carrots, tomatoes, wrinkled peas and gherkins.

The structure of the vegetable farming industry is changing. In the Czech Republic there are approximately 460 vegetable farmers using a total area of 9,700 ha,

of which 57 % is farmed by 23 growers cultivating areas greater than 100 ha. Most vegetable farmers are small market gardeners (cultivating an area of up to 1 ha), who generally specialise in selling vegetables directly to consumers or at markets.

In recent years, there has been a yearly increase in the number of farmers growing their produce in accordance with the rules of integrated production (in line with the Czech "IPZ" system of integrated vegetable cultivation). The primary aims of this system are to protect the environment and human health, to comply with the procedures of good agricultural practice, to apply preventive methods and methods for the detection of harmful organisms and agents in vegetation, and to take subsequent targeted protective action.



#### **FRUIT**

The main species of fruit grown in the Czech Republic are apples, along with cherries, plums, apricots, pears and currants. Traditionally, much of the Czech population grows its own fruit, and self-supply accounts for approximately 30-40 % of total fruit production in the country.

In recent years, the total area of fruit plantations in the Czech Republic has been in the region of 22,500 ha, of which 16,500 ha are registered as fruit-bearing production plantations, which are crucial for the production of fresh market fruit. According to statistics, an average of 354,000 tonnes of fruit are grown in the Czech Republic each year, of which about 150,000 tonnes are harvested precisely from these production plantations.

In this context it must be noted that up to 46 % of production plantations are overmature, and their productivity is declining. However, subsidy policy is successfully preventing any further increase in the proportion of overmature plantations, and is maintaining the status quo. Over the period 1995-2011 a total of 10,629 ha of production plantations were planted in the Czech Republic, of which 8,653 ha were created with support from government subsidies.

The Czech Republic currently has 280 fruit growers, with plantations totalling over II,000 ha, who are participating in its integrated production system (the Czech "IPO" system of integrated fruit cultivation). The main aims of this system are to protect the natural environment at plantations and the organisms that live in them, and to ensure the species diversity of naturally occurring or introduced (non-indigenous) plant and animal species both in plantations and their surrounding areas.

#### **HOPS**

The Czech Republic is the fourth largest producer of hops in the world (after Germany, the USA and China). The predominant cultivar is Saaz semi-early red-bine, which in 2011 covered more than 87 % of the total cultivation area. Due to developments on the world hop market, the area used for hybrid varieties of hops has significantly decreased and the total size of planted areas has stagnated.

#### **GRAPES**

Wine consumption per capita has been progressively increasing since 1989, and is currently around 20 litres per year. A third of the wine consumed comes from domestic production, with the other two thirds consisting of imports from the EU and third countries.

Vineyards currently cover 19,633 ha, with a total planted area of 17,198 ha. In the remaining area the vines have been grubbed up, with replanting rights allocated and a national reserve.

The most commonly cultivated varieties are: Grüner Veltliner (1,662.3 ha), Müller Thurgau (1,603.7 ha), Riesling Weiss (1,234.6 ha) and Welschriesling (1,193.6 ha), as regards white grape varieties, and Saint Laurent (1,334.9 ha), Blaufränkisch (1,190.4 ha), Zweigeltrebe (830 ha) and Pinot Noir (718.6 ha), as regards red grape varieties.

#### **ORNAMENTAL HORTICULTURE**

This sector includes the floriculture industry and the ornamental tree nursery sector. Together with the fruit tree nursery sector, these form an integral component of Czech agriculture. In the last five years this sector has had a 5-7 % share in plant production, and has accounted for 2-3 % of total domestic agricultural production. The quantity of flowers sold has been increasing every year since 2006 - in 2011 purchasers spent CZK 9,530 million on them. The greatest interest was in cut flowers, followed by potted and bedding plants.

#### MEDICINAL, AROMATIC AND SPICE PLANTS

These types of plants are interesting commodities for world trade. In the Czech Republic, the most important species in large-scale cultivation are cumin (with a total production of 3,475 tonnes in 2011), milk thistle, ergot, chamomile and poppy (poppy straw).



# Livestock production

We are striving for better conditions for the sustainable development of livestock production. Current trends in the development of pig and poultry farming concern us. Because of them, Czech producers are losing their market position, even though there are good conditions for competitive production in the Czech Republic. The current subsidy model of the EU Common Agricultural Policy mainly supports crop production. We want to focus greater attention on the development of livestock production, which means greater added value and more job opportunities in rural areas.

#### **BEEF CATTLE**

The Czech Republic is self-sufficient in terms of the production of raw cow's milk and beef. However, as a result of developments in market prices, particularly of milk, and continuously increasing milk performance, beef cattle numbers have been falling long-term. For example, as of April 2012 there were only 1,352,685 head of beef cattle on farms in the Czech Republic.

There has been a steady, long-term decline in particular in the number of cows farmed "for milk". In 2012 their number fell to 373,136. On the other hand, the number of cows raised "for meat" is growing. In 2012 their number reached 178,089.

To increase the competitiveness of cattle farming in Europe, the Czech Republic launched a National Eradication Programme on Infective Beef Rhinotraheitis in 2006 with financial support from the government. As pressure grows for greater competitiveness among milk producers, so also does the importance of other support measures, such as, for example, possibilities for the formation of associations or for cooperation among producers, for cooperation between producers and processors and for closer contact between producers and final consumers. An important measure which improves consumer awareness is the support programme "School Milk". The project has an educational character, and has been in operation in the Czech Republic since 1999.

#### **SHEEP AND GOATS**

Sheep farming is primarily important for the effective utilisation of permanent grassland and for maintaining it in a good state of cultivation. This is an important business activity, while quality lamb meat or goat milk products can also extend the range of goods on offer on the market. Sheep and goats also help maintain rural settlements in mountain and foothill areas. The level of production of sheepmeat and goatmeat has been increasing since 2005. For example, in April 2012 there were 221,000 sheep and goats in the Czech Republic, representing year-on-year growth by 11,962 head of sheep (5.7 %) and 357 goats (1.5 %).

#### **PIGS**

Pork is very popular in the Czech Republic. In the 4th quarter of 2011, the average household spent CZK 1,995 per person per month on food and non-alcoholic beverages. Of this sum, 24 % went on meat and meat products, with pork accounting for a half of these. Converted to values per capita, in 2010 each resident of the Czech Republic consumed over 41 kg of pork meat (out of almost 76 kg of meat per person per year).

Despite these figures, however, the number of pigs in the Czech Republic is falling - in April 2012 there were 1,578,827. This is mainly due to the introduction of a very liberal trade environment following accession to the EU, as a result of which the Czech Republic imports pork and live pigs, especially piglets, from abroad.

On the other hand, thanks to the intensification of breeding activities, reproductive and fattening performance have improved, along with slaughter value. The number of piglets bred per sow has increased in most regions, reaching an overall total of 23.5 piglets per sow in 2011.

#### **POULTRY AND EGGS**

Due to rising input costs and low purchase prices, poultry production is declining. Production of poultry meat was 10 % down in 2011 compared to 2010, despite the fact that the consumption of poultry meat marginally increased thanks to its cost and ease of preparation. However, domestic production is insufficient to meet demand, and poultry is therefore imported from abroad.

The situation with egg production is similar, showing a drop in recent years. The gap between demand and supply is covered by imports from abroad. The number of laying hens decreased in 2012 due to the mandatory changeover of chicken farm technology to "enriched cages", resulting in increased costs for breeders. It is estimated that egg production therefore decreased by about 7%, while consumption stagnated. Nonetheless, eggs still remain among the cheapest sources of protein on the domestic market.







#### **KLASA**



Since 2003, the Minister of Agriculture has been awarding the national designation KLASA ("TOP CLASS") to the highest quality food and agricultural products. Products marked "KLASA" must possess at least one feature of exceptional quality that enhances their added value and guarantees their uniqueness in comparison with the standard products available on the market. As of October 2012, 1,237 products from 221 producers had been awarded the distinction of a KLASA label.

#### "REGIONÁLNÍ POTRAVINA"



"Regionální potravina" ("Regional Food Product") is a designation which may be awarded to the best products from each region. They must excel in terms of their quality, be made from local ingredients, use a traditional recipe and have an excellent taste. This project is aimed at supporting domestic producers of local foods, and motivates customers to look out for such products in shops, at farmers' markets and when buying direct from the producers. In 2012, for example, when the annual competition was held for the third time, consumers could already choose from a total of 273 award-winning products.



#### **FARM FESTIVALS**

The "Farm Festivals" project is aimed at teaching the public about rural life. It comprises a series of all-day events for families and children at chosen farms. Thanks to this project, the general public can get a glimpse of life on family farms, where children can learn through games about traditional farming practices and

#### **FOOD SAFETY INFORMATION CENTRE**

The Food Safety Information Centre (FSIC) is part of the Food Authority of the Ministry of Agriculture. It provides the public with accurate and comprehensive information covering the whole food production chain, i.e. from farm to fork. As well as food safety, the FSIC also focuses on public nutritional issues. The main communication channels used by the FSIC are the website www.bezpecnostpotravin.cz designed for the professional community, and web applications for consumers and young people at www.viscojis.cz. The FSIC also organises specialist seminars for the public and youth education programmes.

the nation's natural and cultural wealth. Farm festivals increase the public's interest in quality, domestically-produced food, and provide support for Czech farmers. They also help people to find farmers in their local area from whom they can buy fresh, quality farm produce directly on the farm itself ("farm-direct sale").

#### "FOOD PILLORY"

The aim of the Food Pillory project is to offer Czech and European consumers up-to-date information about poor quality, adulterated and dangerous foods, thus providing them with a guide to the market. A web application accessible at www.potravinynapranyri.cz allows visitors to find out information about specified unsatisfactory food and drink products by name, type, seller, country of origin and distributor.





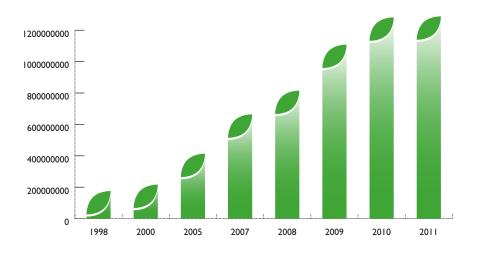


Organic farming is a modern way of working the land without using chemicals, enables the production of high-quality food and is an integral part of the agricultural policy of the Czech Republic. As well as producing organic food, it also contributes to better living conditions for farm animals, environmental protection and greater biodiversity.

Czech farmers are showing increasing interest in the production of organic food. As of the beginning of 2012 there were already 646 organic food producers registered in the country, along with 3,920 organic farmers working an area of 482,927 ha, which represents 11.4 % of all agricultural land. Of this, 59,281 ha was arable land, 6,453 ha plantations, and vineyards accounted for an area of 965 hectares.

Since 2007, organic farmers have been paid area aid under the Rural Development Programme 2007-2013, where organic farming is one of the agri-environmental measures.

Funding paid - area payments for land classified as used in organic farming or in a transitional period, in the years 1998–2011:



### ACTION PLAN FOR THE DEVELOPMENT OF ORGANIC FARMING IN THE CZECH REPUBLIC 2011–2015

In collaboration with non-governmental organisations the Ministry of Agriculture has prepared an Action Plan for the Development of Organic Farming in the Czech Republic 2011–2015, which follows on from the Action Plan to 2010. The Czech government adopted the new Action Plan in December 2010.

The main objectives of the Action Plan are to achieve a 15 % proportion of organic farming by 2015, a 60 % share of Czech organic foods in the organic foods market, and a 3 % share of organic foods in the food market overall.

#### **ORGANIC FOOD - THE MARKET AND TRADE**

Each inhabitant of the Czech population spends around CZK 200 on organic food products per year, and the share of organic food in total consumption has remained approximately 1 % over the long term. About 60 % of organic food is imported, and total sales of organic food, including exports, are currently at the level of around CZK 2.1 billion.

Czech consumers buy most organic food from retail chains (67 %), followed in second place by health food and organic food shops (20 %). In 2011, another approximately 4 % of organic food was purchased in pharmacies, and sales at drugstore chains also substantially increased (3 %). The share of direct sales of organic food (consisting of farm-direct sales and direct purchases from producers and distributors) accounts for a further 4 %, the share of sales at independent small food shops is 1 %, and around 1 % of organic food is sold in restaurants.

The Water Sector







#### **WATERCOURSE MANAGEMENT**

The Czech Republic is known as the "roof" of Europe. Its main hydrographic network consists of approximately 108,500 kilometres of watercourses (running through both natural and modified channels).

The Ministry of Agriculture is the founder of five state-owned "River Basin" enterprises ("Povodí") and the state-owned enterprise "Forests of the Czech Republic" ("Lesy České republiky"), which perform the role of watercourse administrators and currently manage around 92 % of all Czech watercourses by length. A further 5.6 % of watercourses are managed by other entities, including the Ministry of Defence, the National Parks Administration, and additional natural and legal persons.

Since 2011 the state-owned River Basin and Forests enterprises have also taken over the management of the small water-courses transferred from the former Agricultural Water Management Authority (AWMA).



#### **MAP OF RIVER BASIN DISTRICTS**

Basin district of the Upper and Middle Elbe
 Basin district of the Berounka
 Basin district of the Ohře and Lower Elbe
 Basin district of the Morava
 Basin district of the Oder
 Basin district of the Thaya



#### **INVESTMENTS INTO FLOOD PROTECTION MEASURES**

The impetus to create a modern flood protection system came from the extreme floods that hit Moravia in 1997 (when 60 people lost their lives and the damage exceeded CZK 63 billion) and Prague five years later (claiming 19 victims, with damage valued at over CZK 75 billion).

#### **Stage I, 2002-2007 ("Start of Work")**

The first stage of the construction programme to implement preventive flood control measures focused on the areas impacted by the floods of 1997 on the Morava and Oder rivers and the Upper Elbe. By the end of 2007, 435 flood control structures had been built on and in the vicinity of these watercourses, which today protect 315,000 people and property worth CZK 240 billion. More than CZK 4 billion was spent on this stage of preventive flood control measures.

#### **Stage 2, 2007-2013 ("Development")**

The primary objectives of the second stage were to implement technical measures in the vicinity of watercourses, to improve the retention of water bodies, and to increase the security of hydraulic structures on rivers such as the Vltava, the Tichá Orlice, the Ohře and the Morava. By the end of 2013, approximately 500 flood control measures will have been implemented at a cost of CZK 11.5 billion. As of mid-2012, 388 constructions have already been completed or are in progress, supported by more than CZK 7 billion in funding.

#### Stage 3, 2014-2020 ("Retention")

The third stage, which is now under preparation, prioritises measures to increase the water retention capacity of the landscape. This involves measures to reduce flood risk in the basin of the upper reaches of the Opava river - the Nové Heřminovy dam - and the preparation of flood control measures in the basin of the Bečva - the Teplice dry detention basin. These measures will require CZK 12 billion.

#### THE VODA INFORMATION SYSTEM

Since 2005 the Ministry of Agriculture has been collaborating with the Ministry of the Environment on the implementation of an interministerial project entitled VODA ("WATER") - Public Administration Information System. This system provides the public with access to continually updated information on water levels, operations at reservoirs and levels of rainfall. The system significantly helps to limit impacts in the event of floods. Its benefits are also appreciated by users outside the Czech Republic (6 language versions allow the information to be used in all the neighbouring countries), and it has even became a model for creating similar water management systems in other European countries.



#### WATER SUPPLY AND SEWERAGE SYSTEMS

As of 2011, 9.8 million inhabitants of the Czech Republic, i.e. 93.4 % of the total population, were connected to a public water supply system, mainly thanks to the construction of new water mains in the outskirts of towns and municipalities. According to monitoring carried out on the water supply network, the quality of this water is also among the best in Europe, and is constantly improving.

As of 2011, 8.672 million inhabitants of the Czech Republic, i.e. 82.6 % of the total population, were living in houses connected to a sewerage system. A total of 487.6 million m³ of wastewater was discharged into these sewerage systems, and of that amount 96.8 % was treated (not including stormwater). The number of inhabitants in households connected to a sewerage system grew year-on-year by 58,317.

In 2011, the total length of the sewerage network was extended by 1,009 km to reach the value of 41,911 km. The number of wastewater treatment plants also increased by a further 63 from the preceding year, which means that the Czech Republic now has 2,251 functioning WWTPs.

Over the years 2008-2011, an aid programme for the development of water infrastructure - water supply systems, sewerage systems and wastewater treatment plants - which was financed from national sources, helped to cover the costs of 598 water supply construction projects and 620 sewerage construction projects. The total support provided amounted to CZK 7.9 billion.

Developments in the number of inhabitants living in houses connected to sewerage systems, and the quantities of discharged and treated wastewater. 1989 and 2001–2011

(left: millions m³ per year - right: thousands of inhabitants) 1000 900 800 700 600 500 400 300 200 100 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 wastewater discharged into the sewerage system population connected to a sewerage system

treated wastewater including stormwater

Source: Czech Statistical Office

# Forestry







#### **ORGANISATIONAL STRUCTURE**

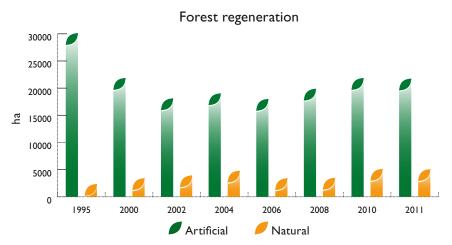
Forests cover a total area of 2,595,936 hectares, the largest part of which (just over 50 %) is national forest managed by the state-owned enterprise Forests of the Czech Republic (Lesy ČR, s.p.), with additional major owners being private entities, municipalities, towns and cities. Relatively small parts also belong to other owners. No major changes in the ownership structure have occurred in recent years, although state ownership has been very slowly decreasing over time.

#### **SPECIES COMPOSITION OF FORESTS**

The area covered by coniferous trees is decreasing, e.g. the area of spruce forest has shrunk since 2000 by 55,591 ha, while the proportion of deciduous trees, especially oak and beech, has been increasing. This is the result of sustained efforts by foresters to achieve an optimal species composition for forests. These efforts have received long-term support in the form of the government's targeted subsidy policy. Support for the improvement of forest species composition can also be utilised under the Rural Development Programme of the Czech Republic 2007-2013.

#### **FOREST REGENERATION**

Forest regeneration is a prerequisite for the sustainable and balanced performance of all forest functions. Natural regeneration is an appropriate approach in areas where the species composition of the trees and their ecotypes match the given habitat. Amongst other things, its success is limited by the site conditions.



Source: Czech Statistical Office

#### **TIMBER STOCKS**

The total stock of standing timber in Czech forests is growing, and has more than doubled since 1930 (its 2011 level was 683 million m³). Moderate growth in the stocking density of stands, an increase in the proportion of older trees and growth in normal increment have all played a part in this. However, not all stocks are equally accessible for timber extraction. The amount of harvesting in protective forests and special purpose forests is limited by the need to perform protective functions or special-purpose management in forests with an enhanced protection regime, in reserves, and in the primary zones of national parks, where timber extraction is almost prohibited.

The average stock per I ha of forest land is 263.1 m³ of timber (where this average has been calculated over all forest land including unstocked areas). The Czech Republic ranks 2nd in Europe in terms of its timber stocks per hectare, and is 6th in terms of annual increment per hectare. This testifies to the enormous productive capital of the country's forests.

#### **TIMBER EXTRACTION**

A total volume of 15.38 million  $m^3$  of wood in the rough was harvested from Czech forests in 2011, representing a drop from the previous year by 1.36 million  $m^3$ . Approximately the same amount of timber was also extracted in 2009.

The total volume of extracted timber is less than the increment in the amount of wood in stands over each given period. This testifies to the fulfilment of the principle of sustainable management which is applied in all countries with developed forestry, among which the Czech Republic undoubtedly belongs.

#### **GAME MANAGEMENT AND HUNTING**

The current system for the management of wild animals, including game, builds on a rich history. In 2011, gamekeepers managed 5,750 hunting grounds with a total area of 6,868,908 ha, of which 192 were game enclosures with an area of 46,375 ha, and 291 were pheasantries with an area of 96,910 ha. The average size of hunting grounds is 1,369 ha, game enclosures 242 ha, and pheasantries 333 ha.







#### **PROTECTION OF LAND**

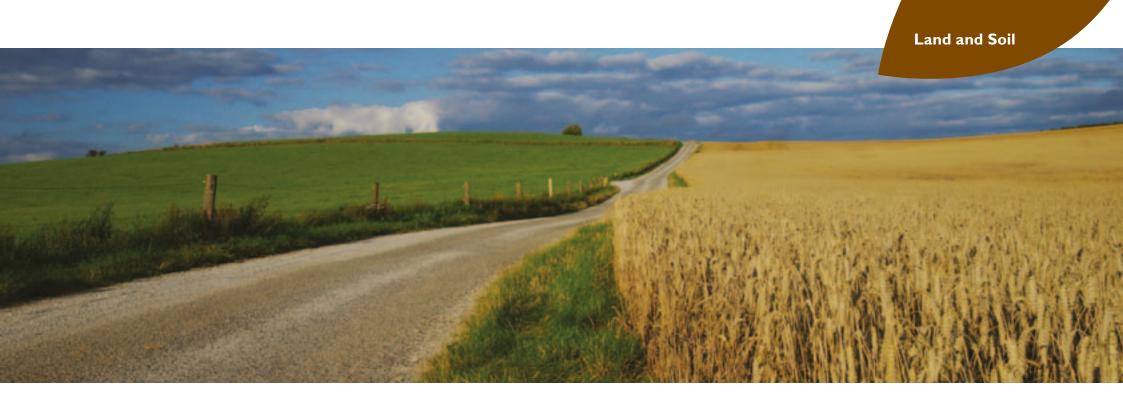
According to available studies, irresponsible land management results in an annual loss of arable land worth up to CZK 4 billion. In fact, almost 50 % of agricultural land is potentially threatened by water erosion. This would lead to the degradation of the soil as a primary factor for production, resulting in a reduction in the competitiveness of agriculture.

All available means must be used to maintain soil at the highest quality over the greatest possible area, in order to prevent further devastation of land. One of the most important tools used for land protection is the land quality evaluation information system. This comprehensive land and soil evaluation system is unique worldwide in terms of its scale and detail. Thanks to this database, the Czech Republic ranks among the countries with the most detailed and precise information about land and soil in the world. This information is widely used in public administration particularly, but also in project design work and many other applications where it may not be immediately apparent that these are based on land quality evaluation. Ecological Land Quality Evaluation Codes (in Czech "BPE]") have

become the basis for determining the basic price of agricultural land, establishing protection categories for agricultural land, and setting the selling price of land owned by the state. The Ecological Land Quality Evaluation Code system is also used in the implementation of agricultural subsidy policy.

#### **LAND CONSOLIDATION AND RE-ADJUSTMENT**

Many owners still cannot take up their ownership rights, properly manage their land and perform their ownership obligations and responsibilities. Complex ownership issues hinder the revitalisation of the land because the necessary measures can be implemented only on land parcels whose ownership has been resolved. Land consolidation and re-adjustment are therefore among the key means for furthering rural development. They allow conditions to be set up for the rational arrangement of the ownership of agricultural and forest land with respect to the management and needs of the land.



#### **SELECTED STATISTICS**

- In 2012, there were 0.39 hectares of agricultural land per capita in the Czech Republic. As a comparison, in 2009 the global average was 0.20 ha of agricultural land per capita, which is less than half the value 50 years ago.
- According to data in the Land Register, as of 31 December 2011 the Czech Republic's Agricultural Land Resources ("ALR") totalled 4,229,000 ha, which is 53.6 % of the country's total area. Compared to 2010 this represented a reduction in the area of agricultural land by roughly 4,300 ha (0.1 %).
- The year-on-year drop in ALR in 2011 consisted primarily of a reduction in the area of arable land by 7,700 ha, which was a decrease approximately 1,100 ha less than that in 2010. Meanwhile, the area of permanent grassland grew by 3,400 hectares. There has been a more rapid increase in the area of forest land, by about 2,500 ha compared to 2,200 ha in 2010, and land categorised as "built-up areas, courtyards and other areas" with an area of around 1,700 hectares. There has also been continuing growth in the area of gardens (by 100 ha)

- vineyards (by 100 ha) and water bodies (by 300 ha). On the other hand, the area of plantations has decreased.
- Since 1991, ownership of 19.8 % of agricultural land has been resolved by land consolidation and re-adjustment. A further 10.6 % is in the resolution stage. The total area of agricultural land where land consolidation and re-adjustment has been completed or is in progress is 1,288,000 ha, across 4,836 cadastral territories.
- As of 31 December 2011, according to the Land Parcel Identification System (LPIS) 1,770,000 ha of agricultural land, with 863,000 ha of permanent grassland, were classified as less favoured areas (LFA). Of this total, mountainous areas accounted for 519,000 ha of agricultural land (370,000 ha of permanent grassland), other less favoured areas 1,104,000 ha of agricultural land (329,000 ha of permanent grassland) and areas with specific handicaps 206,000 ha of agricultural land (137,000 of permanent grassland).

Agricultural Policy







The Ministry of Agriculture is one of the most successful ministries as regards the utilisation of EU funding. For example, in 2012 the total value of agricultural subsidies paid from the EU reached almost CZK 37 billion, compared to CZK 35.2 billion in 2011. In comparison with other Member States, the Czech Republic thus occupies 8th place in terms of utilisation of the budget of the Rural Development Programme.

#### THE RURAL DEVELOPMENT PROGRAMME

The Czech Republic was one of the first countries to agree a Rural Development Programme, under which funding may primarily be drawn by farmers, food producers, owners and tenants of forest land and municipalities. The Rural Development Programme (RDP) 2007-2013 allows applicants to get funding for agriculture and rural areas from the European Agricultural Fund for Rural Development (EAFRD). The total amount of funding allocated from the EAFRD is approximately  $\leqslant$  2.8 billion, which, together with the contribution from the Czech state budget, amounts to  $\leqslant$  3.6 billion over the entire seven-year period.

The objectives of the RDP are to increase the competitiveness of agriculture, to improve the state of the environment and to reduce the negative impacts of agriculture, as well as nature conservation and enhancing the quality of rural life. RDP funding also includes co-financing from the state budget. As of 30 September 2012, about € 2.4 billion had been paid out under the RDP.

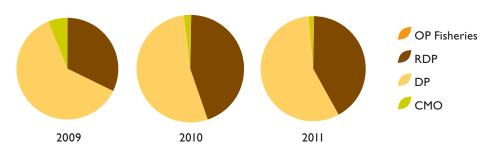
#### **DIRECT PAYMENTS**

Direct payments are among the most important categories of aid provided to Czech agriculture since the country's accession to the EU. In the vast majority of cases these are provided per hectare of farmed agricultural land registered in the LPIS, and are paid from EU resources under the Single Area Payment System (SAPS) (a simplified payment system fully decoupled from production, i.e. offering a single area payment).

In 2011, SAPS payments for the Czech Republic reached 80 % of the level of the payments provided in the old EU Member States. An equalising 20 % was therefore additionally provided in top-up payments. In total, CZK 19.9 billion was paid out in 2011, of which CZK 16 billion was under SAPS and a further CZK 2.1 billion was in top-up payments.

Direct payments also include support for selected commodities. The EU approved this funding as state aid financed from the Czech Republic's resources.

# European funding (in CZK millions)



EUROPEAN FUNDING (IN CZK MILLIONS)	2009	2010	2011
OP Fisheries	18	115	134
RDP	10660	16450	14698
Direct payments	20403	19715	19953
CMO	1962	627	467
Total paid in 2011 – CZK 35.2 billion	33043	36907	35252

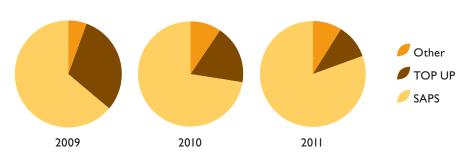
#### THE OPERATIONAL PROGRAMME FOR FISHERIES 2007-2013

The Czech Republic has an exceptional pond system which is unique not only within the European Union but worldwide. Historically, fishpond management has performed an indispensable set of functions in the Czech Republic, playing a role in water management, fishing and shaping the landscape. Fish are farmed in approximately 24,000 ponds, reservoirs and impoundments with a capacity of 420 million m³ and covering a total area of around 41,000 hectares. The average annual yield from fishponds is around 490 kg of fish per ha. In 2011, the production of marketable fish at farms reached the level of 21,010 tonnes, representing an increase of 2.9 % (i.e. 590 tonnes) from 2010.

The measures under OP Fisheries 2007-2013 are aimed at raising competitiveness, maintaining existing levels of fish production and sustaining current employment in the industry. The Czech Republic's funding for the whole programming period 2007-2013 totalled € 36.1 million, of which 75 % (i.e. € 27.1 million) came from the European Fisheries Fund (EFF) and 25 % came from national public sources.

In 2011, applicants received funding under priority axes 2, 3 and 5 of OP Fisheries

### Direct payments – funding paid (in CZK millions)



DIRECT PAYMENTS – FUNDING PAID (IN CZK MILLIONS)	2009	2010	2011
Other	1170	1878	1780
TOP UP	6230	3561	2137
SAPS	13003	14276	16036
Total paid in 2011 – CZK 19.9 billion	20403	19715	19953

totalling CZK 217.7 million, and the total amount of support paid out for the period 2008-2011 amounted to CZK 407.8 million.

# **MARKET PRICE SUPPORT**

Market price support includes both producer price support (in the form of export subsidisation, private storage aid and other price support provided in the framework of the Common Market Organisation (CMO), as well as through tariff protection) and consumer price support (e.g. by subsidising school milk and fruit).







# **SCIENCE AND RESEARCH**

The Ministry of Agriculture conceptually and methodologically manages departmental organisations engaged in research. It is responsible for the implementation of the National Research Policy and the National Innovation Strategy at the Ministry, prepares a Concept for Research and Development within the Ministry's field of competence and ensures that it is implemented, and draws up a list of priorities for national and international programmes dealing with the issues of agricultural research, development and innovation. The Ministry also coordinates collaboration in the area of ministerial R&D&I within the Czech Republic, and the involvement of the ministerial scientific research teams in European research projects.

#### **EDUCATION & TRAINING**

The Ministry organises departmental training courses, stages educational and awareness programmes for the farming community, and provides professional education for public administration staff, particularly in the areas of the law and EU legislation. The Ministry is responsible for the implementation of the Lifelong Learning Strategy, and also participates in the creation of the National Occupation System and the National Qualifications Framework in the context of agriculture, the food industry, forestry and the water sector. It also grants authorisation to educational institutions, is involved in ongoing professional education for teachers, and takes part in a number of other activities, for example in the field of environmental education.



# **ADVISORY SERVICES**

The Ministry's advisory services and information system are very important instruments of its agricultural policy. A properly functioning advisory system is vital in order to ensure the competitiveness and sustainability of Czech agriculture in a market economy.

The Ministry's advisory system has been set up on the basis of the requirements of the Common Agricultural Policy set out in applicable Czech and EU legislation. Its advisory services take a variety of forms: general information, specialised professional consultancy, both individual field information and collated information provided via a set of interconnected websites. It is supported by both national and EU funding.







The Czech Republic's turnover in agricultural trade has grown since 2004 by almost 45 %, reaching CZK 277 billion in 2011. This increase is partly due to exports from the Czech Republic, but also to imports, which predominate.

Czech farmers' largest trading partners in the EU are traditionally its neighbouring countries - Germany, Slovakia and Poland. In terms of non-EU countries, the Czech Republic trades most with Brazil and China (imports), and with Russia and Croatia (exports).

The Czech Republic's main exports are tobacco products, wheat, milk, food preparations and baker's wares. The most frequently imported items are pork meat, baker's wares, cheese and quark, food preparations, chocolate and preparations containing cocoa. Imports from third countries are naturally dominated by items not grown in the Czech Republic, such as bananas, coffee and citrus fruits. Exports mostly consist of traditional processed products such as beer, malt, non-chocolate confectionery and milk powder.



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