Agriculture in Lithuania

History of farming in brief

Farming. Agriculture is one of the oldest businesses in Lithuania. The main food products were grains and meat. The most important grain crop was rye, but wheat, oats, barley, millet and buckwheat were also cultivated. The most popular vegetables were turnips, and legumes such as peas, beans and lentils were also grown widely. Lithuanians have long raised cattle, pigs, sheep and goats, and later – horses as well. From 1919 to 1940, agricultural products accounted for about 90 per cent of Lithuanian export. The level of Lithuanian agricultural production at that time was similar to that per cent of other Western European countries. The majority of the country’s population made a living from agricultural activities. After the 1940 occupation, the Soviets destroyed Lithuania’s market-oriented structure of agriculture, changed land ownership, and began to implement the Soviet structure of agriculture, during which collective farms were established. After Lithuania regained its independence in 1990, land reform was carried out and agriculture was restructured.

Livestock breeding. Bovines, cows and goats have been mentioned in Lithuanian historical sources since the 11th century. Later, raising cattle and pigs became predominant, and the third largest group of domestic animals consisted of small bovids (sheep and goats). Livestock has always been an important source of food in Lithuania, providing meat and milk, as well as wool and fur for clothes, and leather for shoes and other products. A number of articles were made from the bones and horns of domestic animals. An important branch of animal husbandry was the breeding of horses, which, as agriculture developed, became increasingly important due to their pulling force. Of the other activities that fed the people, the most important was beekeeping, which yielded wax even for export by the late 13th century.

Fisheries and fishing. Fisheries and fishing have deep traditions in Lithuania – it has long been one of the most important businesses in the country. Fish were not only caught in rivers and lakes, but also bred in ponds. The first ponds appeared in Lithuania in the 15th–16th century. Their emergence was influenced by Lithuanian nobles. The areas of the ponds expanded in the late 19th century and early 20th century. Until the restoration of Lithuania’s independence, all of the large fish farms were run by the state or cooperatives (collective farms, associations). Now they have become limited liability companies or private limited liability companies. True fishing is considered to have appeared during the Middle Stone Age, when people would catch at least 17 species of fish – most frequently pike, perch, bream and tench. Spearfishing is an ancient method of fishing that was known throughout Lithuania. Ice net fishing is an old form of fishing that was already mentioned in historical sources in the 16th century. This method does not cause any significant damage to the fish stocks – the fishing is done with fine nets that the fish are lured into with sounds. After being shaped in the late 19th century, this method of fishing was gradually modified and improved until it reached our times, having preserved the century-old traditions.

Orchards. Orchards already began appearing in Lithuania at manors and monasteries in the 14th century. Since the end of the 19th century, orchard plants spread profusely at Lithuanian farmsteads, when grafts
taken from manor and monastery orchards were grafted onto European crab apple trees and pear trees. The development of orchards accelerated in the second half of the 19th century after the abolition of serfdom. There are currently about 2,200 varieties and forms of orchard plants being grown in Lithuania. In terms of genetic resources, the heirloom folk crop apple, pear, sour cherry and plum varieties are extremely valuable.

Crafts are traditional professions where people called artisans usually produce items with tools by hand. The secrets of the craft were passed down from generation to generation (by a father to his son or by a master to his student). In the Middle Ages, crafts underwent the most rapid development in the cities, and especially in Vilnius, which became Lithuania’s artisanal centre. From the late 13th century to the 14th century, handicrafts broke away from traditional business and became an independent branch of the economy. Crafts in Lithuania were flourishing – carpenters were building houses and making furniture and spinning wheels, and coopers, clog makers, basket makers, binders, shoemakers, tailors, weavers, wheelwrights, blacksmiths and furriers all had plenty of work. Potters, book binders, jewellers and artisans who worked with iron, leather and stone were also popular. Domestic crafts existed in rural areas until the 20th century – home-made agricultural equipment, fabrics and food products that were used by the family and the farm.

AGRICULTURE TODAY

Agriculture is one of the oldest businesses in Lithuania and occupies the bulk of the territory in rural areas. Lithuania is historically an agricultural country. The agricultural sector carries out very important economic, social, environmental and ethno-cultural functions and is considered a priority sector of the national economy. It is the second largest sector in the Lithuanian economy, and played a significant economic and social role in all of the periods of the country’s history.

Agriculture, forestry and fishing made up 3.3 per cent of the gross value added in 2016, and exports of agricultural and food products accounted for 19.4 per cent of Lithuania’s total export.

Even though Lithuania only covers an area of 65,300 km², the agro-climatic conditions vary in different parts of the country. Lithuania has a cool climate with warm summers and cold winters. The average temperature in July is about 17°C, while in winter it is about −5°C.

An interesting feature of the Lithuanian climate is that the winters are mild and there is little snow. Autumn is warm and rainy, spring is relatively cold, and summer is warm. The weather is quite humid with relatively high precipitation over the year. There is high cloud cover year-round, which significantly reduces the amount of heat the sun transmits to the Earth. Even in summer, the actual duration of sunshine in Lithuania does not exceed 60 per cent of the potential sunlight for this latitude.

Crop capacity is the main factor limiting the cultivation of heat-loving plants in Lithuania on a large scale – it is very unstable both year by year and over the course of the year. During the hottest summers when tropical air masses come to Lithuania, the air temperature can get as high as 33–35°C, but in other years the temperature in July can drop to 6–7°C at night.

The average annual precipitation in Lithuania is 670 mm, but its distribution throughout the country is uneven, ranging from 500 to 900 mm. Such large fluctuations are caused by changes in large relief forms, plains and altitudes. Some 60–65 per cent of the annual precipitation occurs during the warm season (April–October). In summer, there is very heavy rainfall every year where 30 mm or more can come down during a single day. Fog is common.
In summing up Lithuania’s agricultural situation, one could say that Lithuania has a better balance of biological resources than most of the other European Union countries. Therefore, in increasing production volumes and implementing intensive technologies, measures must also be applied that encourage farms to protect the natural balance and use biological resources in a sustainable and responsible manner. After all, farmers are the first link in the food production chain, and they are not limited to growing food products. Farmers often produce and process products as well, and even sell them directly to consumers.

**Crop farming**

The favourable natural conditions in Lithuania and the good number of quality agricultural land for cultivating crops together with the long-standing experience in their cultivation have resulted in an increase in cereal crop yield over a few years. This was influenced by an increase in crop areas and the introduction of more advanced technology in crop production. Our country’s farmers have reached the level of Western Europe. Continuously growing grain yield is becoming the dominant trend.

In Lithuania, more than 32,000 farms of various sizes grow cereal, oil and leguminous crops. Grain plants form a significant part of the crop structure. In 2016, the total crop area was 2.1 million hectares. The relative share of cereals and legumes in the crop structure particularly increased: cereal crops accounted for 65 per cent, and leguminous crops accounted for 11 per cent. The total production of cereals grown in Lithuania accounts for 34.3 per cent of all agricultural production.

The favourable climatic conditions in Lithuania make it possible to cultivate rye, wheat, triticale, barley, buckwheat and other grain crops. We use grains to produce malt, flour, various groats, flakes, pasta, breakfast cereals and cracker, starch, gluten and syrups, and feed makes up the largest part of production.

**Vegetable farming**

Lithuania has suitable climatic conditions and sufficient agricultural productivity for the development of vegetable farming. Preconditions for the development of outdoor vegetable farming are also created by traditions. In 2016, 10.7 thousands hectares were used for outdoor vegetable crops. Greenhouses for growing vegetables occupied 0.5 thousands hectares. In 2016, vegetable crops accounted for 3.4 per cent of total agricultural production. The average yield of outdoor vegetables was 18.6 t/ha. The crop yield for outdoor vegetables was 196.2 thou. tonnes, and 18.4 thou. tonnes for greenhouse vegetables. Farmers grew 97.2 per cent of outdoor vegetables and 80 per cent of greenhouse vegetables, while agricultural companies produced 2.8 per cent and 20 per cent respectively.

The biggest outdoor vegetable crop in 2016 was cabbage (21.5 per cent), followed by carrots (18.7 per cent), beetroot (16.8 per cent) and onions (15.9 per cent). The crop yield for cabbage was 65,300 tonnes, for carrots – 44,400 tonnes, beetroot – 40,300 tonnes, and onions – 26,500 tonnes.

The cultivation of potatoes is a traditional branch of agriculture in Lithuania, with about 70 per cent of farms growing them. In 2016, the total potato crop area was 21.3 thousands hectares, and their crop yield was 340,200 tonnes.

**Fruit farming**

In 2016, there were 29,500 hectares of orchards and berry fields in Lithuania. The most common cultivar in Lithuanian fruit and berry farms is the apple tree. In 2016, 13,700 hectares of land were used for apple trees. Pears (1,7000 ha), plums (1,100 ha), and sour and sweet cherries (1,300 ha) accounted for approximately four per cent of the total land used for orchards and berry fields in 2016. Berry crops have increased in recent years and accounted for 11,400 hectares in 2016. The bulk was used for black currants – 4,500 hectares.
Various products are produced from fruit and berries. Juice was the main product, with 9.7 million litres produced. The largest part (60 per cent) was made from apples. Other key products include frozen fruit and berries, as well as various jams, marmalades, jellies, puree and pastes. Various wines and cider are also produced.

**Dairy**

The importance of dairy farming in Lithuanian agriculture remains significant. Milk production is in second place after grain production.

In 2016, 47,100 farms had dairy cattle. The most cows (21 per cent) were kept in farms with three to nine cows. In 2016, the milk yield was 1,756,000 tonnes, of which 80 per cent was bought for processing. In Lithuania, about 79 per cent of the milk is produced by farmers and family farms. The average cattle productivity in Lithuania in 2016 was 5,536 kg per cow.

Lithuania’s main specialisation in the dairy processing industry is cheese. These products also predominate in the export structure.

**Meat**

The livestock farming sector in Lithuania is an important and priority agricultural field, supplying the country’s consumers with various livestock products and the agriculture industry itself with organic fertilizers. For the development of this sector, the country has favourable natural conditions, livestock breeding traditions, and a wealth of experience.

At the end of 2016, 57,500 farms were raising cattle. The average farm size is not large. One farm had an average of 12 cattle. In terms of pure-bred beef cattle, Limousin, Angus, Aubrac and Charolais are the most popular in Lithuania. However, cross-breeds are the most widespread.

At the end of 2016, there were 663,900 pigs in Lithuania, of which 48,800 were pure-bred sows. There were 163,600 sheep at 10,400 farms, for an average of 16 sheep per farm. At the end of 2016, there were 10,098,900 domesticated birds being bred in Lithuania, of which 98 per cent where chickens. Laying hens accounted for one third of the chickens. Geese, ducks, turkeys and other fowl were also bred.

**Fishing**

Lithuania’s natural conditions are favourable for the development of fisheries. The fishing sector is important for the Baltic Sea coast region of Lithuania and is part of the national heritage. Fishing activities in Lithuania have deep historical traditions. Lithuania has a strong and relatively large fishing fleet.

In 2016, Lithuanian fishing companies caught 19,112 tonnes of various species of fish in the Baltic Sea (including the coastline). The bulk of the catch in the Baltic Sea consisted of: 11,548 tonnes of Baltic sprat, 5,199 tonnes of Baltic herring, 1,669 tonnes of cod, and 303 tonnes of flounder.

Inland fishing is strongly influenced by the country’s geographical position. The largest part of the country’s territory is in the northern part of a mid-latitude climate. Inland waters include the Curonian Lagoon, Kaunas Reservoir, lakes, rivers, water tanks, various ponds, polders and aquaculture ponds. Inland waters cover a total of 2,600 km², i.e. four per cent of the country’s territory.

Fish farming. Much attention is given to restoring the country’s fish stocks. In 2016, a total of 23,632 million fish were released into bodies of waters. There is experience in Lithuania with breeding rainbow trout, a valuable species of salmonid native.