Ministry of Agriculture of the Czech Republic

We support traditions and rural development in the Czech Republic

MINISTRY OF AGRICULTURE
OF THE CZECH REPUBLIC

Ladies and Gentlemen,

The publication that you are holding in your hand will briefly guide you through the basic areas of our agriculture, coherently familiarise you with plant and livestock production, food, water and forest management, soil protection, agricultural research and education, agrarian trade and the subordinate organisations of the Ministry of Agriculture of the Czech Republic (herafter also as "MoA"). The aim is to offer you clear information about this Ministry.

One of the Ministry of Agriculture's priorities is the promotion of healthy and high-quality domestic foodstuffs. Therefore, support is given to quality products, for instance by granting quality certificates such as Regional Food Product and Klasa. Support is also given to organic production and farm-gate sales. Did you know that the Czech Republic is among the top 10 countries with the highest proportion of land under organic agriculture out of the total area of agricultural land? You can read all about this in our Guide.

The Ministry is striving to improve the conditions for sustainable development in livestock production, which provides more job opportunities in the countryside. Pork is traditionally the most popular type of meat in the Czech Republic, but would you have guessed that every inhabitant eats 40 kilograms of pork per year, and only about 25 kilograms of poultry meat?

Crop production is also used to obtain important foodstuffs and at the same time it substantially influences the landscape and the environment. Did you know that the Czech Republic is the largest producer of fine aromatic hops in the world?

Water management is another very important area that falls under the Ministry of Agriculture. It includes protection against floods and drought and developing the network of water supply and sewerage systems. More than 94% of households are supplied from the mains public water supply and almost 85% of the population of the Czech Republic is connected to the sewerage system. Flood control measures continue, aimed at increasing the landscape's capacity to retain water.

By means of the Lesy ČR (Forests of the CR), the Ministry of Agriculture manages half of the forests in the Czech Republic. The area of the main coniferous trees, i.e. spruce and pine, is decreasing, while sites where fir grows are increasing. The proportion of deciduous trees is also increasing, in particular beech and oak, which is a testament to the foresters' sustained efforts to achieve the optimal species composition of forests.

Another important aim is the protection of the soil as a natural resource. The Ministry is strengthening anti-erosion measures, such as greening and observing good farming practices. Under the EU's Common Agricultural Policy, the Ministry is seeking to improve our farmers' position on the European market. It is concerned about overall rural development and the living standards of its inhabitants.

The Ministry of Agriculture has a very broad field of competence. It represents the interests of thousands of farmers as well as food manufacturers, foresters, fishermen and other professionals. At the same time, it manages areas that have an impact on everyone, because the environment, water, soil and food quality affect us all.

I hope that our publication will serve as a friendly guide to introduce you to the main issues of the Ministry of Agriculture.

The Ministry of Agriculture of the Czech Republic

Facts and Data

Area	78 870 km^2
Length of the border	2 327 km
Population	10 578 820 as of 1 January 2017
Capital	Prague (1 280 508 inhabitants as of 1 January 2017)
Population density	134 inhabitants/km^2
Time zone	Central European Time
Political system	Parliamentary democracy
EU Member	Since 1 May 2004
Currency	Czech crown (CZK)

Indicators for agrarian sector (2016)

Agricultural land (thous. ha)			4 208
Arable land (thous. ha)			2 966
Arable (%)			70
Forests (thous. ha)			2 670
Number of agricultural workers (persons)			96 400
Balance of agrarian foreign trade (billion CZK)			-23
Business structure of natural and legal persons in agriculture			
Total			47 604
Natural persons total			43 153
of which	agricultural entrepreneurs		23 188
Legal persons total			4 451
of which	business corporations		3 609
	of which	Ltd.	2 841
		Inc.	728
		cooperatives	517
		other	325
Permanent grassland (thous. ha)			944.9
Hop fields (thous. ha)			5.2
Vineyards (thous. ha)			15
Orchards (thous. ha)			18.2

Source: ČÚZK (State Administration of Land Surveying and Cadastre, SALSC),
ČSÚ (Czech Statistical Office, CZSO) and ÚZEI (Institute of Agricultural Economics and Information, IAEI)

The Ministry of Agriculture of the Czech Republic

We take care of the harmonious development of agriculture and the landscape

Pursuant to Act No. 2/1969 Coll., on the Establishment of Ministries and Other Central Government Authorities of the Czech Republic, the Ministry of Agriculture is the central body of the State administration of agriculture, water management, the food industry and forest management, hunting and fishing outside the National Parks.

The Ministry of Agriculture is also the central body of State administration in matters concerning commodity exchanges, which organises trade in goods from agricultural and forestry production, including products resulting from their processing. Furthermore it is the central body of State administration in matters of veterinary care, phytosanitary care, care of foodstuffs, the prevention of cruelty to animals and protection of the rights of new plant varieties and animal breeds.

The Ministry of Agriculture manages 43 subordinate organisations (see the chapter Subordinate Organisations), closely co-operates with departmental research institutes, non-governmental organisations, individual professions and interest groups, associations and societies.

Working in tandem with the State Agricultural Intervention Fund, the Ministry of Agriculture carries out measures for the common organisation of the European Union's markets, direct payments, national supplementary payments for direct support, structural support programmes and rural development programmes.

It is not the Ministry's task to manage or plan agricultural, forestry or food production; instead it is to define the relevant legal regulations forming the borders in which our entrepreneurs can move. Whilst so doing, the Ministry of Agriculture stems from the government's agricultural policy, the government's programme declaration and the Common Agricultural Policy of the European Union. Its aim is to support the "European Agricultural Model", with an emphasis on developing multifunctional agriculture focusing on agricultural production, as well as on services that lead to landscape maintenance and creation, other environmental services and non-agricultural activities. Ever greater importance is given to a deeper connection between agriculture and rural development and renewal.

THE ORGANISATIONAL STRUCTURE OF THE MINISTRY

The Ministry is made up of seven sections, four separate departments. These organs can be divided into two groups according to the nature of their activities. One group involves organs primarily providing the Ministry's personnel, organisational, economic and communication agenda: the State Secretary Section, the Legal and Information Technology Section, the Minister's Office Department, the Security Policy and Crisis Management Department, the Audit and Supervision Department and the Minister's Cabinet Unit. The second group is made up of specialised departments that are responsible for individual agendas according to the Competence Act. These are the Water Management Section, the Forest Management Section, the Agricultural Commodities, Foreign Relations and Organic Production Section, the EU Funds, Research, Develompent and Education Section and the Food Production Section – Food Authority.

THE MINISTRY BUILDING

The Ministry of Agriculture is located in Prague's Těšnov district, in a historical building built in 1928–1932 according to the plans of the architect František Roith. It is a spacious five-storey building in the spirit of modern Classicism that takes up an area equal to an average city block. Every year the building is open to the public on the Open-door Day for Prague's monuments.

CONTACT DETAILS

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Plant and Livestock Production

We support traditions and the development of agricultural production

Agricultural production and the associated production of food is one of the traditional and important sectors of the national economy. In crop production, the cultivation of cereals and oil seeds predominates. Under prevailing conditions in the Czech Republic, there is also the cultivation of grain, potatoes, sugar beet, hops, fruit, vegetables and grapevines. Furthermore, medicinal and culinary herbs, flowers and nursery products are also grown. Livestock production focuses on breeding cattle, pigs, poultry and sheep and goats. However, we cannot ignore the expanding areas of breeding rabbits, fish, bees and horses.

Plant Production

CEREALS

At the start of the nineties, cereal production underwent a very difficult period. As a result of social changes, transformation, privatisation and a number of other causes, the average yields per hectare decreased significantly, as did the production of all cereals compared to the results of harvests in the European Union.

In recent years, this sector of plant production has gradually started to stabilise. In 2016 the overall acreage of arable land taken up by cereals was 46%. Compared to the previous year it is a drop by about 1%. Although cereal production has quantity variations depending on the weather, its average for the 2006–2016 period was 7696000 tonnes, which is more than sufficient for domestic consumption.

The most important cereal grains grown in the CR is **winter wheat**. It has a dominant position on the market, making up about 60% of all cereals. It is used to produce food, feed mixtures, is the raw material for producing bio-ethanol and is an important export crop. The total area under wheat (winter and spring) in 2016 was almost 840000 ha and production reached 5455000 tonnes.

As concerns the barley mix, **spring malting barley** predominates, which is a typical Czech export commodity (malt, beer and grain for malting). It has a 5% share of the total world export of malt. In 2016, spring barley was sown on an area of 221700 ha and its production was 1208000 tonnes.

In the CR there is ever-rising interest in cultivating **grain maize**. Over the past 20 years, its production has grown more than seven-fold. In 2016, farmers harvested 846000 tonnes of maize from 86400 ha. In the context of the use of **genetically modified organisms**, Bt maize has been grown in the CR for production purposes since 2005. However, this represents a marginal share of total agricultural production and its acreage in 2016 was only 75 ha.

OILSEEDS

Among the crops grown in the CR, oilseeds take up a significant position, which stems from their high demand on the market, both domestic and foreign. The advantages for cultivating oilseeds in the CR are the favourable climatic conditions and well-mastered large-scale production technology.

Compared with the early 1990s, the area under oilseeds has increased more than threefold. In 2010, oilseeds were grown on the biggest surface area ever, 490000 ha. In the following five years, the area of oilseeds fluctuated, in 2016, a total of 470000 ha was sown. The most commonly cultivated oilseed in the CR is oilseed rape, which comprises approximately 84% of the oilseeds grown. On average, about 27% of the domestic production of oilseed rape is exported from the CR. An average of 27% (the average for the last 5 years) of domestic production of oilseed rape is used for food purposes. From 2011, a drop was noted in the area used to grow sunflowers (28000 ha) to less than 16000 ha in 2016. Due to the higher market prices, the area of poppy increased from 18000 ha in 2012 to almost double that, 36000 ha, in 2016.

LEGUMES

The CR has a long tradition of growing legumes; however, in recent years their area has declined. Only a few species of legumes are currently grown in the CR. This primarily concerns green pea and, in smaller volumes, soybeans and lupins. Other species, i.e. broad bean, vetches, beans and other legumes previously grown are presently only grown on very small areas. The acreage of grain legumes in the CR in 2016 was 35 633 ha, which represents almost 1.2% of the arable land.

POTATOES

Potatoes are among the traditional Czech crops. They contain significant amounts of polysaccharides, suitable as a source of energy; they have some of the nutritionally most valuable proteins of plant origin and contain almost no fat. They have high vitamin content, especially vitamin C and minerals, such as potassium, magnesium, iron and phosphorus. They are a rich source of antioxidants, which protect the human body against the effects of free radicals.

In 2016 potatoes were grown in the Czech Republic on an area of 29 500 ha with an average yield of 28 t/ha, with over 23 400 ha in the agricultural sector and over 6 000 ha in the household sector. A total of 831 000 tonnes of potatoes were harvested, of which over 42 000 tonnes of early potatoes, over 719 000 tonnes of other potatoes and over 69 000 tonnes of seed potatoes. In the same year 204 000 tonnes were imported into the CR and just under 44 000 tonnes were exported.

SUGAR, SUGAR BEET

The Czech Republic has a long tradition of sugar beet cultivation and sugar production within Europe, that being from the very start of sugar beet cultivation and the sugar industry. Sugar production started in the Czech Republic 230 years ago. These results rank the Czech Republic among the most productive Member States of the European Union; it is fully self-sufficient in sugar production and a net exporter of sugar.

The 2017/2018 marketing year will be a historic turning point for the sugar sector after 49 years of production quotas. The production quota of the Czech Republic came to 372 459.207 tonnes and was divided among the five sugar factories, that being since the 2008/2009 marketing year when the EU sugar market was reformed. The system for the common organisation of the sugar markets will be retained in a significantly reduced form. There will be an end to: the sugar production quota, the minimum price for sugar beet, the above-quota system for sugar and sugar factories will stop paying the sugar production charge. It will be possible to export any amount of sugar; the WTO export limit of 1.35 million tonnes of sugar will no longer apply.

Sugar beet cultivation and sugar production recorded a very good result in the 2016/2017 marketing year, primarily due to favourable weather conditions throughout the growing season. As concerns sugar production alone, the largest quantity was produced since the EU accession, 592 656 tonnes. There was also an increase in the area under sugar beet after a previous drop caused by long-term drought. Sugar beet was grown on an area of 52 340 hectares.

FRUIT

The main fruit species grown on our territory are apples, as well as sour cherries, plums, apricots, pears, cherries and currants. Traditionally, a large percentage of the Czech population has grown its own fruit; self-sufficiency is about 30–40% of total fruit production in the CR.

Recently the total area of orchards in the CR has seen a continuous decrease and currently stands at an average of 20000 ha, which yield around 310000 tonnes of fruit. However, productive fruit orchards, whose area has been reduced and currently attains 13400 ha, are decisive for growing consumer (market) fruit. The production of fruit from these orchards is in the range of 140000–180000 tonnes depending on the weather.

The decline in the area of productive fruit orchards is due to setting new subsidy conditions and tightening the definition of the "orchard" culture in the LPIS soil register (where, for example, the number of individuals necessary to be included in the soil block identified as orchard has changed). Therefore, some orchards were taken out of the records on productive orchards. In addition, a number of growers actually grubbed up their old plantings. On the other hand removing the non-fruiting plantings from orchards means an increase in the overall average yields of fruits. The main fruit species in the CR are apples where the area of orchards has dropped to 6885 hectares. The largest fall in the area cultivated is demonstrated by peaches, apricots, as well as cherries and currants. Fruit species showing a better outlook are pear trees and plums, where new orchards and those at the start of fruitage make up 24% and 31% respectively of the total area of fruit plantings. For apple trees, less than 12% of the areas fall into these two orchard categories, almost 54% of apple orchards are over-mature.

The CR is endeavouring to alleviate this unfavourable state of affairs by the long-term support for planting new fruit orchards within the state subsidy policy. In the period from 1994 to 2016 there was a total of 12984 ha of newly planted orchards in production, of which 10328 ha obtained state support. As a result, the percentage of over-mature orchards has decreased slightly and the percentage of young orchards and those at the start of fruitage has increased.

Currently a total of 351 members, with a total area of orchards and nurseries of almost 9930 hectares, are involved in integrated pest management for fruit growing (IPMF) in the CR. The objective of IPMF is mainly to protect the natural environment of the orchard and the living organisms that occur in it, ensuring the species diversity of the naturally occurring or introduced animal and plant species in orchards and their surroundings.

VEGETABLES

For a long time now the areas for growing vegetables have been stagnant. The reason is strong competition from vegetables imported from abroad at lower prices and low domestic efficiency in vegetable production. Likewise, the extent of vegetable growing and its profitability are significantly affected by the prices of agricultural vegetable producers, which have recently shown a downward trend.

The 2016 season was one of the successful ones for the vegetable sector. The area being used to grow vegetables increased year-on-year by 9% to 14500 ha, that being primarily for peas, tomatoes, cabbage and pickling cucumbers. The production of vegetables came to 298600 tonnes, which is a 21% increase compared to the weaker harvest in 2015. Almost all the vegetable species monitored showed an increase in production, except for kohlrabi, cauliflower, lettuce.

With changing lifestyles and new trends in eating, the consumption of the vegetable species that take time to prepare in the kitchen is falling and the popularity of leafy salads, cocktail and cherry tomatoes, kohlrabi, radish, bell peppers and asparagus is increasing. Among the most popular vegetable species grown are onions, cabbage, carrots, wrinkled peas and gherkins/pickling cucumbers.

The structure of market gardening undertakings is subject to ongoing changes. Currently there are approximately 500 vegetable growers in the CR with holdings of 10100 ha, of which 57% of the area is managed by 29 growers with an area of vegetables greater than 100 ha. Most are small growers (i.e. with an acreage up to 1 ha), who mostly specialize in selling vegetables directly to consumers or on the markets.

In recent years the number of vegetable growers who grow their production in accordance with the rules of integrated pest management for agriculture (IPA) has risen annually. In 2016, the SAIF recorded 93 vegetable growers in this system with an area of 7300 ha. The aim of IPA is mainly the protection of the environment and human health, compliance with the methods of good agricultural practice, preventive methods and methods for warnings about harmful agents in the crop and the subsequent targeted protective interventions.

THE FRUIT AND VEGETABLES FOR SCHOOLS PROJECT

is part of the Fruit, Vegetables and Milk for Schools project and is intended for pupils of primary and secondary schools, including preparatory classes. Fruit and vegetables represent an important source of vitamins, minerals and other nutritionally important substances. We should eat 2 to 3 servings of fruit and 3 to 4 servings of vegetables a day, i.e. at least 5 servings of fruit and vegetables a day. Students at schools registered in the project receive free fruit and vegetables, that being 2–4 servings per month. A serving is one apple, pear, peach or nectarine, pepper, kohlrabi, orange or banana, for other kinds of fruit or vegetable it is at least 100 g. A part of the project is also accompanying educational measures, which are likewise free for pupils. Small regional fruit and vegetable producers can participate in the project as suppliers. More information about the project at: **www.szif.cz**.

HOPS

The Czech Republic is the largest producer of fine aroma hops in the world. The tradition of hop growing is more than a thousand years old. It was also the first country in the EU to register the EU trademark – Protected Designation of Origin – "Žatecký chmel" (Žatec Hops). The Saaz hop is an original variety with unique properties and quality. Hops are grown in the CR on an area of 4 775 ha. From the perspective of surface area and production, it is the second largest producer after Germany, within the EU, and the third in the world. There are 120 hop growers currently registered in the CR.

Hop exports significantly outweigh imports. The foreign trade in hops has shown an active balance for many years. Therefore this commodity is becoming an important part of the CR's foreign trade and helps strengthen the GDP of the CR. In 2016, up to 60 % of hop production was exported outside the EU, mainly to the Asian market. Within the EU, exports are mainly to Germany.

The current goal is to increase the area of hop fields and stabilise them above 5 000 ha. This can be achieved by comprehensive support, in particular the quality of the plantings, investments into technology, research, etc.

WINE

The production potential of vineyards in the Czech Republic came to 18 486 ha in 2016, whilst the total area planted was 17 737 ha. Other areas were grubbed-up vineyards, grubbed-up areas of vines with a permit or a right to replant and a permit for new planting.

The most commonly grown white varieties are: Veltlínské zelené (Grüner Veltliner) (1 640 ha), Müller-Thurgau (1 547 ha), Ryzlink rýnský (Riesling) (1 242 ha) and Ryzlink vlašský (Welschriesling) (1 188 ha). Svatovavřinecké (Saint-Laurent) (1 139 ha), Frankovka (Lemberger) (1 120 ha), Zweigeltrebe (763 ha) and Rulandské modré (Pinot Noir) (721 ha) are the most commonly grown red varieties.

Wine consumption per capita has been gradually increasing since 1989 and currently hovers around 20 litres per year. A third of the wine consumed comes from domestic production; two-thirds consists of wines imported from the EU and third countries.

ORNAMENTAL HORTICULTURE AND NURSERY MANAGEMENT

These traditional Czech horticultural fields account for approximately 2.7% of total domestic production in agriculture and are one of its sectors that is growing slightly. In 2016 the revenue from growing flowers and fruit and ornamental nursery plants in the CR came to CZK 3.5 billion; the area used for floriculture and nurseries came to 2509 ha. Domestic floriculture enterprises specialise in growing balcony, bedding and potted plants for the domestic market; cut flowers and green foliage are imported. An increasing quantity of horticultural and nursery management products are found in the planting of urban greenery and when reconstructing and maintaining the Czech countryside.

MEDICINAL, AROMATIC AND CULINARY PLANTS (MACP)

MACP are one of the domestic agricultural commodities with a long tradition and their cultivation provides an opportunity for agricultural diversification. In 2016, according to the CZSO, they were cultivated on 5297 ha, and in 2017, according to preliminary estimates, a relatively significant increase in the area can be expected, by up to 40%. In the CR the main commodity is caraway, which is cultivated annually on an area exceeding 2000 hectares. Caraway is also the only crop in the sector showing a positive external trade balance. Other herb plants cultivated include coriander and fennel; among the main medicinal plants cultivated are mainly silybum, chamomile, marigold, peppermint and lemon balm. Chamomile and caraway growers use the Protected Designation of Origin CHAMOMILLA BOHEMICA and ČESKÝ KMÍN for their products. In recent years there has been an increase in MACR grown organically, MACR grown for harvesting the green leaves also known as fresh herbs, and MACR grown in pots or containers.

Livestock Production

BOVINE ANIMALS

The Czech Republic is self-sufficient in the manufacture of beef. Despite the number of cattle decreasing in the long run, in the past two years there has been a slight overall increase. The number of milking cows has stagnated over the past two years and their yield has increased slightly. In contrast, the number of suckler cows has been increasing in recent years. Beef production, in the long term, is primarily determined by the demand on the domestic market and the export options for beef and, in particular, live bovine animals to foreign markets. However, it also depends on the economics of rearing bovine animals, and on the amount of EU and national subsidy measures. Since 2015 beef production has stayed at around 174 000 tonnes of live weight and self-sufficiency is more than 130%. Beef production has risen slightly over the long term, whilst beef consumption has fallen slightly.

MILK

The milk sector has its specific position within the food supply chain, it is a source of regular income, it creates jobs in the countryside, contributes to maintaining landscapes and improving soil quality. From the perspective of the CR, milk has been categorised as sensitive since 2010 and thus a directly subsidized commodity in the framework of EU supports. Despite the decline in dairy cows in recent years, the milk yield continues to increase. The annual yield from dairy cows increased from 8001 litres in 2015 to 8061 litres in 2016. In 2016 the production of raw cow's milk in the CR amounted to 2984.2 million litres, representing an annual increase of 1.3%. Dairies in the territory purchased 2458.6 million litres of milk for processing, i.e. a 1% annual increase.

An important factor influencing production, sales and purchase prices is the consumption of milk and milk products. In 2016, the year-on-year overall milk supply and domestic consumption increased with a modest growth in the ex-

port and import of dairy products. Although, overall, 2016 was seen as a crisis for milk purchase prices, the breeders' base can be judged to be more stable with increasing yields and hence efficiency. This was aided by the systematic steps taken by the Ministry of Agriculture.

SCHOOL MILK PROGRAMME

Milk and dairy products contain high-quality milk proteins and minerals such as calcium, phosphorus, potassium, magnesium, zinc etc. as well as being a source of vitamins. Regular consumption of milk and dairy products protects against osteoporosis, tooth decay, being overweight and obesity. Children should consume about three servings of milk and dairy products daily. That is why the Ministry of Agriculture has implemented the Milk for Schools Project, which is part of the Fruit, Vegetables and Milk for Schools Project and is intended for pupils of primary and secondary schools. Pupils from schools that are registered receive milk (at least two per month) and unflavoured dairy products free of charge, for flavoured dairy products the parents pay a surcharge. Milk products with reduced lactose or organic milk and organic products are also available. Part of the project is also the accompanying educational measures, which are also provided free of charge to pupils. Local dairies can also be involved in the project as suppliers. It is possible to read more about the project at **www.szif.cz**.

PIGS

For a long time, pork has been the most popular type of meat in the Czech Republic. Its consumption is 43 kg per person per year, which is 54% of the 79.3 kg of meat consumed per person per year in all. In 2016, self-sufficiency in the production of this agricultural commodity declined slightly to 54.3%. In contrast, the percentage of imports for domestic pork consumption is higher (62.1%). Live pigs are imported, but mainly it is pork. On the other hand, there was a further improvement in the reproduction indicators for breeding pigs. In 2016, there were 27 piglets reared per sow, which places the Czech Republic among the advanced countries as concerns breeding in the European Union.

POULTRY AND EGGS

Poultry meat and eggs are traditional and popular commodities in the Czech Republic. This is primarily due to their affordability and ease of preparation in the kitchen. Consumption of poultry meat is around 26 kg per person per year. In the case of eggs, this indicator came to 255 per person per year. The consumption of both poultry meat and eggs per capita has increased slightly since 2007. Self-sufficiency in 2016 was 65.5% for poultry meat and 78.1% for eggs.

SHEEP AND GOATS

The main product of sheep farming in the Czech Republic is lamb meat. Currently sheep breeding is mainly focused on breeds with meat production and then on breeds with combined production. Sheep numbers rose up until 2015 and have since declined slightly. The decrease in the number of sheep did not affect mutton production. The reason was the higher number of ewes and good natality. In comparison with other kinds of meats, however, the consumption of mutton in the CR is low and it is still just a supplementary meat on the domestic market. This mostly only concerns traditional consumption during bank holidays.

In 2016, the number of goats decreased slightly year on year. The overall number of sheep and goat is declining in spite of the increasing demand for mutton and dairy products, which are in greater demand due to the promotion of healthy nutrition. The breeding of these animals is associated with the preservation of biodiversity in the landscape.

RABBITS

Rabbit meat is only a supplementary meat on the domestic market. Recent years have seen mainly chilled meat and products with higher finalization, i.e. a rabbit cut up into portions, emerging on the market. Since 1999, when 16.8 million rabbits were bred, their stocks have decreased 68% to 5.4 million in 2016. The reason was the fall in sales of rabbit meat, not just on the domestic market, but also on foreign markets. In 2016, the decline in rabbit stocks almost halted. The same level of demand for this type of meat as in 2015 had a large impact on the stabilization of stocks. Demand that outstrips domestic production is supplemented by imports of rabbit meat and imports of predominantly live rabbits for slaughter.

HORSES

The Czech Republic is a country where horse breeding is traditional. Although horse breeding meets other functions than those of breeding other livestock, it clearly falls within the field of agricultural production. According to the Breeding Act No. 155/2000 Coll., the horse is a farm animal. The popularity of horse breeding in the Czech Republic is ongoing and the number of horses has increased annually since 1996. At present, horse stocks are growing only slightly due to a lower number of reproductive mares and are around 90 000 head.

Food Industry

We promote healthy and high quality domestic food

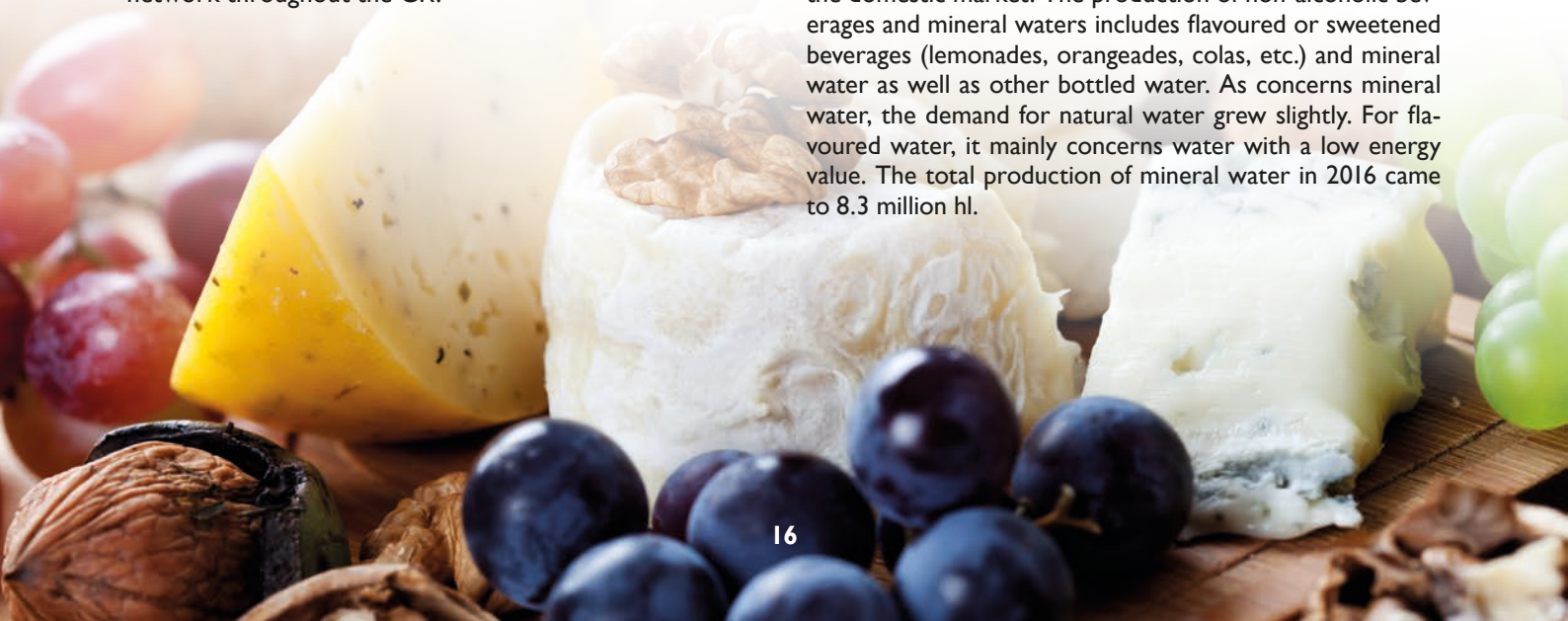
We want to ensure high quality, fresh and healthy domestic food for consumers. Therefore, we assist in the presentation of our products under the Klasa, Regional Food Product and Czech Food Product brands. We support farmers‘ markets, yard sales and local food.

PRODUCTION OF FOOD PRODUCTS

In the Czech Republic, as it is in the entire European Union, the production of food products is one of the key sectors of the manufacturing industry. The importance of the food industry is primarily given by ensuring the population obtains nutrition through the production and sale of healthy and safe foods. Food and food business operators are inspected by the supervisory institutes, including the quality of the delivered production. From the standpoint of the number of enterprises, micro enterprises make up over 60%, the largest share of revenues and added value, about 45%, is taken by medium-sized enterprises. The highest share of revenues was attained by processing and preserving meat and the production of meat products, followed by the production of other food products. Almost one quarter of the added value of the section was created in the production of other food products that include a broader range of products but above all those that represent a higher stage of processing agrarian raw materials. Food production remains a significant employer in many regions. In 2016 the largest number of employees and the greatest number of units was attained by the production of bakery, confectionery and other flour products, which was primarily due to the need to deliver fresh bakery goods to the market network throughout the CR.

PRODUCTION OF BEVERAGES

In the CR this sector is dominated by the production of beer, of which malt production is an intrinsic part. In 2016, beer production in the CR, including non-alcoholic beer, grew year-on-year to 20.5 million hl of beer. This growth is due to both the higher volume for the domestic market and the continuing positive trend in exports. This development is also supported by the fact that Czech beer carries a protected geographical indication. In 2016, domestic malt houses produced roughly 544 000 tonnes of malt. According to the CZSO, in 2016 the CR harvested 75 900 tonnes of wine grapes from 15 800 ha of productive vineyards. Wine grape production in 2016 was down by 16% from last year. A total of roughly 565 000 hl of wine will produced from the grape harvest. This represents about one quarter of annual wine consumption in the CR. The deficiency in wine is made up for by the high import of raw materials and wine and, on the other hand, there is also the export of high-quality wines from the CR. For spirits the trend is away from highly aromatic kinds to spirits that are more neutral or slightly aromatic in character. Gin and vodka are finding popularity. Spirits with a lower content of ethanol are also seeing increasing demand, especially emulsion spirits of a creamy consistency. Tuzemák maintained its dominant position on the domestic market. The production of non-alcoholic beverages and mineral waters includes flavoured or sweetened beverages (lemonades, orangeades, colas, etc.) and mineral water as well as other bottled water. As concerns mineral water, the demand for natural water grew slightly. For flavoured water, it mainly concerns water with a low energy value. The total production of mineral water in 2016 came to 8.3 million hl.



KLASA

Klasa

One of the possible ways to contribute to manufacturers' competitiveness is the national quality brand KLASA. The KLASA brand is awarded by the Minister of Agriculture to food and agricultural products that have attained the highest quality. The rules for awarding the Klasa brand are primarily aimed at promoting products that demonstrate exceptional qualitative characteristics that increase the added value of a given product and guarantee its uniqueness in relation to the usual products available on the market. The mark is awarded for three years and ownership of it may be extended after that period. If a product's quality deteriorates or the conditions of use

are violated, it may also be taken away. During its existence, the mark has become not only a prestigious matter for its holders but, above all, it has gained the trust of the inhabitants of the Czech Republic who prefer products marked with the Klasa logo when shopping.

As of October 2017, the KLASA brand had been awarded to a total of 979 products from 220 manufacturers. Most often the following categories were represented: Milk and Dairy Products, Meat and Meat Products and Grain Mill and Bakery Products. The number of awarded products in recent years has stabilised and, given the amount of tradable items in the market network, this quantity is possible to be termed as reasonable.

REGIONAL FOOD PRODUCT

The Czech Republic also focuses on promoting and supporting quality regional food products through the "Regional Food Product" brand. This project was created in early 2010 and is organised by the Ministry of Agriculture in cooperation with individual regions and the Agrarian and Food Chamber of the Czech Republic.

Regional Food Product

The project caters to the public interest in domestic quality food. The Regional Food Product brand may be received by the highest quality products from each region that excel in quality, are made from local raw materials, have a traditional recipe and excellent taste. The project supports domestic producers of local food and motivates customers to look for such products on shop shelves, at farmers' markets and directly from manufacturers. This provides a great opportunity for local producers to raise the visibility of traditional specialities, at the same time it is also a form of support for local farmers, food manufacturers and tourism.

Consumers can currently choose from 520 products awarded the Regional Food Product brand from 378 producers.

CZECH FOOD PRODUCT

Labelling products as "Czech Food Product" or "produced in the Czech Republic" is voluntary, but, according to the law, it can only be used either if 100% of all constituents of the total weight of unprocessed food, wine products or milk come from the Czech Republic and primary production, the slaughter of animals and all stages of production took place in the territory of the Czech Republic, or if the sum of the weight of the constituents originating in the Czech Republic is at least 75% of the total weight and production took place in the territory of the Czech Republic.

Česká potravina

Czech Food Product

EU QUALITY SCHEMES (TSG, PGI, PDO)

In addition to local quality and origin brands, our producers may use also the schemes valid and recognised throughout the European Union. In terms of promotion of products on the European market, our producers may use the registration of products in the schemes of Traditional Speciality Guaranteed (TSG), Protected Designation of Origin (PDO) and Protected Geographical Indication (PGI). These designations help to highlight and emphasise the quality of the products on the market.

In the case of the Protected Geographical Indication and the Protected Designation of Origin, the protection provided by this system is that the use of these designations of origin and geographical indications is reserved for agricultural products and foodstuffs produced or processed in certain areas or locations. It is the protection of industrial property rights, requested by the association of manufacturers, who use it to designate the same product produced in the given well-defined area, and according to uniform specifications. The indication is connected to only a particular product, which may originate from different manufacturers.

Seven Czech products bear the logo of Protected Designation of Origin (PDO), namely Všestarská cibule (Všestary Onions), Chamomilla bohemica, Český kmín (Czech Caraway Seeds), Nošovické kysané zelí (Nošovice Pickled Cabbage), Pohořelický kapr (Pohořelice Carp), Žatecký chmel (Žatec Hops) and Chelčicko-Lhenické ovoce (Fruit from the Chelčicko and Lhenicko Districts).

The logo of Protected Geographical Indication (PGI) can boast Olomoucké tvarůžky (Olomouc Cheese), Jihočeská Zlatá Niva (South Bohemian Golden Niva Cheese), Jihočeská Niva (South Bohemian Niva Cheese), Černá Hora (Černá Hora Beer), Březnický ležák (Březnice Lager), Brněnské pivo/Starobrněnské pivo (Brno Beer/Old Brno Beer), Mariánskolázeňské oplatky (Mariánské Lázně Wafers), Znojemské pivo (Znojmo Beer), České pivo (Czech

Beer), Chodské pivo (Chodsko Beer), Hořické trubičky (Hořice Filled Wafers), Pardubický perník (Pardubice Gingerbread), Třeboňský kapr (Třeboň Carp), Lomnické suchary (Lomnice Biscuits), Karlovarský suchar (Karlovy Vary Biscuits), Štramberské uši (Štramberk Ears – local cake from Štramberk), Budějovické pivo (Budějovice Beer), Budějovický měšťanský var (Budějovice Burgher´s Brew), Českobudějovické pivo (České Budějovice Beer), Valašský frgál (Wallachian pie), Karlovarské trojhránky (Karlovy Vary Triangles) and Karlovarské oplatky (Karlovy Vary Wafers).

The difference between the Protected Designation of Origin and the Protected Geographical Indication primarily lies in the requisite intensity of the product's ties to the geographical environment. Whilst the designation of origin requires a very strong tie, for a geographical indication it is sufficient that at least one production stage takes place in the appropriate place, region or country, with at least the product's reputation being attributable to its geographical origin.

Traditional Speciality Guaranteed (TSG)

Protected Geographical Indication (PGI)

Protected Designation of Origin (PDO)

MEET YOUR FARMER

The direct sales of good-quality agricultural products to the consumer is also supported by the Ministry in the form of the Meet Your Farmer project. The aim is to introduce the public to a farmer (hence the name "Meet Your Farmer") who lives close to their place of residence and to show them where to buy fresh food directly from the producer.

This improves communication between farmers and their potential customers. Thanks to this project, the general public gains the opportunity to buy absolutely fresh food at prices that come directly from the producer.

An open gate day is held annually in all regions of the Czech Republic, always at several smaller farms involved in food production. Throughout the day visitors have the opportunity to get acquainted with the products on offer as well as to see for themselves how they are made. Other similar farms from the surroundings are also present at the event. Children can look forward to an entertaining programme on farming and healthy eating at the farms.

In the case of the Traditional Speciality Guaranteed (TSG), this is a marketing tool for products traditionally produced within the EU, which are characterised by a traditional composition or a traditional method of production or processing. It is an indication of products that meet the exact specification (recipe), which is registered in the EU Register. As Traditional Speciality Guaranteed are registered e.g. Špekáčky (Sausages), Lovecký salám (Hunters' Salami), Spišské párky (Spiš Sausages), Liptovský salám (Liptov Salami). These are recipes that are based primarily on Czech technical standards from the '70s.

FOOD PILLORY

The aim of the project is to make available news about poor quality, adulterated and unsafe food to Czech and European consumers, and thus to provide them with a tool facilitating market orientation. The application available at **www.potravinynapranyri.cz** allows visitors to find the required information on substandard food by product name, type of food, vendor, country of origin and distributor. In addition, in the application, consumers will find an overview of closed establishments and results of thematic controls (e.g. on the labelling of gluten in foods). The application is free and is also available in a version for mobile devices with the Android, Windows Phone and iOS systems.

FOOD SAFETY INFORMATION CENTRE

The Food Safety Information Centre (FSIC) provides the public with accurate, understandable and verified information covering the whole food chain, i.e. from the farm to the consumer. Besides the issue of food safety, the FSIC focuses on issues of food supplies for the population. The FSIC publishes information materials and publications, implements professional events for adults and educational programmes for children and youth. The main FSIC communication channels are the **www.bezpecnostpotravin.cz** website, designated for professionals and the **www.viscojis.cz** web applications for adult consumers and **www.viscojis.cz/teens** for youth.

Organic Production and Organic Food

We develop organic production and support organic food

The Ministry of Agriculture supports and ensures the development of organic production in the CR. It is the guarantor of compliance with the rules on organic production, and at the same time it coordinates financial support for organic farmers within the framework of national subsidies and the Rural Development Programme. It also actively participates in support for marketing, education and training.

Organic farming is a modern form of farming without the use of chemical substances; it enables the production of high-quality food and is an integral part of the agrarian policy of the CR. Organic production provides advantages for consumers, the animals and the surrounding environment. Organic farmers manage their land without synthetic pesticides, mineral fertilisers, growth promoters or genetically modified organisms. This is to minimise the risk of contaminating the environment and the landscape with these foreign substances. Organic farming supports microbial life in the soil and also the biodiversity of the landscape; there is a greater percentage of protected plant and animal species on organic farms, organic farmers often grow fewer traditional crop varieties (spelt, buckwheat) and rear fewer common/popular, but native breeds of farm animals.

BASIC STATISTICAL DATA

The CR is among the top 10 countries with the highest proportion of land under organic agriculture from the total area of agricultural land. Within the framework of the EU, the CR takes 4th place after Austria, Sweden and Estonia, with 12% of the area being organically farmed. Traditionally, organic agriculture developed in mountainous areas. About half of the land in mountain areas is now managed organically.

With the growth of areas being farmed organically, there is also a growth in the volume of organic products. In comparison with 2003, for example, the area of cereals increased almost threefold and the production of organic grain more than 4.5 times. Developments in the number of animals in organic production have also seen a rising trend. Since 2003, the number of cattle and the volume of beef from organic farms have more than doubled.

Every year, the interest in organic food production also increases; by the end of 2016, 607 producers of organic food and 4271 organic farmers were registered, who managed a total area exceeding 506000 ha. This currently represents a percentage of 12.03% of the agricultural land fund. Of this, about 66400 ha was arable land, the area of grassland was more than 418000 ha, and vineyards made up 931 ha.

According to the FADN methodology, the total production of organic farms in 2016 was estimated at CZK 6.25 billion, which constitutes 4.7% of the total agricultural production of the CR according to the Economic Accounts for Agriculture (Czech Statistical Office, CZSO). The value of agricultural production includes all the produce from organic farms, including production which is eventually consumed on the farm in the form of feed or seed.

FINANCIAL SUPPORT

Currently the support for organic farmers is paid within the framework of the Rural Development Programme of the CR for 2014–2020, which is a separate measure for organic production. The amount of the subsidy depends on the area of farmland under organic agriculture, the culture grown and on whether the subsidised land is in the transitional period or already being farmed fully organically. This allocation of support is a new incentive for farms to move to organic farming, because the amount of subsidy during the transitional period is higher for most crops.

The amounts paid for the "Organic Farming" measure from 1998 to 2016 – subsidies for the area being farmed organically or placed in the transitional period

Year	Amount paid (CZK)
1998	48 091 000
1999	84 168 000
2000	89 101 971
2001	167 966 104
2002	210 861 131
2003	230 810 809
2004	292 200 000
2005	285 828 855
2006	304 995 064
2007	536 410 176
2008	687 594 517
2009	980 809 000
2010	1 154 028 000
2011	1 160 709 973
2012	1 245 193 855
2013	1 256 975 454
2014	1 237 100 163
2015	1 308 357 741
2016	**1 354 241 386**

THE MARKET AND TRADE IN ORGANIC FOOD

Each inhabitant of the CR buys roughly CZK 213 worth of organic food annually. The percentage of the total consumption of organic food has remained at approximately 1%, although it is continuously increasing. Roughly 62% of organic food comes from imports. The total turnover of organic

food, including exports, is currently approximately 3.73 billion Czech crowns.

Most organic food is purchased by Czech consumers in the retail chains (46.2%), secondly by means of drugstores (14.7%) and health food shops (14.3%). Approximately the same percentage is sold by means of farm and other direct sales (7%) and e-shops (7.8%). A year-on-year increase in organic food sales also took place in independent food shops, that being up to 4.2%. More than 3% of organic food has been used by gastronomic facilities and catering establishments. The fewest amount of organic food is purchased via pharmacies. (2.6%).

THE ROLE OF THE MINISTRY OF AGRICULTURE IN THE CONTROL SYSTEM

The Ministry of Agriculture (MoA) supervises compliance with the rules for organic farming production. It authorises the control bodies that carry out regular checks on all organic operators. An operator only receives a certificate

for its production and can only use the "BIO" or "ECO" suffixes on its products if it meets the requirements for organic production. The Ministry regularly supervises the activities of the control bodies. At least once a year, an supervision is carried out at the headquarters of the control body and throughout the year there is further supervision of inspectors from the control bodies whilst carrying out their checks. Furthermore, the Central Institute for Supervising and Testing in Agriculture (CISTA) is also involved in the control system. Since 2016, also the Czech Agriculture and Food Inspection Authority (CAFIA) and the State Veterinary Administration (SVA), which carry out inspections of organic producers within the framework of their powers given by the law, have been involved.

Every entity involved in organic production must be registered at the MoA and subsequently such an entity is registered in the online database of all organic entities, the Registry of Organic Entrepreneurs, which is available on the MoA website www.eagri.cz/rep. Here the public can find basic information about organic operators, including information as to whether the operator has a currently valid certificate for their organic products. It also publishes up-to-date statistical data on the number of organic farmers, organic food producers, the area of land under organic management and the division of land by individual regions, etc.

ACTION PLAN FOR DEVELOPING ORGANIC FARMING IN THE CR

The main strategic document in the area of developing organic production is the Czech Action Plan for Development of Organic Farming. Currently, the third Action Plan is in effect. It was approved by the government on 20 November 2015. Its main objective is to achieve 15% of the total area of agricultural land in the CR to be included in organic agriculture. Other specific objectives are to achieve at least 20% of the total acreage of arable land to be under organic agriculture, for organic food to attain a 3% share of the total consumption of food and beverages, to increase the share of Czech organic food to 60% of the organic food market, to increase the average expenditure on organic food from the current CZK 200 to CZK 600 per capita per year, to increase the value of organic farms' production by 15% and to increase the income of organic farms from production with regard to subsidies.

Apart from the above-mentioned launch of the Registry of Organic Entrepreneurs, the activities implemented by the main Action Plan 2011–2015 included improvement of the sales of organic food at the regional level (in particular, thanks to the increase in direct sales of organic products from organic farms). Furthermore, a number of awareness-raising events for the public took place (September – the Organic Food Month, Biostyl trade fair, the "Czech Organic Food Shop of the Year" competition, etc.). A register of authorised plant protection products and fertilisers for organic farmers was also launched, and, last but not least, the market and sales of Czech organic milk has stabilised.

GENETIC RESOURCES

Genetic resources and their protection and sustainable use are very important in terms of the further development of agriculture. Unique genes and characteristics can be found in many of these living organisms, which can play a key role in breeding new varieties and breeds, when adapting crops to the changing climatic conditions (e.g. better tolerance of longer periods of drought or waterlogging), or for new industrial uses (e.g. bacteria producing polymers). Therefore, for agricultural purposes, a relatively wide part of biodiversity is considered to be those genetic resources which, in the long term, arose in the agricultural systems themselves due to intentional human activity, whether by targeted selection or by the later breeding of crops and livestock. This also includes related wild species and primitive forms of agricultural crops and livestock. Among the genetic resources we can also find micro-organisms and small invertebrates, which are either significantly involved in agricultural production or its protection or directly in its processing and use.

The significant genetic resources in the Czech Republic are part of the National Programme for the Conservation and Use of Genetic Resources of Plants, Animals and Micro-organisms Relevant for Food and Agriculture, which was announced by the Ministry of Agriculture for the 2012–2017 period.

The basic goal of the National Programme is not only the conservation of genetic resources of plants, animals and micro-organisms for the current and future needs of humanity, but also conserving the quality of the countryside and maintaining the sustainable development of the agrarian sector. The mission of the National Programme is also to guarantee the Czech Republic's international commitments and to contribute to global conservation efforts and the sustained use of genetic resources and biodiversity.

THE IMPACT OF CLIMATE CHANGE ON AGRICULTURE, FORESTRY AND WATER MANAGEMENT

Agriculture is among the sectors of the national economy that is the most sensitive to climate change due to its "workplace" being under the open sky. In recent decades, climate change has been primarily reflected by an extension of the growing season or by a partial change of areas suitable for some crops, or their varieties, which is visible, for example, in the case of the vine. On the other hand, climate change also brings about a more frequent occurrence of extreme weather phenomena or a change in the annual rainfall, which is reflected, in particular, by the occurrence

of floods or, in contrast, droughts. In the future, climate change could also bring about a faster spread of the pests and diseases of agricultural crops or facilitate the spread of invasive species of plants, animals and micro-organisms. Although agriculture also has emissions of greenhouse gases, which primarily include nitrogen oxides, methane and carbon dioxide, on the other hand, along with forestry, it contributes to climate change mitigation through long-term carbon sequestration in the soil and in plant biomass. In 2017, the Ministry of Agriculture prepared a new publication entitled "Adapting Agriculture to Climate Change in the Czech Republic conditions – Summary of Current Information", which, on the one hand, summarises all the international and national strategy papers that are relevant to the adaptation of agriculture to climate change and, on the other hand, provides an overview of the specific adaptation measures in the agricultural sector.

RENEWABLE ENERGY SOURCES

Renewable energy sources (RES) include a range of raw materials and technologies; the main objective of their use is to replace fossil (non-renewable) resources, mainly coal, oil and natural gas. A typical representative of RES is electricity production in hydroelectric, wind and solar power stations. However, a no less important source of energy is the use of agricultural materials, either intentionally grown or waste products. In practice this primarily concerns the direct combustion of biomass, the production and use of biogas and the application of liquid biofuels as a substitute for fossil fuels in the transport sector.

The concept of biomass is the unifying concept for all matter of organic origin, which has a wide range of properties. It includes dendromass (wood biomass), phytomass (plant biomass) and biomass of animal origin. One source of biomass is also biodegradable wastes, those being pure or separated from other components (for example, agricultural manure or sorted biodegradable industrial and municipal waste).

The use of biomass for energy is being encountered increasingly often. New technologies allow the conversion of waste, residual or deliberately cultivated mass into energy in the form of heat, electricity or to power engines. Biomass is becoming an ever more important commodity for farmers, foresters, as well as for communities, regions and property owners, i.e. for energy consumers. Biomass has a fairly wide range of forms as concerns the type of biofuels and the possibility of their use. The main areas of using biomass energy are the use of solid biomass for direct burning for heat and electricity, biogas and liquid biofuels. In addition, the non-energy use of biomass material also plays a significant role.

In order to indicate the options for the use of biomass energy, to set appropriate support mechanisms and determine the direction of developing technologies for the use of biomass, the Ministry of Agriculture prepared the Action Plan for Biomass in the CR for the 2012–2020 period (hereinafter the "APB"). The main objectives of the APB include determining the quantified energy potential of agricultural and forestry dendromass and the quantification of the amount of energy that can be realistically produced from biomass in the CR up to 2020.

Water Management

We take care of water-courses and protect against floods and drought

The Ministry of Agriculture's priorities are protection against floods and drought and support for the development of the water supply and sewerage systems. Water flows are taken care of by means of the state-owned enterprises, Vltava River Board, Elbe River Board, Morava River Board, Odra River Board, Ohře River Board and Lesy ČR (Forests of the Czech Republic). We are strengthening the safety of water flows and waterworks, we support the cleaning of ponds, and we provide the main supervision in the field of water supply and sewerage systems for public use with regard to protecting consumers and the long-term sustainability of the sector.

CARE OF WATERCOURSES

The CR is known as the "roof of Europe". The basic hydrographic network consists of almost 100 000 km of watercourses (with natural and modified corridors).

The Ministry of Agriculture is the founder of five state enterprises River Boards, s. e. and Forests of the Czech Republic, s. e., which perform the role of watercourse administrators. The River Boards, s. e and Forests of the Czech Republic, s. e. enterprises currently manage more than 94% of the watercourses' length in the CR. Other bodies are involved in managing almost 6% of the watercourses' length, including the Ministry of Defence, the National Park Administrations, municipalities and other natural and legal persons.

Since 2011, the state enterprises River Boards and Forests of the Czech Republic have taken over the care of small watercourses from the former Agricultural Water Management Authority.

INVESTMENT IN FLOOD PREVENTION

The impulse for building a modern flood protection system were the extreme floods, which struck Moravia in 1997 (about 60 people died and damages exceeded CZK 63 billion) and Prague five years later (16 people died and damages exceeded CZK 75 billion).

Programme stage I: 2002–2007

The „Flood Prevention Programme I" was focused on the territory struck by the floods in 1997 on Morava, Odra and Upper Labe. By the end of 2007, 435 flood protection measures had been built along the rivers and their surroundings, which now protect 315 000 people and assets worth CZK 240 billion. Financial resources in excess of CZK 4 billion were spent on this programme stage.

River Board map

Source: MoA

Programme stage II: 2007–2013

The aim of the "Flood Prevention Programme II" was primarily to construct technical measures along the watercourses, increasement of the retention of water bodies and strengthen the safety of waterworks, for example on Vltava, Ohře, Tichá Orlice and Morava river. Under the terms of "Flood prevention programme II" were carried out 549 activities by the end of 2014, of which 379 flood protection measures were built and 170 studies on floodplains and project documentation were processed, for which over CZK 10 billion was provided. In all, over CZK 11.5 billion was spent to increase the protection of more than 466 000 inhabitants.

Programme stage III: 2014–2020

The priority of current "Flood Prevention Programe III" are those measures to ensure a decrease the runoff from sub-basins and an increase of the landscape's ability to water retention. Currently the estimated financial resources of the state budget are CZK 4.6 billion.

PUBLIC ADMINISTRATION INFORMATION SYSTEM IN WATER MANAGEMENT

This concerns an inter-ministerial project that was officially launched in 2005. The aim is to use the Internet domain www.voda.gov.cz to present comprehensive and unified information on water management in the hands of all central water authorities (Ministry of Agriculture, Ministry of the Environment , Ministry of Transport, Ministry of Defence), irrespective of the division of competencies in water management between the individual ministries. This approach allows state administration and self-government, incl. the general public, to use and share state-guaranteed water management data.

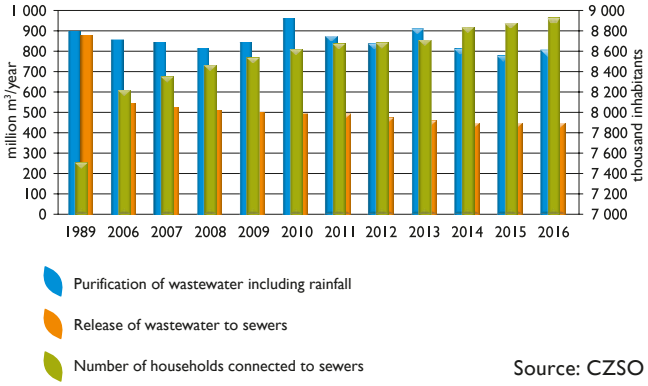
WATER SUPPLY AND SEWERAGE SYSTEMS

In 2016, water supply systems supplied water to 9.97 million inhabitants in the Czech republic, i.e. 94.4 % of the total population, largely thanks to the construction of new water mains in the peripheries of cities and municipalities. According to the quality monitoring in the water supply network, this water is some of the highest quality in Europe, and its quality is still improving.

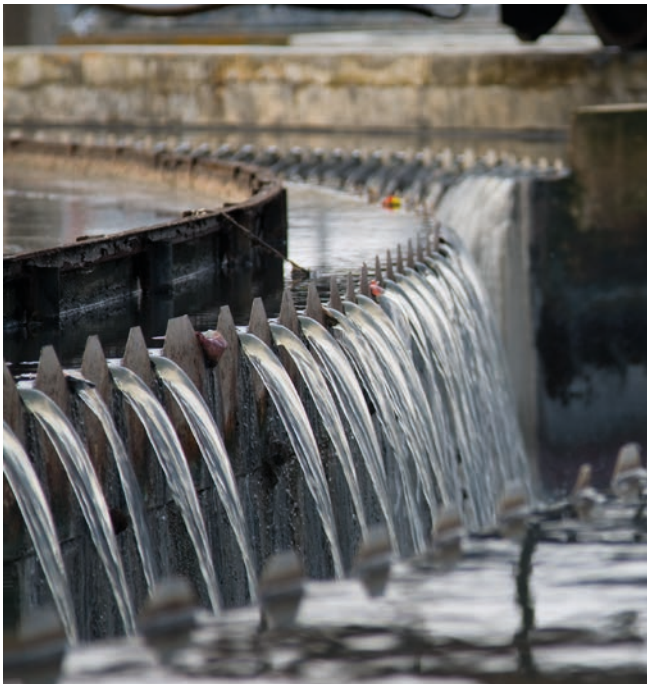
In 2016, there were 8.94 million people living in houses connected to the sewerage system, which was 84.7% of the total population. There were 446 900 000 m^3 of waste water released into the sewerage systems. Of this amount, 97.3 % of waste water was purified (excluding rain water). The number of inhabitants whose homes are connected to the sewerage system increased by 62 109 year-on-year.

In 2016, the length of the sewerage system was extended by 1 257 km and is now 47 141 km long. Compared to the previous year, the number of waste water treatment plants increased by 59. Thus there are 2 554 waste water treatment plants in the CR.

Development of the number of residents living in houses connected to the sewerage system and the amount of wastewater released and purified in 1989 and 2006–2016



Source: CZSO

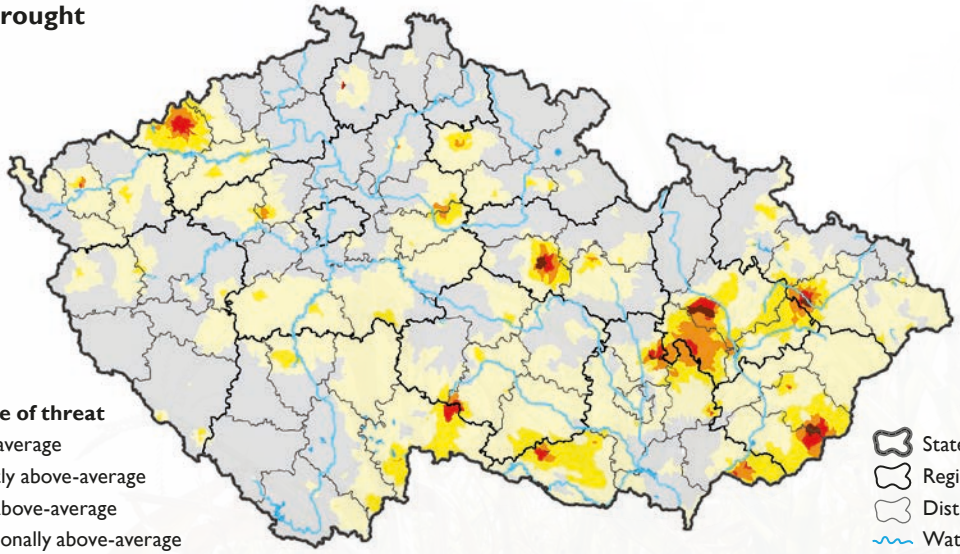


In 2016, a grant programme with a focus on developing the water management infrastructure of water supply and sewerage systems and waste water treatment plants, financed from national resources, helped to pay for 116 water supply constructions and 185 sewerage systems constructions. The total amount of aid was CZK 1.88 billion.

ANTI DROUGHT MEASURES

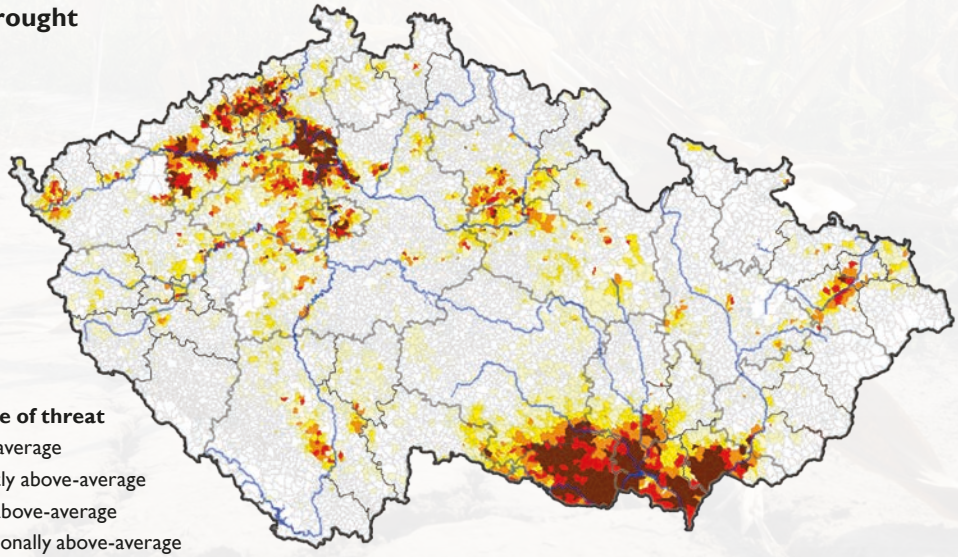
Drought is beginning to manifest ever more intensely in our territory, it is a threat not only for agriculture and water sources but it afflicts practically all sectors of the economy – especially power (cooling water for power plants). These maps clearly show which regions of the Czech Republic are most at risk from agricultural drought (lack of soil moisture) and which from hydrological drought, i.e. a lack of water.

Hydrological drought



Source: State Land Office

Agricultural drought



Source: CzechGlobe, MENDELU

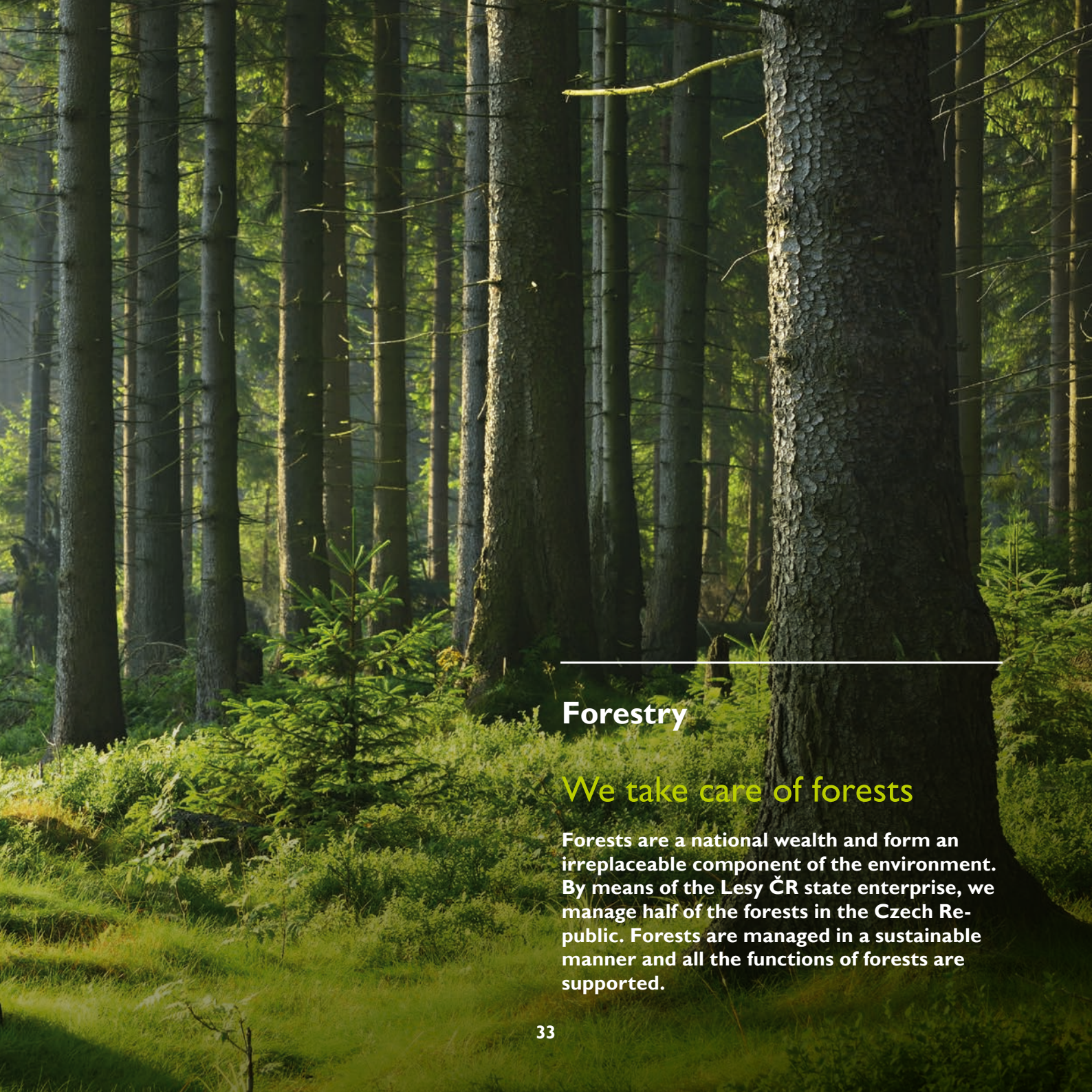
The MoA has actively taken part in setting up the "Interdepartmental committee WATER-DROUGHT" (2014), has ensured measures and programmes to mitigate the negative impacts of drought and water scarcity (2016) and was the main processor of the Concept of Protection against the Consequences of drought for the Czech Republic (2017).

The MoA has created 12 subsidy programmes that directly lead to reducing the consequences of dry periods. The programmes will be implemented in 3 stages (2016–2021, 2022–2027, and 2027–2033). The assumed financial demands for the first stage are CZK 13.6 bn. from the state budget and CZK 4.31 bn. from investors' funds.

Currently, 8 out of 12 subsidy programmes have already been launched, these are primarily subsidies to support irrigation and the construction of small water reservoirs for municipalities, many applicants expressed an immediate interest in the first round of calls.

An overview of subsidy titles against drought

- Support for water retention in the landscape, including restoring defunct ponds and water reservoirs
- Implementation of the Skalička water construction in the Bečva river board
- Preparation and implementation of dam reservoirs in regions affected by drought and deficiency of water resources
- Support for measures on small watercourses and small water reservoirs
- Support for planting soil-improving and soil-stabilising species
- Development programme for irrigation equipment
- Removing sediments from reservoirs, construction of reservoirs
- Programme to support the reconstruction, repair and modernisation of the major drainage facilities
- Programme to support connecting water management systems to the security of water resources
- Support for the construction and technical appraisal of the infrastructure for water supply and sewerage systems
- Support for the construction of a drip irrigation system in fruit orchards, hop fields, vineyards and forest nurseries
- Programme to create tools for assessing the technical, water management and economic efficiency of measures to protect against drought and water stress



Forestry

We take care of forests

Forests are a national wealth and form an irreplaceable component of the environment. By means of the Lesy ČR state enterprise, we manage half of the forests in the Czech Republic. Forests are managed in a sustainable manner and all the functions of forests are supported.

OWNERSHIP STRUCTURE

Forestland covers 2 669 850 ha, which constitutes 33.9 % of the Czech Republic's total area.

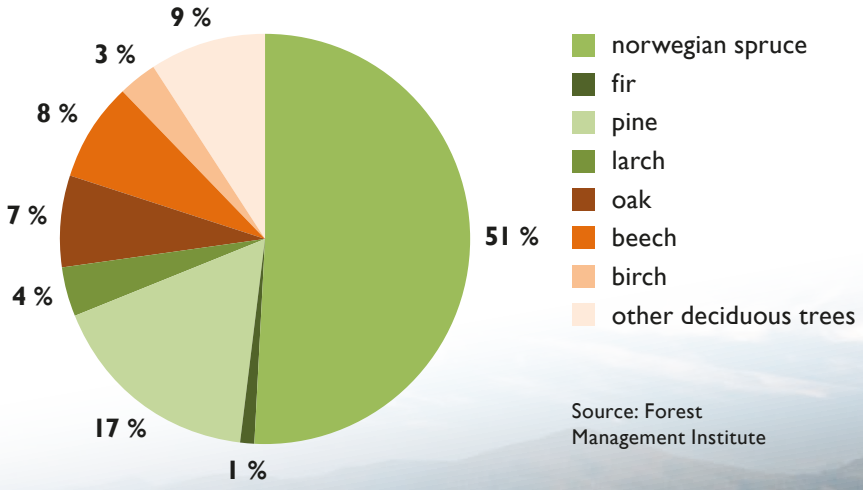
Roughly half of the forests in the CR are managed by Lesy České republiky. Other major owners are private owners (25 %), towns and municipalities (17 %).

SPECIES COMPOSITION OF FORESTS

The area of the main coniferous trees, i.e. spruce and pine, is still declining, while the percentage of fir shows a slight, steady rise. The proportion of deciduous trees, particularly beech and oak, is also increasing.

This is the result of persistent efforts by foresters to achieve an optimal species composition of forests, which has long-term support from the state's targeted subsidy policy.

Species Composition of Forests *(basic tree species in %)*



Source: Forest Management Institute

PROTECTION AND REPRODUCTION OF FOREST TREE SPECIES' GENE POOL

On 1 July 2014 the Ministry of Agriculture announced the National Programme for the Protection and Reproduction of the Gene Pool of Forest Tree Species for the 2014–2018 period (hereinafter the "National Programme"). This National Programme regulates the conditions and procedures for the protection and reproduction of the genetic resources of forest trees originating in the territory of the Czech Republic and completes the legal and organisational framework necessary to ensure the effective and sustained use of the genetic resources of forest tree species, in accordance with the needs of forestry management and the principles of sustainable forest management. As part of the national wealth of the Czech Republic, the gene pool of forest tree species is of great importance for the future of all forests on the territory of the state, both from the perspective of the significant influence on the future income from them and from the perspective of climate change, adaptive capacity and the ecological stability of forest stands (ecosystems).

FOREST RESTORATION

Forest restoration is a prerequisite for the sustained and balanced fulfilment of all functions of a forest. Natural restoration is appropriate where the species composition of the trees and their ecotypes corresponds to the site in question. Its success is limited by site conditions. In 2016, a total of 24742 ha of forest were restored, of which 4813 ha represented natural restoration.

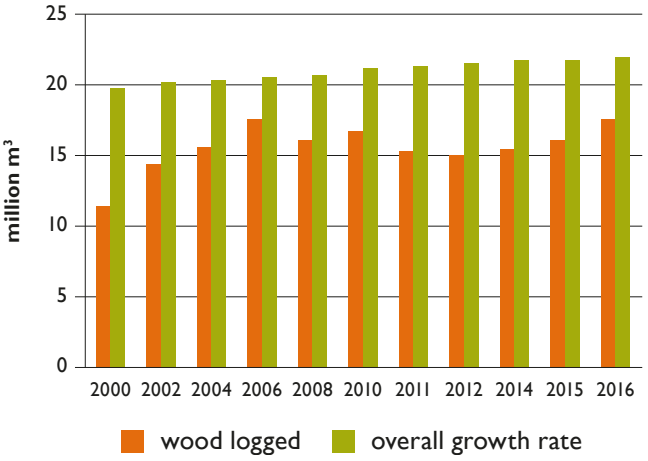
WOOD STOCKS

Total wood stocks in the forests in the CR are increasing; since the 1930s they have more than doubled (in 2016 – 696 million m^3). Not all stocks, however, are available for timber. The felling of wood stocks in a protected forest and special purpose forest is limited by meeting the protective features or purposeful management in forests with increased protection; logging is virtually prohibited in the first zone of reserves and National Parks.

LOGGING

A total of 17.61 million m^3 of raw timber was logged in the forests of the CR in 2016; of this 15.92 million m^3 was coniferous wood. For the same period, there was an increase of 22 million m^3 of wood. Only 80% of the total current increment was logged. These data clearly show that logging is sustainable in the long term. This bears witness to meeting the principle of sustainable forest management, which is advocated in all countries with well-developed forestry.

Comparison of the volume logged and overall growth rate



Source: Forest Management Institute

SUPPORT FOR FOREST OWNERS FROM MOA RESOURCES

The Ministry of Agriculture supports forest management in the form of services for forest owners and in the form of financial contributions. The services for forest owners include fire-fighting services, both aerial and terrestrial. Then there is the Forestry and Game Management Research Institute, which provides an advisory service, for example, in the field of forest protection, called the Forest Protection Service. Aerial liming and fertilising are also included in the category of services.

Financial contributions from the MoA budget are provided for the restoration of forests damaged by emissions, skidding or dragging by horse and for processing forest management plans. In the area of game management, financial contributions are provided for users of hunting grounds and for breeding and training national breeds of hounds and birds of prey.

GAME MANAGEMENT

Game management is defined as a set of economic activities conducted in the countryside in relation to game as part of the ecosystem as well as a communal activity aimed at maintaining and developing hunting traditions and customs as part of the Czech national cultural heritage. It is a traditional field of human activity in the field of game management and active care about animals in the landscape.

In 2016, hunters managed a total area of 6 888 969 ha of hunting areas, i.e. 5815 hunting grounds, 205 game reserves and 295 pheasantries. The average hunting ground area was 1 185 ha.

FOREST PEDAGOGY

The Ministry of Agriculture supports the educational activities covered by Forest Pedagogy, which brings visitors to a forest closer to the forest ecosystem, sustainable forest management, the meaning of forest management and the benefits that a forest brings to one. Its basic principle is to perceive nature using all the senses; this is facilitated by forest pedagogues (specially trained foresters with pedagogical knowledge and experience) directly in the forest environment. Forestry and other interest organisations publish printed materials on popular science for the project and there are also created educational forestry on-line applications that provide more information about forests and forest management in the form of fun games (The Forester's Apprentice or Forest Traffic Lights). You can find more information at **www.lesnipedagogika.cz**.

FISHERIES

The term fisheries is understood to mean the farming, husbandry, protection and catching of fish or other aquatic organisms. In the Czech Republic fisheries can be divided into production and recreation sectors.

At present, there are approximately 24 000 ponds and water reservoirs in the Czech Republic with a total area of about 52 000 ha. Management in fishing grounds consists of managing river systems and maintaining fish communities in locations where recreational fishing is carried out using rods. In the Czech Republic there are more than 2 000 declared fishing grounds with an area of approximately 42 000 ha.

In 2016 the production of market fish in the Czech Republic came to 20 952 tonnes. Carp made up 87.6 % of the total volume of fish caught; salmonids 3.2 %, herbivorous fish 5.1 %, tench 0.8 % and carnivorous fish amounted to 1.1 % of the total catch. The domestic market consumed 8 252 tonnes of live fish and live fish exports came to 10 977 tonnes.

APICULTURE

Beekeeping is one of the oldest fields of human activity. The total number of hives kept in the Czech Republic is 657 107. Beekeepers are associated into professional associations, the largest of them, the Czech Association of Beekeepers, has 55 464 members, another 2 452 beekeepers work outside this organisation. There is still a predominance of small beekeepers in the CR, keeping up to 15 hives. This is the best way to ensure uniform pollination of the landscape while also providing ideal conditions for regional food production and the possibility to offer regional bee products. At the same time, there are 109 larger beekeeping operations, with more than 150 hives; these are the regional centres for promoting modern beekeeping methods and rationalization. The Ministry of Agriculture provides significant support for beekeepers in the Czech Republic by means of European and national subsidies. European subsidies are mainly aimed at the options for providing a technical background for beekeepers, training in the field, promoting transhumance of hives, support for ascertaining the quality of the honey and support for drugs in the fight against varroosis. The Czech Republic contributes 50 % to European subsidies and 50 % comes from the EU. National subsidies are mainly aimed at supporting the pollination activity of bees as well as at supporting the activities of beekeeping associations whilst promoting apiculture.

HONEY BREAKFAST

Since 2015, the Ministry of Agriculture has run the Honey Breakfast Project, which is intended for all primary and nursery schools in the Czech Republic. This is a fun-educational programme directly in schools that, in addition to tasting honey, also includes talks by experienced lecturers from the Czech Association of Beekeepers on honey production, beekeeping as an occupation and as a hobby and the importance of beekeeping for agriculture and landscape biodiversity. More information on the project can be found at **www.zsmze.cz**.

Soil

We protect the soil and settle land ownership rights

Soil is the most valuable natural treasure. Our goal is to protect the soil and to use it wisely. We also want to ensure that our agriculture is based on sound principles, those being absolutely clear property relations for farmers managing the soil.

The total area of agricultural land resources (ALR) in the Czech Republic as of 31 December 2016 came to 4208000 ha. Agricultural land (a.l.) represents 53.4% of the total land area of the Czech Republic. The percentage of ploughing in 2016 was 70%. The quality of the agricultural land resources is measured on the basis of the classification of the agricultural land resources (CALR). Roughly 60% of the ALR consists of less to poor fertile soils (approximately 54% of arable soils are average and below-average and about 6% of the area is completely inappropriate for agroecosystems) roughly 40% of soils have above average fertility. Updating of the demarcation of assessed soil-ecological units (ASEU) in the field is ongoing and there is also the ongoing modernisation of the ASEU system. The long-term use of the agricultural land resources for organic farming and non-food production has been kept at a more or less steady level. As of 1 June 2017 the total area of agricultural land for organic farming was approximately 506000 ha, i.e. 12.0% of the agricultural land resources and is comparable with the extent of organic agriculture in developed EU Member States. On the basis of the Ministry's Strategy with a view to 2030, one of the Ministry of Agriculture's aims is to ensure the Czech Republic is self-sufficient in food whilst substantially improving the impacts of agriculture on natural resources and increasing protection in times of climate change with regard to sustainable farming and to comprehensive development and landscape creation.

SOIL PROTECTION

Soil is threatened by accelerating degradation processes caused by climate change among others. A large amount of agricultural land lies in areas that can be built upon, thus it can be assumed that in the future – several years to a few decades – this land will no longer serve its agricultural purpose. The forced collectivization of the 1950's has significantly damaged the relationship of owners to their land. Nowadays, 74% of fields is leased and sometimes it is only managed for short-term profit. This percentage of leased land is very high compared to Western European countries.

Soil protection is one of society's priorities and is dealt with via an emphasis on the informational, educational and motivational impact of all the measures. It cannot be attained without the active participation of us all. It presumes general public awareness and the farmers' professional knowledge about protecting the landscape and the soil and real efforts on their part to comply with best practices and technologies. The Czech Republic uses comprehensive land consolidation as a highly appropriate and effective tool to protect soils, which helps, among others, to prevent the soil degradation process. Consolidation has been implemented on more than a quarter of the agricultural land in the CR. This involves a new, rational, spatial arrangement of the land for all land owners and at the same time it provides the conditions for improving the environment, protecting and fertilizing land resources, functional water management and increasing the ecological stability of the landscape. This tool also returns much needed landscape features to the landscape.

Soil fertilization

Regular incorporation of organic matter into the soil promotes the formation of the soil's micro-structure and the life it contains, it maintains and improves the soil's sorption capacity, ensures binding of nutrients in the soil which are kept there instead of being released into the ground and surface water. It will be desirable to stop the declining trend in the sorption capacity and the input of essential nutrients, including micro minerals.

Many farmers only focus on fertilizing with nitrogen, which is the cheapest of nutrients; the other nutrients are added far below the necessary minimum. A more intensive supplementary use of organic fertilizers would help to significantly improve the situation and the basic nutrients in the soil. However, there is a lack of organic matter for fertilization. It is necessary to find and use alternative sources, especially green fertilizers and composts, but also sludge from sewage treatment plants, etc. In the future, increasing the proportion of organic matter added to the soil and increasing the supply of nutrients to the soil should be a measure of a green approach to soil and an expression of every farmer's professional pride.

Soil retention capacity

It is expected that climate change will bring a more frequent occurrence of weather extremes such as floods and drought. For this reason, it is necessary to focus on the options for promoting natural infiltration and water retention in soil. The soil can hold immense amounts of water, up to 320 litres per cubic metre. The less the soil is degraded, the greater it will act as a retention tank. In the Czech Republic about 40% of agricultural land is at risk through compaction. Soil compaction reduces the thickness of the usable soil profile for crop roots, thereby negatively affecting the cycling of substances and water in the soil. This results in reducing the capacity for rainfall to percolate and be retained in the soil, as is the case with extreme climatic events such as long-term drought and torrential rain. Torrential rain is often associated with flash floods.

Erosion

Roughly 60% of agricultural land is potentially threatened by some form of water erosion, 35% of the CR has the most vulnerable soils. Currently the maximum soil loss in the CR is estimated at approximately 21 million tonnes of topsoil per year, which can be expressed as an economic loss of at least CZK 4.3 billion. About 45% of agricultural land in the CR is potentially threatened by various degrees of wind erosion. Another tool that the MoA has available

to ensure the protection of soil from erosion and other degradation is primarily the standards of Good Agricultural and Environmental Condition (GAEC) which support agricultural management in compliance with environmental protection. The set of soil protection technologies is designed to ensure soil protection while taking into account the economic and organisational burden on the farmer. The MoA, in cooperation with the Research Institute for Soil and Water Conservation (RISWC), has published the Manual for Protection against Water Erosion for farmers and smallholders. The manual primarily provides farmers and smallholders with practical information on how to successfully protect the soil from erosion. An important form of soil protection is the payment for fulfilling the conditions of agricultural practices favourable to the climate and the environment – or greening. The introduction of the greening rules motivates the farmer to manage the land in a more environmentally friendly manner. Payment for greening does not come automatically for farmers; it is conditional on meeting prescribed procedures.

Building on land

The construction associated with the uncontrolled expansion of settlements, together with erosion, is currently the biggest problem facing agricultural land. From 2010 to 2016, the Czech Republic lost 25 000 ha of agricultural land,

which is roughly 11 ha/day. At present, it has been possible to curtail the problem of building on agricultural land to a lower tempo as a result of applying the amendment to the Act on the Conservation of Agricultural Land Resources – the daily loss of agricultural land is now about 9 ha.

Soil acidification

According to the evaluation criteria of the agrochemical testing of agricultural land, the alarming changes in the pH over the last 25 years are visible in arable land, which has shifted almost 17% of the land in the CR with a neutral reaction into the categories slightly to strongly acidic soils, in contrast, the percentage of soils with strongly alkaline and alkaline pH has stagnated. 62% of soils in the CR are highly threatened by acidification. The percentage of strongly acidic and acidic soils is 26%, the percentage of weakly acidic soils is 43%. The largest percentage of acidic soils is located in the Karlovy Vary (54%) and South Bohemia (51%) regions, followed by the Vysočina region (50%) and the Pilsen region (47%). Currently, the average value of the soil reaction on the arable soils is 6.2. The development of the soil reaction in the CR suggests a growing trend of acidification, particularly in potato growing areas with poorer soils that have a lower capacity to balance pH.

Web applications for soil protection

The MoA objectives concerning soil protection are met with the aid of projects developed by the Ministry in cooperation with the RISWC. It primarily concerns various web applications and portals. These include, for example, *Land Usage Limits* allowing agricultural land use limits to be analysed, an *Anti-erosion Calculator* that provides information on the degree of erosion risk faced by the chosen site and enables farmers to introduce organically fertilized crops into the crop rotation on areas threatened by erosion, *Erosion Monitoring* – a web portal that provides background data on agricultural land erosion, *Soils in Numbers* for analysing and monitoring changes in soil properties, *Groundwater Vulnerability* with information on water vulnerability to leaching of hazardous substances and much more besides. More information on individual projects and applications can be found at the sub-portal PŮDA at www.eagri.cz.

LAND OWNERSHIP AND LAND PRICES

Of the total area of the agricultural land resources in the Czech Republic, 4208000 ha, 76.5% is owned by natural persons, 13.8% by legal entities, 5.5% by municipalities and regions and 4.2% by the state. The structure of economic operators on agricultural land differs from the ownership structure. Natural persons manage approximately 30.6% of the agricultural land area, of which farmers manage 28.2% of the total area of agricultural land. The remaining 69.4% of agricultural land is managed by the enterprises of legal entities. The main tool to ensure actual and identifiable ownership is land consolidation. As of 31 December 2016, simple and comprehensive land consolidations had

been carried out on roughly 28% of the agricultural land resources, while land consolidations are in the stage of being resolved on about a further 9% of the land. In 2016, the amendment to Act No. 139/2002 Coll., on Land Consolidations and Land Registries came into force, which appreciably simplifies the land consolidation process. The plan is to initiate and complete approximately 200 proceedings on comprehensive or simple land consolidation annually, this represents approximately 150 000 ha a year.

Land prices

There are still two types of prices on the land market. The official price is for tax purposes. The market price arises on the basis of market supply and demand and is applied according to the current supply and demand on the market. The average market price of agricultural land (primarily intended for further agricultural use in the medium term) is dependent on the type of land. For arable land, the estimated average market price in 2017 was about 15 CZK/m^2, for grassland it was 11 CZK/m^2. Due to the significant heterogeneity in the properties of commercial land, the price range is high. The development of market prices of privatized state agricultural land is characterized by an increase in market prices in relation to the official price of the land during a purchase with priority for farmers, even during a free sale. In the case of permanent grassland, the increase in the price is more steady and is not affected to a great degree by fluctuations in the profitability of agricultural production. Farmers are willing to pay up to 200–300% of the official price for land. Important factors affecting the resulting price are the soil quality, its location, the potential for non-agricultural use, the culture and nature of the transaction. In general, the market prices are rising in the long term (on average about 6–10% per year); in comparison with the EU-15 they are still lower. In relation to the new EU-12, land prices in the CR are mostly comparable or higher. Over the last 5 years a link with foreign capital has been identified with transfers of land ownership for about 350 000 ha.

Rental – tenure

More than 74% of agricultural land is rented. In 2017, the rents were in the range of 3 000–6 000 CZK/ha, the highest rent is paid in accord with the profits obtained in the beet and maize production area, the lowest in mountainous areas. The Methodology for a Soil Survey of Agricul-

tural Plots of Land Intended for Rental Agreements is for large scale use by owners and tenants. This fundamental yet simple methodology is a great help, especially for land owners, it contains a sample rental agreement, which may well serve as the basis for all rental agreements, including those where the lessor is the state.

LPIS

Since 2004 the administration of subsidies has been using the geographic information system, the Land Registry-LPIS (Land Parcel Identification System), which records the agricultural land used. As of 10 October 2017, a total of 3 562 348 ha of agricultural land was used in the CR, i.e. 84.3% of the total agricultural land resources of the Czech Republic. The register serves not only to verify the information given in applications for grants related to agricultural land, to check compliance with the conditions of these subsidies, but also for registering organic farming, the growing of genetically modified varieties and for exercising the right to a refund of excise tax for "green diesel". Recently the register has been expanded to include environmental data.

DEMONSTRATION FARMS

Since the beginning of 2017 the MoA has been running a subsidy programme for Demonstration Farms. The activity is based on the tasks set out by Government Resolution No. 620/2015 and is in agreement with the Office's long-term strategy. The programme is focused on the area of soil care, with an emphasis on supporting the presentation of practices and techniques that reduce water and wind erosion, excessive soil compaction, practices contributing to water retention in the landscape or presenting alleviation and adaptation measures in relation to climate change.

It supports those subjects who bring new findings to their field, have innovative and effective solutions in the relevant area of soil protection and can be an example to others. Demonstration farms present their agricultural activities in the form of events such as open days and demonstration events for groups or individuals. The aim is to transfer knowledge in agriculture focusing on practical demonstrations and presentations of sustainable farming systems and soil protection in practice.

The Common Agricultural Policy

We successfully develop the European model of agriculture

Within the framework of the Common Agricultural Policy, we seek to increase the competitiveness of agriculture in the Czech Republic and to reduce the administrative burden for farmers and the state administration. The Ministry of Agriculture's priority is also rural development, while preserving and improving the environment and ensuring a good standard of living for our farmers. Agricultural activity is an integral part of rural areas, which deserve our care and support.

RURAL DEVELOPMENT PROGRAMME

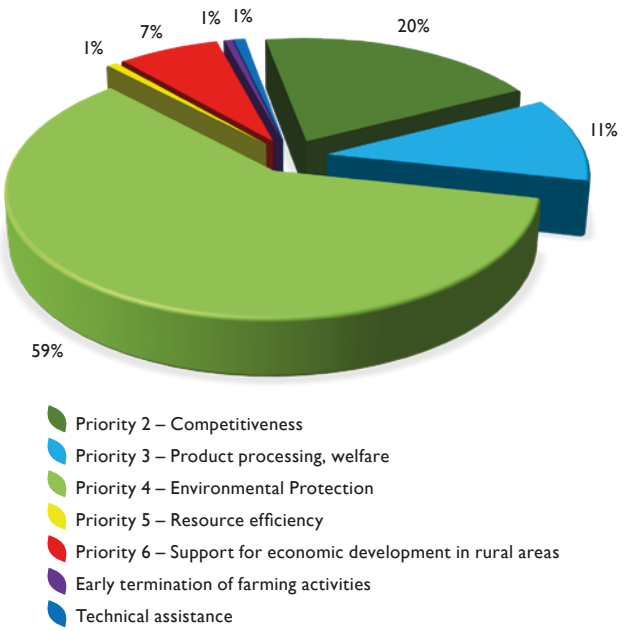
In the European Union the Common Agricultural Policy (hereinafter the CAP) is aimed at ensuring food production, export, agricultural and rural development and ensuring a good standard of living for farmers.

One tool for drawing supports from the CAP is the Czech Rural Development Programme 2014–2020 (hereinafter the "RDP 2014–2020"), which was approved by the European Commission on 26 May 2015. It is being spent almost EUR 3.6 billion (nearly CZK 97 billion) into the Czech Republic in the coming years. Of this EUR 2.3 billion (CZK 63 billion) will come from Union resources and EUR 1.3 billion (about CZK 34 billion) from the Czech budget. The contribution from the state budget comes to 35%.

The main objective of the RDP 2014–2020 is the renewal, maintenance and improvement of ecosystems dependent on agriculture primarily by means of agri-environmental measures, and then by investments for competitiveness and innovation in agricultural, food industry and forestry enterprises, support for young people to enter into farming and land consolidation.

The RDP 2014–2020 also supports the diversification of economic activities in rural areas in order to create new jobs and boost economic development. Community led local development, or the LEADER approach, will be supported as it contributes to a better targeting of the aid for the local needs of a given rural territory and the development of cooperation between the actors at the local level. The horizontal priority is the transfer of knowledge and innovation in the form of training activities and advice and cooperation in the field of agriculture and forestry.

The estimated allocation of funds to individual areas



The 2014–2020 Rural Development Support objectives are expressed in more detail through six EU-wide priorities. These are the following priorities, supplemented by budgets within the Czech RDP 2014–2020:

- Horizontal Priority 1 – **Support of knowledge transfer and innovation** in agriculture, forestry and rural areas, with a total budget of CZK 332 million – is integrated into the remaining 5 priorities.
- Priority 2 – **Enhancement of the viability of agricultural enterprises and the competitiveness** of all types of farming in all regions and promotion of innovative farm technologies and sustainable forest management, with a budget of CZK 18661 million.
- Priority 3 – **Promotion of the food chain organisation**, including processing and marketing of agricultural products, **animal welfare** and risk management in agriculture, with a budget of CZK 10233 million.
- Priority 4 – **Restoring, preserving and enhancing ecosystems** related to agriculture and forestry, with a budget of CZK 55168 million.
- Priority 5 – **Promotion of resource efficiency** and support for the shift towards a low-carbon and climate-resilient economy in the agricultural, food and forestry sectors, with a budget of CZK 631 million.
- Priority 6 – **Promotion of social inclusion, poverty reduction and economic development** in rural areas, with a budget of CZK 6671 million.

WE SUCCESSFULLY DEVELOP THE EUROPEAN MODEL OF AGRICULTURE

On 2 February 2017, the European Commission (hereinafter the "Commission") launched the first phase of the modernisation and simplification of the CAP with the opening of a three-month public consultation. A modernised and simplified CAP should address the key challenges that agriculture and rural areas face. In the next phase the Commission will prepare the legislation for the CAP. The preparation of the Multiannual Financial Framework for the new programming period will take place in parallel.

One of the main efforts of the CR is to continue to focus on the issue of the **equality of the supports in the framework of direct payments**. This is also associated with the efforts to ensure **efficient and competitive businesses,** as well as **support for the modernisation of market measures and traditional sectors** and an improvement in the position of farmers in the supply sector. Despite high productivity, **the sustainability of agricultural and forestry management with regard to the environment** must always be taken into account. From the standpoint of **improving the quality of life in rural areas**, it is essential not only to secure basic infrastructure but also to provide enough job opportunities. **A smooth change in generations** and more effective support for young farmers is also very important. Critical factors will be the **structure of the CAP and ensuring sufficient sources of funding**, whilst the CR considers **simplicity and subsidiarity** to be a key priority of the future CAP.

DIRECT PAYMENTS (DP)

The reformed CAP 2015–2020 contains a number of new elements which were not applied in the area of direct payments (e.g. the active farmer criterion, greening) and which, at the same time, change the nature of the preceding direct payments from the single area payment scheme (SAPS) to a multicomponent payment. However, in the case of the CR, SAPS continues to be the largest component. The other components are greening, voluntary coupled support (VCS) granted to sensitive sectors and a payment for young farmers. Until 2020, the CR may also use the national budget to pay a transitional national aid (TNA), which builds on the national supplementary payments (Top-Ups) previously provided. For 2017, assuming complete payment, about CZK 22 billion will be paid from the envelope for direct payments and CZK 730 million in the context of transitional national aid.

Envelope for direct payments from 2015 to 2017

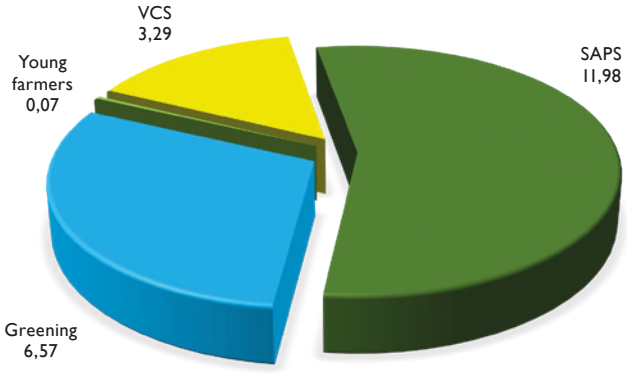
	2015	2016	2017*
Direct payments (in EUR million)	844,854	844,041	843,200
Direct payments (in CZK bn.)	22,9	22,8	21,9
TNA (in CZK bn.)	0,88	0,82	0,73

The CZK/EUR exchange rate for 2017 is 25.981

**the decrease of envelopes in 2017 is mainly due to the strengthening of the CZK exchange rate (for comparison – the exchange rate of CZK/EUR in 2016 was 27.021)*

Source: Annual Report on Direct Payments for 2016

Components of direct payments in 2017 in CZK billion



Note: Exchange rate of CZK/EUR 25.981 was used
Source: Commission Implementing Regulation (EU) 2017/1272

CROSS-COMPLIANCE

The provision of direct payments, some supports for the Rural Development Programme and some supports for the common market organisations in wine will be conditional upon compliance with the selected legislation. The control of cross-compliance comprises two parts – the standards of good agricultural and environmental conditions (GAEC) and statutory management requirements (SMR).

OPERATIONAL PROGRAMME FOR FISHERIES 2014–2020

The Fisheries OP is a tool for drawing support from the European Maritime and Fisheries Fund; it contributes to implementing the Common Fisheries Policy and meets the EU priorities in the field of the sustainable development of aquaculture:

- Union priority 2 – Promoting environmentally sustainable, innovative and competitive aquaculture based on knowledge and effectively using resources
- Union priority 3 – Support for the implementation of the Common Fisheries Policy
- Union priority 5 – Support for marketing and processing.

The OP Fisheries 2014–2020 measures are aimed at improving the competitiveness of traditional aquaculture by promoting investment in traditional aquaculture and intensive farming systems. Support is directed at increasing the share of processed fish, promoting aquaculture, the transfer of scientific knowledge into practice, and forms of management contributing to maintaining or improving the state of the environment and biological diversity.

The 2014–2020 Fisheries OP measures are:

Union priority 2

2.1. Innovation – support for product and process innovation
2.2. Productive investments in aquaculture – support for investments contributing to increasing the competitiveness of aquaculture
2.3. Support for new breeders – support for investments related to establishing aquacultural enterprises by new starting farmers
2.4. Recirculation equipment and flow systems with additional cleaning – support for investments in recirculation facilities and through-flow systems (including nurseries) with final treatment
2.5. Aquaculture providing environmental services – introduction of European Eel

The beneficiaries of support within the framework of EU Priority 2: aquacultural enterprises; entrepreneurs entering the aquacultural sector; public bodies.

Union priority 3

3.1. Data collection – promoting the collection and use of data
3.2. Product traceability – control measures (monitoring and surveillance) for fisheries and aquacultural products

Support beneficiaries within the framework of EU Priority 3: the competent authorities referred to in Article 2 (4) of the Regulation (EC) No. 882/2004 of the European Parliament and of the Council of 29 April 2004 on official controls performed to ensure the verification of compliance with feed and food law, animal health and animal welfare rules;

persons referred to in Section 22 of Act No. 166/1999 Coll., on veterinary care; professional organisations; aquacultural enterprises; the Ministry of Agriculture.

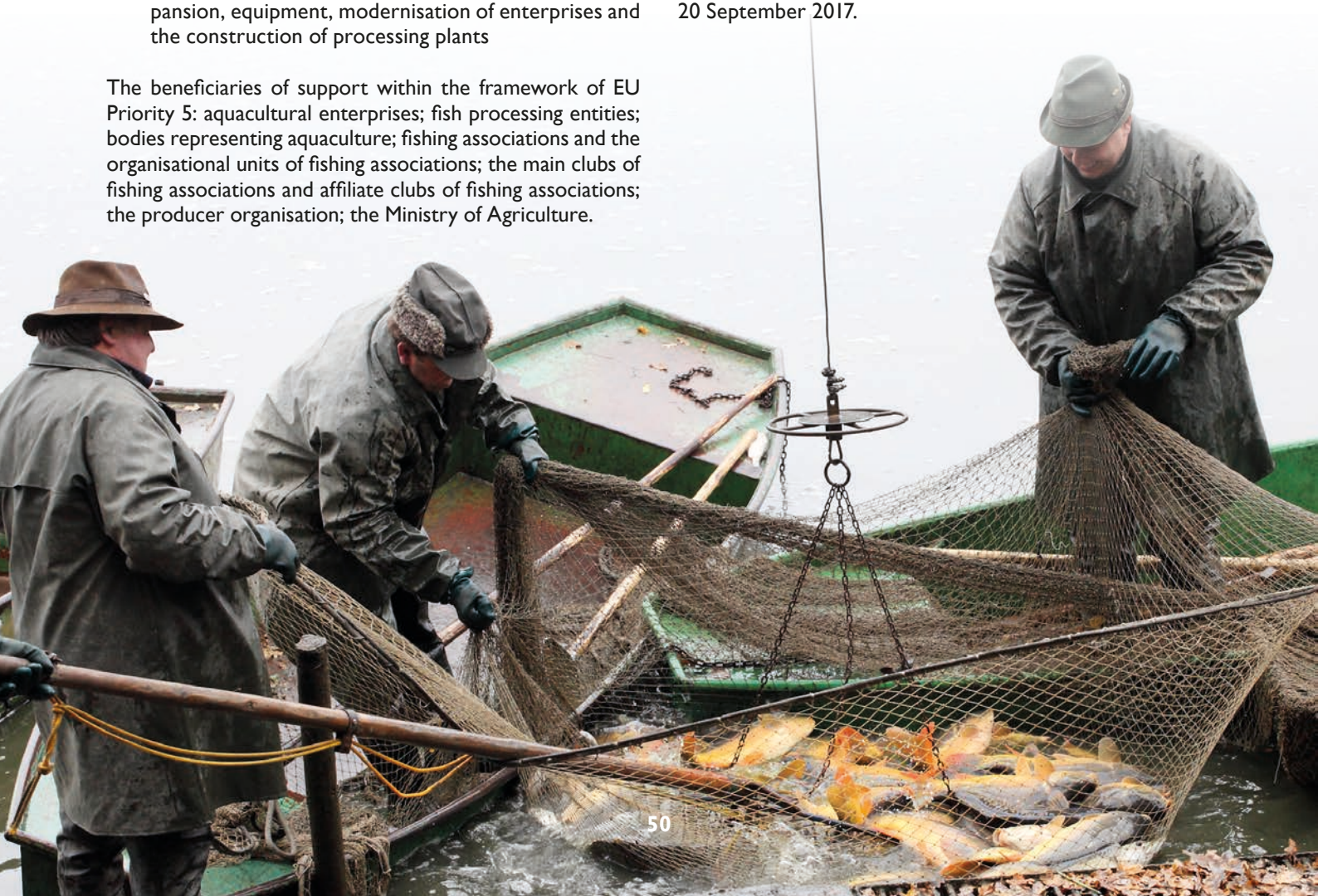
Union priority 5

5.1. Production plans – preparation and implementation of production plans and placing products on the market
5.2. Product marketing – activities associated with setting up producer organisations and implementing promotion and communication campaigns
5.3. Investments in product processing – investment in expansion, equipment, modernisation of enterprises and the construction of processing plants

The beneficiaries of support within the framework of EU Priority 5: aquacultural enterprises; fish processing entities; bodies representing aquaculture; fishing associations and the organisational units of fishing associations; the main clubs of fishing associations and affiliate clubs of fishing associations; the producer organisation; the Ministry of Agriculture.

Allocation for the entire 2014–2020 programme period is the total amount of EUR 41.2 million (CZK 1.11 billion), of which EUR 31.1 million (CZK 840 million) will be financed from the European Maritime and Fisheries Fund and EUR 10.1 million (CZK 271.4 million) will be financed from national resources.

In the OP Fisheries 2014–2020 Decisions on Granting Subsidies were issued to 250 projects for the requested subsidy amounting CZK 280 million. From OP Fisheries, a total subsidy of CZK 61.9 million was paid to 55 projects until 20 September 2017.



Research, Education and Consultancy

We invest in Science, Research and Education

The Ministry of Agriculture conducts research and development within the whole agrarian sector and is investing significant funds for its systematic support and development. Thanks to these subsidies, the results of some research teams from the CR rank among the best in Europe and internationally. The MoA also pays great attention to further education; it manages a system of departmental professional qualifications, educates e.g. entrepreneurs in the sector, as well as secondary school teachers.

SCIENCE AND RESEARCH

The Ministry of Agriculture conceptually and methodologically manages departmental research organisations. It is responsible for the implementation of the National Policy for Research and the National Innovation Strategy in its field of activity, develops the Conception of Research and Development within the scope of the Ministry and ensures its implementation, prepares priorities of national and international programmes dealing with agrarian research, development and innovation. The Ministry also coordinates cooperation in departmental research, development and innovations within the CR and supports the involvement of the scientific research base in European research.

SECTORAL TRAINING

The Ministry controls departmental education, ensures the education of the agricultural public and the professional training of state administration employees, especially in the area of legal standards and European legislation. It is responsible for the implementation of the Lifelong Learning Strategy. The Ministry participates in the creation of the National Occupation System and the National Qualification System in the areas of agriculture, the food industry, forestry and water management. At the same time, it grants authorisations to educational entities and participates in extending the professional knowledge of teachers. The Ministry is active in a number of other areas, for example, in the field of environmental education.

SECTORAL CONSULTANCY

Consultancy and its information system are very important means of the Agricultural Policy of the Ministry of Agriculture. The proper functioning of the consultancy system is essential for ensuring the competitiveness and sustainability of Czech agriculture under conditions of the national and international market economy.

The consultancy system is based on the requirements of the Common Agricultural Policy expressed by the existing EU and Czech legislation. Consultancy takes various forms: general informative, professional, individual field and synthetic information provided through interconnected websites. Sectoral consultancy is supported by both national and European subsidies.

Agrarian Trade

We support the agrarian trade of the CR

The effort of the Ministry of Agriculture is to create, in collaboration with other responsible government authorities and representatives of the private sector, favourable conditions for increasing exports of Czech agricultural and food products, mainly to countries outside the EU.

AGRARIAN FOREIGN TRADE (AFT)

The Czech Republic must import many products, especially the so-called uncompetitive commodities (tropical fruits, sea fish, rice, etc.). For these items, the goal is to support the reduction of import tariff rates and to ensure the lowest possible consumer prices.

When it comes to competitive items, i.e. those for which the CR, as a producer, can compete with other countries, it is in the interest of the CR to ensure the strategic degree of national self-sufficiency. In recent years, due to the reduced competitiveness of Czech producers, national self-sufficiency has decreased in the case of poultry and pork, fruit and vegetables and, to meet the demand in the CR, it needs to be supplemented by imports from abroad.

In the period after 1989, consumer demand increased in the CR, which, among other things, manifests itself in the requirements for a wide selection of agricultural and other products. Thus, the AFT enables the CR to ensure sufficient offering of individual products of Czech and foreign origins (cheeses, sausages, spirits, wine, etc.). In Czech agriculture and the food industry, a number of very good and export-oriented (not only large) enterprises are operational. There are also many examples of good practice in the contractual or direct linkage of activities operating in the „agriculture – food industry – trade" vertical. In addition, the uniqueness and traditions of some Czech products (including their EU-protected geographical indications) and the awareness of the use of agricultural machinery and technological units of Czech origin in the past, assist exports, for example, beer, hops, malt, collagen casings, etc.

The AFT of the CR in the past five years has represented 5.5 – 5.8% of the total foreign trade in terms of turnover, and the agrarian export of the CR has amounted to 4.8 – 5.2% of total exports, which corresponds with the character of the CR as a significantly industrial economy. Despite this low share, which also reflects the position of the agricultural sector in the Czech economy (2.5% of GDP in the year 2016), AFT, due to the strategic tasks of the state in ensuring national self-sufficiency and meeting domestic consumption, is one of the most sensitive segments of foreign trade.

In terms of the direction of trade flows, the AFT of the CR shows dominant orientation to the EU market. The share of exports to the EU in the total agrarian exports since 2007 has permanently exceeded 90%. While exports to the EU during the 2006–2016 period increased almost three times, the volume of exports to non-EU countries in the same period only doubled. The orientation to the EU countries is mainly due to the geographic location of the CR (a landlocked state bordering exclusively with EU member states) and the fact that trading in the EU single market is essentially barrier-free. However, also in this market, Czech food exports are faced with a variety of formal and informal non-tariff trade barriers, which in effect lead to its certain distortions. If the barriers are unjustified, the state initiates their removal.

As regards the commodity structure, in the area of agrarian products the CR exports about 60% of highly processed products. Almost 70% these products are exported to third countries. In this context, it is necessary to add that the factor significantly influencing these figures is the export of cigarettes.

Generally, in Czech exports, products of plant origin are more established, which is associated with the development of the structure of Czech agriculture after accession to the EU. Export of goods to third countries is an area with the potential thus far being little utilised. The state, in cooperation with foreign offices of the CR and institutions focused on promoting exports, has started systematically to promote the export interests of Czech food producers in these countries.

The role of the state in these markets is also irreplaceable with regard to removing trade obstacles and assisting Czech entrepreneurs to overcome these obstacles.

In this respect, since 2016 agricultural diplomats have been working in selected third countries (Russia, China, Serbia, and Saudi Arabia). From the middle of 2017 and the beginning of 2018, the positions of agricultural diplomats in the US and Lebanon were also filled. Strengthening the export orientation to a greater number of markets, the so-called third countries, appears to be important, among other things, also in the context of the current political instability and EU market saturation. It is also essential to increase state support for the participation of Czech agricultural and food companies in international trade fairs and exhibitions, foreign activities of the MoA management during trade missions, and other elements of the MoA pro-export policy.

RESULTS OF CZECH AGRARIAN FOREIGN TRADE FOR 2016

In 2016 the turnover from Czech agrarian foreign trade (AFT) stagnated in comparison with the growth in previous years. Exports achieved a year on year increase of CZK 0.2 bn., i.e. 0.1%, imports saw an increase of CZK 4.0 bn., i.e. 1.8%.

As a result of this development the annual **deficit** for Czech AFT **deepened** by 19.7% **to CZK 23.1 bn. The degree of import coverage by exports** fell slightly by

1.6 p.p. to 89.7%. Compared to the previous two years, when the negative trade balance with the EU 28 improved, 2016 saw it deepen by more than double – CZK 7.2 billion. In contrast, in the case of third countries, the trade deficit fell by 7.7% to CZK 14.5 billion.

Agrarian goods as a percentage of year-on-year total Czech exports declined slightly by 0.1 p.p. to 5.1%, whilst in the case of imports it increased slightly by 0.1 p.p. to 6.4%.

Agricultural goods only participated in 2.7% of the turnover of the CR's total foreign trade with third countries (which represents a year-on-year decrease of 0.2 p.p.) while in the EU-28 framework it attained 6.7% (unchanged).

The bulk of the CR's AFT is done on the European Union market. Its share in Czech agricultural imports in 2016 rose by 1.8 p.p. to 85.4%, while Czech agrarian exports grew by 0.5% to 91.6%.

The commodities most exported from the CR in 2016 were cigarettes, wheat, rapeseed oil, preparations used for animal nutrition, chocolate and other cocoa preparations, other food preparations, coffee, unsweetened milk and cream, beer, sweet biscuits and wafer biscuits, live cattle, soft drinks, confectionery not containing cocoa, cheese and quark, bread, unsweetened and sweetened pastry, rape seed, malt, meat preparations and preserves, coffee extracts and concentrates, incl. preparations based on them, sausages and salami, rapeseed oil-cake, live poultry, concentrated milk and cream and barley. Other commodities and commodity aggregations accounted for less than 1% of Czech agricultural exports.

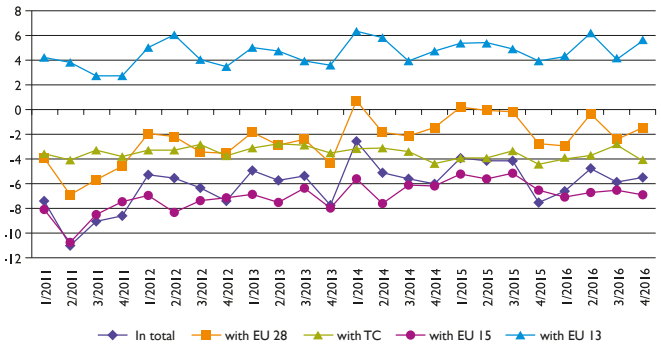
Among **the commodities most imported** (with more than 1%) to the Czech Republic were pork, chocolate and other cocoa preparations, coffee, cheese and quark, cigarettes, food preparations, preparations used for animal nutrition, rapeseed oil, poultry meat and offal, bread, un-

sweetened and sweetened pastry, wine, soft drinks, spirits, beef, soy oil-cake, citrus fruits, coffee extracts and concentrates incl. extracts based on them, peppers, sweet biscuits and wafer biscuits, preparations made of flour, meal, starch or milk, tomatoes, preserved and other prepared fruit and nuts, confectionery, fish (fresh, chilled or frozen), and other sauces and flavouring preparations (without soya beans), ketchup and tomato sauce.

The commodity development of the Czech AFT balance was mainly influenced by the development of trade in products for which exports dominated over imports. Specifically, by the drop in the value of the active balance for rape seed, unsweetened milk and cream and tobacco for smoking and its increase for cigarettes, sweet biscuits, preparations used for animal nutrition and sugar. It is also necessary to take into account the effect of price developments. Converted to 2015 prices, the value of exports increased by 6.2% in 2016 and the value of Czech agrarian imports increased by 4.9%.

Similarly as in previous years, **the most important markets** for agrarian goods from the CR in 2016 were **Slovakia, Germany, Poland, Italy Austria and Hungary**. With regard to the average for 2011–2015, the value of Czech agrarian exports to these countries increased in 2016, however, compared to 2015, there was a decrease in three of them (mainly to Germany). Of the third countries our most important buyer, despite the embargo, remains Russia, where, after a significant year-on-year decline in 2015, there has been a noticeable increase. Other export countries outside the EU are Turkey, Iraq, Switzerland and Japan. The main suppliers of agricultural goods to the CR in 2016 were Germany, Poland, the Netherlands, Slovakia, Italy, Spain, Hungary and Austria in 2016. In a year-on-year comparison, the values of imports from these countries did not change significantly. As usual the main suppliers from third countries were China, Brazil, Norway and Turkey. As concerns Brazil, there was a significant year-on-year drop (poultry meat), in contrast, for Norway there was an increase (the Atlantic salmon).

Development of the Czech AFT balance from 2011 to 2016 by quarter (CZK bn.)



Note: EU-15 – original members of the EU,
EU-13 – new members of the EU (since 2004),
TC – third countries (i.e. non-EU countries).

Source: Foreign Trade Database of the CZSO, February 2017

Development of the Czech AFT from 2014 to 2016 by quarter (CZK bn.)

Indicator	AFT turnover	Agrarian export	Agrarian import	AFT balance	Degree of coverage of imports by exports (%)	Share of the balance in exports (%)	Share of AFT turnover in total FT turnover (%)	Share of agrarian exports in total exports (%)	Share of agrarian imports in total imports (%)
1. Q. 2014	92.2	44.8	47.4	-2.7	94.4	5.9	5.6	5.0	6.2
2. Q. 2014	92.3	43.6	48.7	-5.2	89.4	11.9	5.5	4.9	6.2
3. Q. 2014	94.6	44.4	50.2	-5.7	88.5	12.9	5.6	4.9	6.3
4. Q. 2014	101.1	47.5	53.6	-6.1	88.6	12.8	5.7	5.1	6.3
1. Q. 2015	99.3	47.7	51.6	-3.9	92.5	8.1	5.5	5.0	6.1
2. Q. 2015	103.7	49.8	53.9	-4.1	92.3	8.3	5.7	5.2	6.3
3. Q. 2015	103.9	49.8	54.0	-4.2	92.2	8.4	5.8	5.3	6.3
4. Q. 2015	115.2	54.0	61.1	-7.1	88.4	13.2	5.9	5.3	6.6
1. Q. 2016	106.4	49.8	56.6	-6.8	87.9	13.7	5.7	5.0	6.6
2. Q. 2016	107.4	51.3	56.1	-4.7	91.5	9.2	5.7	5.0	6.4
3. Q. 2016	103.1	48.6	54.5	-5.9	89.2	12.1	5.8	5.2	6.5
4. Q. 2016	109.4	51.9	57.5	-5.6	90.2	10.9	5.7	5.1	6.3

Note: Agrarian goods are defined by Chapters 01 to 24 of the Customs Tariff. Calculations are based on unrounded data.
Source: Foreign Trade Database of the CZSO, November 2017

Development of the Czech AFT from 2012 to 2016 (CZK bn.)

Indicator	AFT turnover	Agrarian export	Agrarian import	AFT balance	Degree of coverage of imports by exports (%)	Share of the balance in exports (%)	Share of AFT turnover in total FT turnover (%)	Share of agrarian exports in total exports (%)	Share of agrarian imports in total imports (%)
2012	321.3	148.3	173.0	-24.7	85.7	16.7	5.5	4.8	6.3
2013	345.3	160.6	184.7	-24.1	87.0	15.0	5.8	5.1	6.5
2014	380.2	180.2	199.9	-19.7	90.2	10.9	5.6	5.0	6.2
2015	422.1	201.4	220.7	-19.3	91.3	9.6	5.7	5.2	6.3
2016	426.3	201.6	224.7	-23.1	89.7	11.5	5.7	5.1	6.4

Note: Agrarian goods are defined by Chapters 01 to 24 of the Customs Tariff. Calculations are based on unrounded data.
Source: Foreign Trade Database of the CZSO, November 2017

Ministry of Agriculture Subordinate Organisations

We control our ministerial organisations

Ministerial organisations are in charge of specific areas such as the care of rivers, forests and food inspections. They collect important information about the development of agriculture and the food industry, deal with soil quality, oversee plant and animal care and are engaged in agricultural research, training and consultancy.

ORGANISATION UNITS OF THE STATE THAT ARE GOVERNMENT AUTHORITIES

- Státní pozemkový úřad (State Land Office of the Czech Republic)
- Česká plemenářská inspekce (Czech Breeding Inspectorate)
- Státní zemědělská a potravinářská inspekce (Czech Agriculture and Food Inspection Authority)
- Státní veterinární správa ČR (State Veterinary Administration)
- Ústav pro státní kontrolu veterinárních biopreparátů a léčiv (Institute for State Control of Veterinary Biologicals and Medicines)
- Ústřední kontrolní a zkušební ústav zemědělský (Central Institute for Supervising and Testing in Agriculture)

ORGANISATION UNITS OF THE STATE THATARE NOT GOVERNMENT AUTHORITIES

- Ústav pro hospodářskou úpravu lesů (Forest Management Institute)

STATE-SUBSIDISED ORGANISATIONS

- Česká akademie zemědělských věd (Czech Academy of Agricultural Sciences)
- Státní veterinární ústav Jihlava (State Veterinary Institute Jihlava)
- Státní veterinární ústav Olomouc (State Veterinary Institute Olomouc)
- Státní veterinární ústav Praha (State Veterinary Institute Prague)
- Ústav zemědělské ekonomiky a informací (Institute of Agricultural Economics and Information)
- Mateřská škola Klásek s.p.o. (Klásek Nursery School)
- Národní zemědělské muzeum, s.p.o. (National Museum of Agriculture)
- Národní hřebčín Kladruby nad Labem s.p.o. (National Stud at Kladruby nad Labem)
- Zařízení služeb MZe s.p.o. (Facilities Services of Ministry of Agriculture)
- Zemský hřebčinec Písek, s.p.o. (Provincial Stud Farm in Písek)
- Zemský hřebčinec Tlumačov, s.p.o. (Provincial Stud Farm in Tlumacov)

STATE ENTERPRISES ESTABLISHED UNDER ACT NO. 77/1997 COLL.

- Mezinárodní testování drůbeže, s.p. (International Poultry Testing, s.e.)
- Lesy České republiky, s.p. (Forests of the Czech Republic, s.e.)
- Povodí Vltavy, státní podnik (Vltava River Board, s.e.)
- Povodí Labe, státní podnik (Elbe River Board s.e.)
- Povodí Ohře, státní podnik (Ohře River Board, s.e.)
- Povodí Moravy, s.p. (Morava River Board, s.e.)
- Povodí Odry, státní podnik (Odra River Board, s.e.)

STATE ENTERPRISE ESTABLISHED UNDER ACT NO. 109/1964 COLL.

- Budějovický Budvar, n.p. (Budweiser Budvar, National Corporation)

STATE JOINT-STOCK COMPANIES, IN WHICH THE RIGHTS OF THE SOLE SHAREHOLDER ARE EXERCISED BY THE CZECH REPUBLIC – MINISTRY OF AGRICULTURE

- Jihomoravské pivovary, a.s. (South Moravian Breweries)
- Podpůrný a garanční rolnický a lesnický fond, a.s. (Supporting and Guarantee Agricultural and Forestry Fund)
- Státní zkušebna strojů a.s. (Government Testing Laboratory of Machines)

JOINT-STOCK COMPANIES, IN WHICH THE CZECH REPUBLIC – MINISTRY OF AGRICULTURE – EXERCISES THE SHAREHOLDER RIGHTS TOGETHER WITH OTHER MINISTRIES

- Exportní garanční a pojišťovací společnost, a.s. (Export Guarantee and Insurance Corporation)
- Česká exportní banka, a.s. (Czech Export Bank)

JOINT-STOCK COMPANIES WITH MINORITY SHARE OF THE CZECH REPUBLIC – MINISTRY OF AGRICULTURE

- Českomoravská společnost chovatelů, a.s. (Czech-Moravian Breeders Association)
- SETUZA, a.s.

STATE FUND

- Státní zemědělský intervenční fond (State Agricultural Intervention Fund)
- Vinařský fond České republiky (Wine Fund of the Czech Republic)

PUBLIC RESEARCH INSTITUTIONS

- Výzkumný ústav meliorací a ochrany půdy, v. v. i. (Research Institute for Soil and Water Conservation)
- Výzkumný ústav potravinářský Praha, v. v. i. (Food Research Institute Prague)
- Výzkumný ústav rostlinné výroby, v. v. i. (Crop Research Institute)
- Výzkumný ústav veterinárního lékařství, v. v. i. (Veterinary Research Institute)
- Výzkumný ústav zemědělské techniky, v. v. i. (Research Institute of Agricultural Engineering)
- Výzkumný ústav živočišné výroby, v. v. i. (Research Institute of Animal Science)
- Výzkumný ústav lesního hospodářství a myslivosti, v. v. i. (Forestry and Game Management Research Institute)

OTHER ORGANISATIONS

- Střední odborné učiliště včelařské – Včelařské vzdělávací centrum, o.p.s.
  (Secondary vocational school of beekeeping – Beekeeping educational center, o.p.s.)

The Ministry of Agriculture has a total of 43 ministerial organisations associated with agriculture. State-owned enterprises take care of rivers and small watercourses, forests and breeding. State organisational units with control functions include the Czech Agricultural and Food Inspection Authority, the Czech Breeding Inspection and the State Veterinary Administration. The Ministry also has state contributory organisations, such as the National Agricultural Museum where various exhibitions with an agricultural theme are organised, and the National Stud Farm in Kladruby nad Labem, which has been breeding Kladruby horses for more than 400 years and is endeavouring to inscribe the landscape of the stud farm in the UNESCO World Heritage List. Institutions that are engaged in agricultural research and education play a very important role. Joint-stock companies are also important, headed by the Supporting and Guarantee Agricultural and Forestry Fund, which is in charge of providing support programmes for farmers in order to increase the competitiveness of Czech agriculture, forestry, the food industry and to contribute to the overall development of the Czech countryside.

LESY ČESKÉ REPUBLIKY, S.P. (FORESTS OF THE CZECH REPUBLIC)

The enterprise's main activity is the management of the more than 1.3 million ha of forest property owned by the state (nearly 86 % of all state forests) and caring for roughly 38 000 km of designated watercourses and streams (a significant increase in the amount of watercourses managed compared to the previous year since 1 January 2011, due to the transfer of stewardship from the Agricultural Water Administration within the framework of its transformation). Annual felling ranges, on average, to approx. 7 million m^3 of wood, which accounts for about 72 % of the current increment.

The basis of the enterprise's forestry strategy is sustainable forest management, based on the maximum use of the creative forces of Nature to ensure the continuous, balanced fulfilment of the productive functions of the entrusted forests. The enterprise's aim is the creation of stable, high-quality mixed forests of varying ages, species composition and spatial distribution. More information on the Lesy ČR website **www.lesycr.cz**.

KLADRUBY S.P.O. NATIONAL STUD FARM

Kladruby nad Labem, s.p.o. National Stud Farm is one of the oldest large stud farms in the world. It is located in the Labe lowlands near Pardubice and has very favourable soil conditions (sandy and sandy-loamy soil) for horse breeding. Horses from the National Stud Farm in Kladruby nad Labem, s.p.o. are currently bred in Kladruby (white horses) and also in Slatiňany (black horses).

Currently the Kladruby nad Labem National Stud Farm is a state-subsidised organisation, breeding nearly 500 horses. Visitors can see Old Kladruber white horses, along with a small herd of Czech Warmblood horses. Together with private horses, a total of about 250 horses are stabled at Kladruby. The Slatiňany Stud Farm currently breeds about 250 Old Kladruber black horses. More information on the stud farm's website **www.nhkladruby.cz/national-stud**.

BUDĚJOVICKÝ BUDVAR, N.P. (BUDWEISER BUDVAR, NATIONAL CORPORATION)

Budějovický Budvar, n.p. Brewery is one of the most successful beverage enterprises in the Czech Republic. Almost half of the production is exported to more than 70 countries on all continents. In 2016, the Budweiser Budvar enterprise sold about 1.615 million hectolitres of beer. The modern history of the Brewery dates back to 1967, when the Ministry of Agriculture of the Czech Republic established the national enterprise of Budějovický Budvar, as the direct successor of the Czech stock brewery, which had been brewing in České Budějovice since 1895. The Czech joint-stock brewery was founded by Czech licensed brewers who tied in to the more than 700 years of brewing history in České Budějovice (formerly Budweis).

Via gradual and purposeful expansion into foreign markets and strengthening domestic sales, Budějovický Budvar became a major player in the beer market, and not just in the Czech Republic. The volume of exports ranks the premium original Budweiser Budvar lager among the top export beer brands in the Czech Republic. Today Budějovický Budvar, n.p. has a staff of more than 600 employees.

Every year more than 40 000 tourists visit the Brewery to watch the production of beer and taste it in the lagering cellar. "The Story of Budweiser Beer" is a multimedia exhibition showing the history and the present times of Budweiser beer in a 3D film on plasma screens. More information on the Budějovický Budvar website: **www.budejovickybudvar.cz/en/.**

THE POVODÍ STATE-OWNED ENTERPRISES

The five Povodí enterprises (River Basin enterprises) fall under the Ministry of Agriculture. These are Elbe River Board, Morava River Board, Vltava River Board, Ohře River Board and Odra River Board. All the Povodí enterprises protect and take care of the quantity and quality of surface and groundwater, ensure the sustainable use of water resources with regard to hydrological extremes – floods and drought – implement the construction of flood control measures, manage waterways, monitor the status of the watercourses and riverbanks in terms of water flow, care for watercourses' corridors, etc.

In 2016, the state-owned Povodí enterprises celebrated 50 years since the establishment of their first legal predecessor, the special budget organisation of the Directorate for Watercourses, Prague, established on 1 July 1966. It was entrusted with the administration and operation of watercourses by means of the River Basins Management, organised according to the main river boards. These were gradually transformed into separate enterprises.

Elbe River Board, state enterprise is located in Hradec Králové, the entire catchment area is 14 976.1 km^2, the length of the courses under its management is 9 352.7 km. The Povodí administers 196 weirs and 78 small water reservoirs and ponds. More information can be found on the website: **www.pla.cz**.

Morava River Board, s. e. is located in Brno, its total area is 21 132.3 km^2, the length of the courses under its management is 10 820 km. With regard to weirs, the Povodí manages 174 and further manages 133 small water reservoirs. More information on the website: **www.pmo.cz**.

Vltava River Board, state enterprise is located in Prague. On a territory with a total area of 28 708 km^2 it manages more than 22 000 km of watercourses. Furthermore, it has the right to manage 110 water reservoirs, 344 movable and fixed weirs and 19 small water power plants. More information on the website: **www.pvl.cz**.

Ohře River Board, state enterprise is located in Chomutov and manages watercourses that are 6 951 km in length on a territory with a total area almost 10 000 km^2. It also manages 54 weirs, 22 large water reservoirs and 21 small water power plants. More information on the website: **www.poh.cz**.

Odra River Board, state enterprise is located in Ostrava. On an area of 6 252 km^2 it manages 3 655 km of major and minor flows. It also manages 31 small water reservoirs and operates 80 weirs and 9 small hydroelectric plants. More information on the website: **www.pod.cz**.

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Front cover: Daniel Rericha, symbiot, back cover: Ondrej Prosicky, Kajano

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Prague 2018

ISBN 978-80-7434-416-9