LITHUANIAN INSTITUTE OF AGRARIAN ECONOMICS

AGRICULTURAL AND FOOD SECTOR IN LITHUANIA 2011

VILNIUS, 2012

An analytical review of the Lithuanian agricultural and food sector over the period of 2007–2011. "Agricultural and Food Sector in Lithuania 2011" is intended for representatives of governmental and self-governing authorities, scientific research and study institutions, and all interested in the development of agricultural and food sector, fisheries and rural areas.

General Editor Dr. Rasa Melnikienė Scientific Editor Dr. Nijolė Pelanienė

Reviewer Prof. Dr. Neringa Stončiuvienė

ABBREVIATIONS

AB – Joint Stock Company

AIRBC - Agricultural Information and Rural Business Centre

AMFIS – Agricultural and Food Market Information System

AWU – annual working unit

CAP – Common Agricultural Policy

CIS – Commonwealth of Independent States

CN – combined nomenclature

CNDP – complementary national direct payment

EAGF - European Agricultural Guarantee Fund

EC – European Commission

ESU – economic size unit

EU – European Union

EU-12 – Member States since 2004 and 2007

EU-15 – the old EU Member States

EU-27 – all EU Member States in 2007

FADN – Farm Accountancy Data Network

GDP – gross domestic product

LAG – local action group

LIAE - Lithuanian Institute of Agrarian Economics

LTL – Lithuanian Litas

RDP – Rural Development Programme

SME – small/medium-sized enterprise

UAA – utilized agricultural area

USA – The United States of America

VAT – value-added tax

WTO - World Trade Organisation

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FOREWORD

The publication "Agricultural and Food Sector in Lithuania 2011" is the thirteenth edition of the annual publications by the Lithuanian Institute of Agrarian Economics (LIAE). This analytical economic survey of agriculture, processing industry and fisheries was prepared referring to the statistical information, accountability data of companies within the sectors of agriculture, processing industry and fisheries, and the findings of surveys conducted by the LIAE staff.

The year 2011 was favourable for the Lithuanian agricultural and food sector. Due to good climatic conditions, the volumes of manufacture of a major part of agricultural products increased and purchase prices went up. Consumption that has been decreasing within the recent years on the domestic and foreign markets started augmenting again. As a result the gross value added created in agriculture and related services, if calculated by comparable prices, increased by 1.3% (by preliminary data amounted to LTL 2648.7 million). In 2011 the Lithuanian agricultural and food products has been positive since 2004. In 2011 it was by LTL 264 million higher than in 2010 and amounted to LTL 1997 million. National agricultural development was encouraged by the European Union (EU) and national budget support. In 2011 the share of the funds in the Lithuanian budget, assigned for financing of direct and investment assistance in agriculture, intervention and other market regulation measures, amounted to LTL 2.59 billion.

The publication presents changes in the indicators of agricultural and food sector development covering the five-year period focusing more attention on the events and outcomes in 2011. With an aim of retaining the possibility for comparing the key tendencies, data in all surveys is provided following the single methodology and structure.

As in all previous years, some preliminary statistical indicators of 2011 were used. Final economic and financial outcomes will be reflected in the later publications of the Department of Statistics and in the next-year LIAE survey.

The publication is intended for all who are interested in the achievements and problems of the agrarian and food sector. Material provided here might be useful for agricultural specialists and scientists, farmers and entrepreneurs, teachers and students.

Our sincere thanks go the Heads of the Lithuanian Department of Statistics and the Ministry of Agriculture of the Republic of Lithuania and their staff members for provided statistical information and advice. Dear readers, we are kindly looking forward to your remarks and proposals.

Dr. Rasa Melnikienė, Director of the Lithuanian Institute of Agrarian Economics

I. LITHUANIAN AGRARIAN SECTOR IN THE EU CONTEXT

1. Achievements and priority development trends in agriculture

With the new programming period approaching, the recent achievements and new challenges in agriculture to be faced by Lithuanian farmers after 2013 have been still more often in the focus of discussions. The increasing demand in food and necessity to more rationally use the natural resources and preserve them for the future generations stimulate to make a new assessment of the role and significance of Lithuanian agriculture. Agriculture and industry processing its products is not just the important source of economic welfare supplying the population of the country with qualitative food and certain energy resources. This sector has a big impact on the development of rural areas that are inhabited by one-third of Lithuania's population. By strengthening the base of agricultural production capacities and developing infrastructure, the life of the rural population has been also improving.

Within the past years rapid structural changes were taking place in Lithuanian agriculture. The average size of a farm was increasing whereas the number of farms went on decreasing. In 2011, as compared to 2007, the average size of a farm increased from 11.0 to 13.8 ha, and the number of annual working units in agriculture in accordance with the agricultural census and structural survey data declined from 173.6 thousand to 143.4 thousand. The structure of the utilized agricultural areas got changed – pastures and meadows were decreasing and the arable land was increasing. Even though Lithuania traditionally is the livestock-breeding country and possesses very good natural conditions and export markets for the development of this sector, the number of cattle was rapidly decreasing. With the decline in the demand for the employees in agriculture, emigration of young people was also incidental to rural areas. In 2011, the age of 58% of farmers and their working family members was over 50 years. Some negative tendencies became revealed – emptying villages, barren lands and rapidly declining employment in the low efficiency farming territories. Those changes reveal that agricultural problems and achievements should be assessed anew and new alternatives searched for the creation of competitive advantages in the sector.

Value added in the agricultural and food, beverages and tobacco production sector. Lithuania's economy in 2011 revealed apparent signs of its recovery. The gross domestic product if estimated in comparable prices, as compared to 2010, increased by 5.9% and exceeded the pre-crisis level. The value added generated in agriculture got increased by 1.3%, even though it did not reach the 2008 pre-crisis level (Table 1.1). Fluctuations in the gross value added created by agriculture and related services in the period under analysis were conditioned by the two main reasons: shift in the volumes of agricultural production due to climatic conditions and changes in the purchase prices for agricultural products because of the situation on the domestic and foreign markets. In 2009 the volumes of agricultural production were higher than in 2008: grain crops in

2009 increased by 11.7%, vegetables by 3.6%; however, with the start of crisis the value added dropped as a result of decreased purchased prices – in 2009 they accounted for 77.8% of the 2008 level. In 2010 agricultural production prices increased, whereas the level of value added created in agriculture and related services in 2010 was predetermined by the reduced production volumes due to unfavourable climatic conditions. Productivity of agricultural crops decreased as a result of droughts and heavy rains. In 2010 crop productivity accounted only for 79.7% of the 2009 level. Potato and vegetable productivity was lower as well: potatoes by 8.5%, carrots by 26.6%, and cabbage by 49.0%. Within the context of the constant fight for better yield and higher income the year 2011 should be attributed to more successful since climatic conditions determined the rich yield, the more so that prices were favourable.

Table 1.1. Macroeconomic indicators of the agricultural and food sector in 2007–2011

Indicators	2007	2008	2009	2010*	2011**
Gross domestic product, at current prices, LTL mill.	99 229,3	112 083,7	91 914,0	95 074,3	106 019,4
Gross value added, at current prices, LTL mill.	88 971,5	100 505,6	82 791,9	85330,1	95 192,5
Gross domestic product, at current prices, compared to the previous period, %	9,8	2,9	-14,8	1,4	5,9
Gross value added created in agriculture and related services, LTL mill.	2 879,3	3 101,0	1 905,4	2 311,0	2 648,7
Share of agriculture and related services in gross value added, %	3,2	3,1	2,3	2,7	2,8
Gross value added created in manufacture of food products, beverages and tobacco products, LTL mill.	3 298,9	3 429,0	3 711,6	3 829,8	4 402,8
Share of manufacture of food products, beverages and tobacco products in gross value added, %	3,7	3,4	4,5	4,5	4,6

^{*} Provisional data.

Source: Data of Statistics Lithuania.

In 2011 the share of value added in Lithuania's agriculture and related services retained the declining tendency, characteristic of the recent years. During the decade (2001–2011) this indicator dropped from 4.9% to 2.8%. Lithuania like other new EU Member States is facing a phenomenon experienced by all EU-15 Members States in the second half of the last century when with the rapid growth of the sectors of industry and services input of agriculture into the GDP went on decreasing consistently. Currently, the share of value added created in Lithuania' agriculture, forestry and fisheries was rapidly decreasing even though it remains almost as much as twice higher than the average in the EU states. In 2011 this indicator in the EU states accounted for 1.7% on the average. In comparison with the neighbouring Baltic countries, the share of value added created by Lithuanian farmers differed slightly in 2011, even though it should be noted that the share of value added created in agriculture and related services increased in some countries, especially in Latvia (Fig. 1.1).

^{**} Preliminary data.

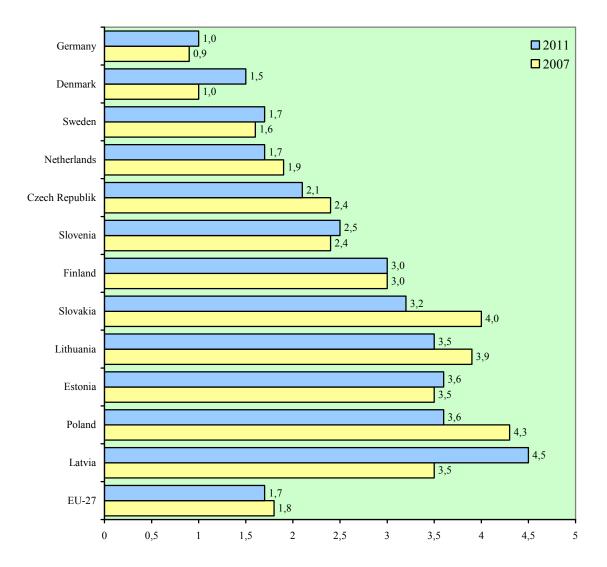


Fig. 1.1. The share of value added created in agriculture, forestry and fisheries in Lithuania and selected EU countries in 2007 and 2011, percent

Sources: Data of Eurostat and Statistics Lithuania.

Assessment of food, beverages and tobacco production shows not only the post-crisis recovery of the sector but also its stable contribution into the improvement of national macroeconomic indicators. The added value generated by food, beverages and tobacco production if calculated in comparable prices which due to crisis in 2009 dropped to 92.5% of the 2008 level, in 2010 reached and somewhat exceeded the pre-crisis indicator, and in 2011, as compared to 2010, increased by 4.8%. If calculated by the prices of the then period, it has increased by nearly one-third. The growth of added value created in this sector was more rapid than that of the GDP; therefore the share of gross value added in food, beverages and tobacco production was increasing.

Export dynamics and structure. More rapid growth rates of value added in food, beverages and tobacco production, as compared to the value added growth in agriculture manufacturing raw materials for this sector, predetermined certain new

tendencies in foreign trade. After the accession to the EU, the growth rate of export in agricultural and food products for several years considerably exceeded import growth rates. Foreign trade balance of agricultural and food products remains positive for already a number of years; in 2011 it increased to LTL 1996.9 million and, as compared to 2007, it was by 1.6 times more and was highest within the entire period of Lithuania's membership in the EU (Table 1.2). Thus a conclusion may be drawn that export in agricultural and food products helped to reduce considerably Lithuania's current account deficit.

Table 1.2. Export, import and foreign trade balance of agricultural and food products in 2007–2011

Indicators	2007	2008	2009	2010	2011
Value of exported products, LTL mill.	7345,6	8893,5	7979,4	9710,3	11564,6
share in total export, %	17,0	16,0	19,6	18,0	16,6
Value of imported products, LTL mill.	6097,3	8139,8	6650,2	7977,6	9567,7
share in total import, %	9,9	11,2	14,7	13,1	12,2
Foreign trade balance, LTL mill.	1248,3	753,7	1329,3	1732,7	1996,9

Source: Data of Statistics Lithuania.

At the same time new tendencies started to become apparent in 2011 – for the first time within the reference period the annual growth rates of import in agricultural and food products came close to and exceeded though insignificantly export growth. In 2011 import in agricultural and food products in comparison with 2010 increased by 19.9%, and export by 19.1%. Since Lithuania is the self-sufficient country in food products, the growth of import in agricultural and food products is conditioned by the consumer needs to acquire food products in a more varied range or cheaper in price. Simultaneously the volumes of imported raw materials for manufacture of food, beverages and tobacco products are increasing.

The demand of food, beverages and tobacco production enterprises for the import of raw materials is conditioned by the structural changes of production in agriculture: the number of farms specializing in grain production is increasing in Lithuania, and livestock number is decreasing. In 2011, as compared to 2007, the number of livestock units in the country has dropped by one-tenth. With the productivity of cattle increasing, even at the decrease of their number, livestock production volumes in 2011 were by 13% higher than in 2007. However, some production volumes are too low to satisfy the need in raw materials required for food, beverages and tobacco production. Cattle breeders due to low purchase prices, depending on certain oligopolistic tendencies in food, beverages and tobacco production, do not tend to expand production volumes. Primarily, negative tendencies become revealed on the milk market when due to the low milk purchase prices on the Lithuanian market the farmers seek for raw milk export alternatives, whereas milk processors at the same time increase the volumes of raw milk import. Since 2005 after import of milk for processing has started and until 2011 raw milk import increased by 7.5 times (from 39 thou. t to 295 thou. t), and its average price went up by 1.2 times (from 950 to 1145 LTL/t). 70% of raw milk was imported from Latvia and 30% from Estonia. Raw milk export has increased rapidly within the recent years while milk

processors were importing raw milk: in 2009, 10.4 thou. t of raw milk was exported, in 2010-23.6 thou. t, in 2011-70.7 thou. t. The most important markets are the neighbouring countries: in 2011, 70% of milk was exported to Poland, 26% to Estonia, and 4% to Latvia.

Since the beginning of crisis in 2008 pork import volumes have been decreasing though still remained considerable in comparison with the production volumes in Lithuania. In 2010, 86.1 thou. t of pork (carcass weight) was produced, and in 2011, by preliminary LIAE data, 88.0 thou. t. In 2011, 60.1 thou. t of pork was imported – by 3.6% more than in 2010, but by 17% less than in 2009. Such changes were partly due to the significantly increased pork demand on the domestic market conditioned by swine fever in Lithuania and export restriction to Russia. In 2010 poultry import was even by 1.2 times less than in 2009, but import volumes in 2011 increased again by 17%, as compared to 2010. Import of raw materials shows that food, beverages and tobacco production capacities exceed the supply of raw materials manufactured by Lithuanian agriculture and due to the developed disproportions the food, beverages and tobacco industry is becoming still more dependent on the volumes and quality of imported raw materials.

Import of agricultural and food products was also encouraged by the opportunity for re-exporting of some imported products into the neighbouring markets, as the economic situation was improving in those countries. In 2011 Lithuania imported 34.9 thou. t of frozen fish, of which one-third was re-exported, 31.4 thou. t of fish fillet (one-sixth was re-exported). If calculated by weight, re-exported fruit made a substantial share: 30% of bananas, 70% of citrus fruits, 75% of grapes, 86% of apricots, peaches, cherries, and plums. In 2011 fruit import went up by 24% (by value), export by 33%. Re-export of vegetables also comprised a significant share, e.g., import of champignons, paprika and aubergines increased by 1.2 times, and re-export by 1.3 times.

Lithuanian business ability to find foreign markets not only for its own products but also niches for products manufactured in other countries enabled the export of agricultural and food products to be reverted to a pre-crisis level. In 2011 agricultural, food, beverages and tobacco industry remained among the national export leaders. Export of agricultural, food, beverages and tobacco products accounted for 16.6% of the aggregate national export (Table 1.2). During the year export increased by almost onefifth, and comparing the 2011 foreign trade outcomes with the pre-crisis period in 2008, growth constituted even 30%. Export growth was due to the amount of the exported agricultural products and price enhancement. Average annual export price for butter in 2011, as compared to 2010, increased by 8.8% – from 11.10 to 12.08 LTL/kg, ripened cheese by 2.2% – from 12.02 to 12.29 LTL/kg. Grain shipped in 2011 comprised 1095 thou. t, by 285 thou. t (26%) less than in 2010, whereas value increased by 4.8% and comprised LTL 858 million, as the average export price on wheat increased from 607 to 794 LTL/t, barley from 486 to 674 LTL/t, rye from 470 to 715 LTL/t. Export amounts of many products increased. Poultry exported was by nearly 1.3 times more, pork by 1.5 times, ready-made food products, cereal flakes by 13%, bread, pies, rolls and other pastry by 6%.

The change of the agricultural production structure impacted the change in the export structure of agricultural and food products. Within the reference period since the re-establishment of independence, milk and dairy products constituted the major share of export in Lithuanian agricultural and food products and in 2007–2011 accounted for 14–15%. The significant place by export value, however, belonged to grain as well (in

2011 – 11% of export of the agricultural and food products of Lithuanian origin). The number of cattle and feed grain demand on the domestic market declining, grain export accounted for a significant share within the overall reference period and retained the tendency for growth, except 2009, during which it decreased by 1.3 times after the substantial drop in production prices.

In 2011 the main list of exported products, its value accounting for 61% of the total agricultural and food product export, included seven product groups: dairy produce, birds' eggs and natural honey, fruit and vegetables, tobacco products, grain crops, fish, and fodder products. The value of all those products amounted to LTL 7018 million. Nevertheless, in 2011 grain remained one of the most important export products and its share in export structure comprised 7.4%, and when evaluating export structure of agricultural and food products of Lithuanian origin – 10.6%. Even though grain export is beneficial for farmers and exporters, sale of raw materials in foreign markets does not create presumptions for the growth of value added of agricultural and food sector and simultaneously of the national gross value added.

In 2011 the major partner in the export of agricultural and food products was Russia. Export to this country accounted even for 30% of the total export in agricultural and food products, whereas its volumes increased even by 1.3 times per year. The second partner in this respect was Latvia – export to this country within the same period has increased by 11%, and its share in the export structure accounted for 13%. The third export partner as to export importance was Germany, the amount of shipped products into which was even by 18% higher than in 2010 (for LTL 1191 million), and export share to this country comprised 10%. Other Lithuanian neighbours were among major export partners: Poland accounting for 7.1% and Estonia for 4.7% of export. It should be underscored that export geography has been successfully expanded within the crisis period: export to Egypt increased by 2 times and to Saudi Arabia by 13%. In 2011 Lithuania exported agricultural and food products into 127 countries.

Employment, labour efficiency and income. Since the beginning of Lithuania's membership in the EU, rapid changes in employment tendencies observed in agriculture due to the crisis in 2008 became stabilized until 2011. The number of employed persons in agriculture and related activities amounted to 142.2 thousand in 2011, thus constituting 8.2% of the total number of the employees in the entire country. Emigration of people resulted in the workforce slumping tendencies, characteristic of the entire economy, including Lithuanian agriculture. In 2011 the employed persons in the national economy comprised 1370.5 thousand, as compared to 2010, their number increased 2.0%, and if compared to 2007 – reduced by 10.6%. The number of the employed in agriculture and related services was decreasing (0.8 and 10%, respectively).

Changes on the labour market reveal that employment structure in Lithuania gradually is getting closer to the employment structure characteristic of post-industrial countries; however, the importance of this sector on the labour market is still significant and exceeds strongly the corresponding indicator in the EU states. In 2011 the share of employed persons in the sectors of agriculture, forestry and fisheries accounted for 8.5%, in the EU-27 - 5.3%, the EU-15 - 3.0%, i.e. by 3.2 and 5.5 percentage points less. Economic crisis somewhat stopped the reduction of employment in agriculture, since part of the able-bodied rural population that got employed in the construction, services and industrial sectors at the economic boom after losing their jobs due to crisis came back to farming.

With the supply in the labour force decreasing, investments into farm modernization have become an important factor damping the workforce shortage. Material investments of agricultural entities (except farmers) in 2011 amounted to LTL 209.0 million. Within 2007–2011 investments constituted nearly LTL 1419.5 million (in 2007 – LTL 375.2 million, in 2008 – LTL 528.4 million, in 2009 – LTL 160.6 million, in 2010 – 146.3 million). Provision for capital by farmers' farms was on the increase. According to the data of respondent farms, in 2010, in commercial farms, property per ha of utilized agricultural area constituted on the average by 24% more than in 2007.

Investments of the agricultural entities and food, beverages and tobacco industry were stimulated by support granted in implementing the 2007–2013 Rural Development Programme. During 2007–2011 support assigned to projects under the measure "Modernization of Agricultural Holdings" amounted to LTL 1392.7 million and under the measure "Processing of Agricultural Products and Increasing Value Added" to LTL 428.5 million.

Investments into farm modernization were aimed at creating preconditions for labour efficiency in the farms and increase of farmers' income. Within several years from the beginning of the EU support for farm modernization, material investments accelerated the growth of labour efficiency. Within the period of 2007–2011 labour efficiency was from 2% to 32% higher than in 2004, in the year of Lithuania's accession into the EU.

Labour efficiency in 2011 remained at the same level as in 2007, though within the entire reference period value added per average working unit (AWU) in agriculture and related services fluctuated greatly: in 2007 – LTL 18223, in 2008 – LTL 20550, in 2009 – LTL 12952, in 2010 – LTL 16116, in 2011 – LTL 18627 and, as compared to 2010, labour efficiency increased by 15.6%.

The dependence of technological processes on natural factures predetermined the lower labour efficiency in agriculture in comparison with other branches of the national economy. According to the data of the Department of Statistics, labour efficiency in agriculture is up to several times lower than the average in the economy. For example, in 2011 added value per average working unit created in agriculture, forestry and fisheries in such old EU Member States of the strong economy and expanded agriculture like Denmark and Germany constituted accordingly 58% and 59% of the average national labour efficiency. By labour efficiency level in agriculture, Sweden and the Netherlands are to be distinguished from the EU states where value added per AWU created in this sector accounted for 84% and 69% of the average national labour efficiency indicator (Table 1.2).

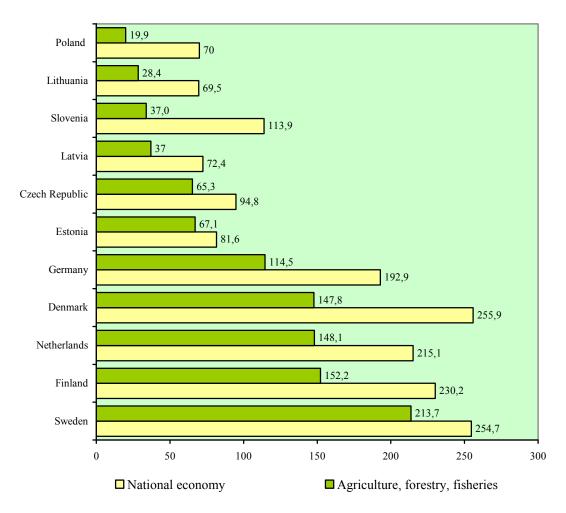


Fig. 1.2. Value added per average working unit in national economy and in agriculture, forestry and fisheries in Lithuania and selected EU countries in 2011, LTL thousand

Sources: Data of Eurostat and Statistics Lithuania.

Comparison of labour efficiency indicators in Lithuania with analogous indicators in other EU countries reveals that efficiency in Lithuania's agriculture is considerably behind the average in the EU-27 and the EU-15 Member States.

Labour efficiency influences farmers' income and reflects competitive advantages in the sector. Development and modernization of technologies and equipment have become the most important factor in the increase of labour efficiency since the beginning of Lithuania's membership in the EU. Plant-growing farms after acquisition of modern machinery and expansion of the arable land areas by way of ownership or lease could apply powerful technology and use the advantages of scale economies. Labour efficiency was increasing with agricultural employment reduction, though no due attention was paid to increase the added value. Tendencies for change in labour efficiency within 2007–2011 show that other labour efficiency enhancement factors should be also used, focusing special attention on certain areas enabling the increase of added value in small- and medium-sized farms and its redistribution among the food supply chain participants to the benefit of farmers.

With a view to increasing value added created in agriculture, account should be taken of the fact that farmers lack assistance at the stage of production of means. This

was underlined by the speakers in the discussion of the Green Paper in 2010. Farmers are still more interested in the support for other parts in the value added creation chain. This is especially important to small- and medium-sized farms. Lately, consumers devote still more attention to food quality and want to eat ecological and fresh food, produced locally. Now the present situation is especially favourable for the farmers' attempts to sell agricultural products directly to the final consumer. The support measures should be based on the idea to stimulate farmers to sell their products to the final consumer rather than to the processors of the raw materials or other agents.

Individual farmers, especially small ones, usually are not able to reach the final consumer, and, moreover, to find or raise permanent consumers. Such forms of trade when farmers enter into a direct contact with their product consumers need the concerted efforts and support from the authorities. For example, farmers' markets emerged in towns only when implementing a target project and with the support of the Ministry of Agriculture. Lithuanian consumers gave a very positive evaluation of this project and are waiting for similar initiatives in implementing other new forms of direct sales enabling consumers to buy qualitative short-term livestock and other products in a more favourable way and at a lower price.

Support shall help farmers to develop organizational systems for acceptance of orders and their delivery to customers, to create a network of outlets in farmers' farms, etc. To cut costs, e-trade in livestock products shall be encouraged. In order to implement this task, support beneficiaries should be not individual farmers but rather their associations, cooperatives, rural communities, and local action groups (LAGs). Support measures should stimulate the farmers' mutual cooperation and collaboration with other organizations.

State institutions could also contribute to the development of the system of trade in agricultural products without agents, creating opportunities for farmers to participate in public procurements. Therefore, while buying agricultural products and announcing purchase of separate products, farmers growing those products should be included into a list of possible suppliers. Benefit after implementation of that model would be miscellaneous: 1) local farmers would be able to act as the suppliers in thus organized procurements, therefore budget costs would become the local farmers' income and would come back to the budget in the form of taxes; 2) losses of logistic inputs would be avoided when transporting products and environment pollution would be less; 3) the consumer need to acquire the locally grown products would be satisfied.

Support provided in the said directions would not only contribute to the creation of the bigger added value in agriculture but would also stimulate the redistribution of the economic value between agriculture and other branches of the economy to the benefit of farmers.

Experience of the EU states evidences that to increase added value in agriculture know-how transfer and implementation of innovations should be applied. Research, innovations and their successful application in farmers' farms is one of the most important factors for increasing added value created in agriculture under conditions of knowledge society. Therefore promotion of innovations and improvement of methods for knowledge transfer is of utmost importance seeking to increase the sustainability of Lithuanian agricultural sector in the long-term perspective. The main challenge is to create the effective mechanisms helping to tackle the following issues:

- to use more varied organizational forms for knowledge transfer, focusing utmost attention on the transfer of tacit knowledge (accumulated from personal knowledge);
- to promote cooperation of science, education and economic entities;
- to increase the applicability of research.

Until recently the organizational forms of knowledge transfer that have been mostly applied in the Lithuanian system for training farmers and rural residents were based on explicit, i.e. encoded, recorded knowledge. The prevailing organizational forms of knowledge transfer are lectures or dissemination of written texts with recommendations or other documents. According to scientific research, such methods of knowledge transfer are hardly effective, just approx. 5% of information is commonly mastered. In the future, knowledge transfer should be improved focusing on such organizational forms like learning by doing, mentoring, coaching, Socratic questioning method, etc. A major part of such trainings should be prepared by farmers for other farmers, thus not only making knowledge transfer more effective but also learning themselves to be consultants, mentors, etc.

In promotion of cooperation between science, training and economic entities, support should be given to the projects aimed at creating the effective system of permanent relations among all those three groups. The projects should be intended to:

- create a knowledge base (e.g., organizational systems), the formation whereof includes the representatives of all three groups, among which economic entities seeking to implement benchmarking in their farms, new products for market research, etc.;
- develop cooperation networks for creation of the mechanism maintaining the self-recreating chain (scientific research-technology demonstration ground-implementation of innovations in a farmers' farm or enterprise-formulation of new research themes for practicians).

Strengthening the cooperation between farmers and foresters with scientists, trainers and consultants, implementation of new technologies in agriculture would be accelerated.

To increase the applicability of scientific research, support should be granted to spin-off enterprises, being created for implementing scientific research of agricultural and forestry institutes. Financing of applied research should be also increased by announcing tenders for carrying out sustainable development research in the agricultural, forestry and rural regions. This would allow to form the critical mass (scientists' potential, commercialization of technologies (turning into the source of profit) necessary for the transfer process of new technologies, competences, financing), which would operate as a catalyst for innovations and structural change.

Innovations, in particular in the sphere of marketing and management, should stimulate the farmers not only to focus on the competition in the market at the lowest production costs in the manufacture of standard products but also to compete in exclusive products.

2. EU and national support for the development of Lithuania's agricultural and food sector

After entry into the European Union Lithuania has become a participant of the Common Agricultural Policy (CAP). This policy is targeted to maintain viable agriculture, to provide the population with food, to sustain the environment and resources, to reduce the social exclusion between the rural and urban population, etc. To achieve those goals, support from the EU and the national budget is granted to the economic entities. The share of the funds, intended for financing of agriculture, in 2011 amounted to LTL 2728 million, i.e. by 5% more than in 2010 and by 5% less than in 2009. The funds in question are aimed for direct and investment support as well as intervention and other market regulation measures.

Direct payments. Direct payments shall be paid to ensure the long-term and less vulnerable economic viability of farms, independent of price fluctuations. They are granted to agricultural entities for the declared utilized agricultural areas (UAA), cattle and quota milk. Continuing the allocation of support according to the scheme of lump-sum payments for land areas, in 2011 in Lithuania direct support was paid from the European Agricultural Guarantee Fund (EAGF) and the national budget, paying complementary national direct payments (CNDP). Every year the procedure for CNDP payment shall be coordinated with the European Commission. The share of EAGF for Lithuania's direct payments has been increasing with every year. In 2011 payments made amounted to LTL 1114.4 million (the total allocation comprised LTL 1131.7 million) (Fig. 1.3). Of these funds, direct payments are made for the declared UAA, sugar, beef cattle and sheep (meat breeds). As compared to 2010, the share allocated from the EAGF, increased by 20.3% and paid by 19.9%.

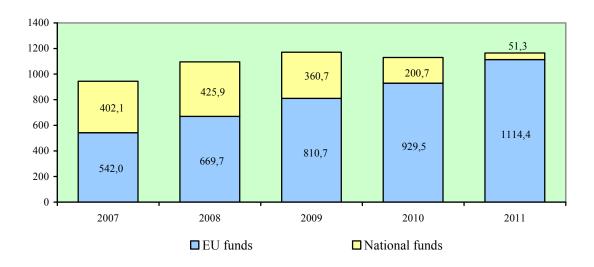


Fig. 1.3. Funds for direct payments in 2007–2011, LTL million

Source: Data of the National Paying Agency.

In accordance with the EU CAP rules for allocation of the support, the national share of direct support in Lithuania is decreasing with the increase of the EU support part (in 2013 part of the EU support shall constitute 100% of the foreseen budget, and the CNDP is cancelled). Even though in 2011 the approved complementary national direct payments amounted to LTL 194 million – by 34% (LTL 100 million) less than in 2010, the total amount of the support increased slightly.

In 2011 the basic direct payments paid to the applicant for utilized agricultural areas (not taking into account the kind of crops) comprised LTL 369.8, i.e. by 8.5% more than in 2010 (in 2010 – LTL 340.7). As in 2010, in the year 2011 support for grain crops, rapeseed, and flax was completely decoupled from the volumes of production. Since 2010 no support has been granted to agricultural entities for energy crops (Table 1.3).

Table 1.3. Direct payments in Lithuania in 2007–2011

Kind of payment	2007	2008	2009	2010	2011
EU budget payments					
basic payment, LTL/ha	198	248	291	341	370
quota sugar payment, LTL/t	269	318	344	344	344
energy crop payment, LTL/ha	155	155	155	_	_
beef cattle payment, LTL/head	_	_	_	_	426–546
sheep (meat breeding) payment, LTL/head	_	_	_	_	38–67
Complementary national direct payments for product	tion*				
grain crops, rape LTL/ha	170	144	99	60	33
protein crops, LTL/ha	256	251	180	100	75
fibre flax, LTL/ha	392	348	297	247	217
perennial herbs for seed and feed crop mix, LTL/ha	170	100	99	60	33
energy crops, LTL/ha	170	144	99	_	_
suckler cows, LTL/head	559	610	590	590	400
bulls, LTL/head	551	593	593	593	543
slaughtered adult cattle, LTL/head	193	250	220	213	30
ewes, LTL/head	48	48	48	48	40
quota milk, LTL/t	53	87	87	87	70

^{*} Total sum of coupled and decoupled payments.

 $Source: Data\ of\ the\ Ministry\ of\ Agriculture.$

To stimulate the rearing of beef cattle and sheep (meat breeds) in Lithuania and to prevent the mass shipment of calves (up to 1 year), a specific support scheme was prepared and adjusted with the European Commission under Article 68(1) of the Council Regulation (EC) No. 73/2009. Financing under this scheme is carried out from the EAGF funds, redistributing the financial envelope of direct payments for 2011–2013.

Beef cattle keepers meeting the requirements for payments under a specific support scheme, besides CNDP, from LTL 426 to LTL 546 per head were paid additionally (Table 1.4).

Table 1.4. Direct payments for beef cattle and sheep (meat breeds) in Lithuania in 2011

Beef cattle groups by number of heads	Payment, LTL/head	Sheep (meat breeds) groups by number of heads	Payment, LTL/head
1–5	546	1–50	67
6–50	526	51–100	47
51–100	485	101–150	43
101–150	465	>150	38
>150	426		

Source: Data of the Ministry of Agriculture.

Fluctuations in payments were determined following the principles of disbursement of payments under this specific support scheme – payments are differentiated according to the number of beef cattle in a farm, i.e. the bigger number of heads of cattle, the less average payment per head. An analogous scheme of support ensured the complementary payment to the sheep (meat breeds) growers from LTL 38 to 67 per sheep, depending on the size of a sheep herd in a farm.

Taking into account the redistribution of direct payments in 2011 and seeking to rear beef cattle and sheep, the basic direct payment as compared to the previous years was increasing less. It is notable that the increased basic payment reduced the share of CNDP in plant-growing and livestock-breeding farms. As compared to 2010, support for slaughtered adult cattle decreased by nearly 86%, for grain crops, rapeseed, perennial herbs and feed crop mixes by 45%. In 2011 it reached LTL 33 per hectare of utilized agricultural areas. Support for suckler cows decreased by some 32% (in 2011, LTL 400 per head) and for quota milk by about 20%, from 87 LTL/t in 2010 to 70 LTL/t in 2011.

Export refund payments. After Lithuania's membership in the EU, export refund payments that are paid for products shipped outside the EU into third countries as one of the EU applicable regulation measures were started to be applied. Export refund payments (compensation of the difference between the global and the EU market price) are paid with a view of making the EU manufactured products to be competitive on the markets of third countries. Even though these payments are paid to processors, they also affect the income of farmers, since they give the opportunity to pay the higher price to the growers on their supplied raw production. Export refund payments applied for the products manufactured in Lithuania are of the same rate as in other EU states. Export refund payments stimulate the increase of export volumes in Lithuania, though lately they have been reduced. This is related to the obligations of the WTO members when the Member States have to ensure the parallel (the principle of parallelism when all subsidies are reduced to a similar level) cancellation of all forms of export subsidies (direct export subsidies, export credits, etc.) until the year 2013. In 2011 in Lithuania export refund payments were granted only for meat and milk products. Of meat products, export refund payments were allocated for beef, cattle meat and live animals, and of milk products – for whole milk powder. As compared to 2010, the total amount of export refund payments decreased by about 34%, from LTL 21.5 million in 2010 to LTL 14.3 million in 2011 (Fig. 1.4).

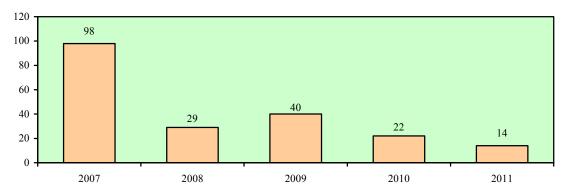


Fig. 1.4. Export subsidies paid in 2007–2011, LTL million

Source: Data of the National Paying Agency.

In 2011 export subsidies for beef in Lithuania comprised 98.5% of the total export refund payments, i.e. somewhat more than LTL 14 million. For cattle meat only LTL 92.2 thousand was paid, for live cattle LTL 79.5 thousand, and for whole milk powder LTL 48.1 thousand.

Export refund payments decreasing in Lithuania, it is planned to encourage export by supporting the popularization of trademarks and regional products.

Intervention purchases. One of the principal CAP mechanisms is to ensure agricultural produce procurement prices which should guarantee farmer's income. For that purpose the EC identifies target prices for the majority of agricultural products. On their basis intervention prices are calculated and intervention purchases of manufactured products are carried out.

In 2011 no applications for grain intervention purchases were filed in Lithuania, as market prices were higher that the established intervention prices. Analogous tendencies were observed in other EU states as well. In Lithuania only intervention cereals amount was administered that was sold before 2011. Last time cereals for intervention stocks were sold in 2009. Those cereals were warehoused and about 120 thou. t of cereals, of which just 90 tonnes of wheat, and the remaining part was barley, were distributed to support beneficiaries under the Food Distribution Programme from Intervention Stocks to the Most Deprived People in the Community. A similar situation is with intervention purchases of butter and skimmed and whole milk powder that were not sold for intervention either in 2010 or in 2011.

Since Lithuania's accession into the EU, the EU support level in 2011 for intervention measures in Lithuania has been one of the lowest. Such level was determined by high market prices for agricultural produce. The major share of the EU support was allocated to such intervention measures as "Promoting of Fruit Consumption in Schools" and "Food for the Benefit of the Deprived Persons". The total EU funds, assigned for intervention measures, in 2011 constituted about 4.1 million, by nearly 55% less than in 2010 (Fig. 1.5).

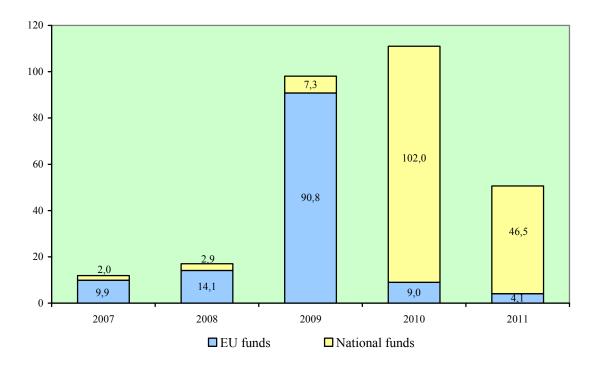


Fig. 1.5. Funds for intervention purchases in 2007–2011, LTL million

Source: Data of the National Paying Agency.

In 2011 the share of national funds for intervention measures was by some 54.5% less than in 2010 and amounted to LTL 46.5 million. The major part of those funds was allocated for the deprived persons and the socially more vulnerable groups of society.

Rural development measures. Alongside the direct support to farmers, the Common Agricultural Policy investment support is foreseen for farmers and it is granted under the 2007–2013 Rural Development Programme. The aggregate support foreseen within seven years for agricultural entities amounts to LTL 7.8 billion for strengthening the competitiveness of the agricultural sector, improving the environment and the countryside, living conditions of rural population, strengthening small-scale and non-agricultural business, and increasing the employment of rural people.

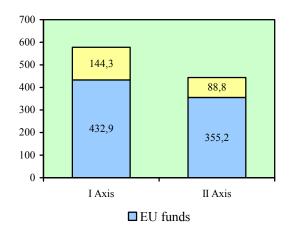
Since the beginning of the 2007–2013 programming period up to the end of 2011, in total almost 653 thousand applications were received under the 2007–2013 Lithuanian Rural Development Programme measures, the amount of requested support thereof comprising over LTL 7.7 billion. The approved support, however, constituted LTL 5.6 billion, and around LTL 4.6 billion was paid (this sum does not cover technical assistance and VAT of other RDP measures). As compared to 2010, the number of applicants decreased slightly in 2011 – some 3%, i.e. almost 132 thousand of applications (in 2010 – 135 thousand) were collected. In 2011, according to the applications, about LTL 2 billion was requested, support amounting to LTL 1.19 billion was paid, or 15% of the sum allocated for the entire programming period, and nearly 29% of the sum paid during 2007–2011. The major part of support in 2011, as in 2010, was paid in the Panevėžys County – LTL 179 million, least in Alytus – LTL 71.8 million. In 2011 the majority of applications were approved in the Utena County – almost 23 thousand, and least number in the Marijampolė County – about 4 thousand.

If the 2007–2013 Rural Development Programme implementation is assessed according to axes, as in all the years, support measures under Axis I were most successfully applied in 2011. Under the measure "Improving the Competitiveness of the Agricultural and Forestry Sector" of this Axis, 22.2 thousand applications were submitted. The major part of them stands for the measure "Early Retirement" -16.1 thousand and measure "Modernization of Agricultural Holdings" – 3.4 thousand. In 2011, LTL 328.9 million was paid under the above-mentioned measures, i.e. about 57% of the total paid sum under the measures of Axis I (in 2011 – LTL 577.2 million). As compared to 2010 (LTL 573.3 million), the support amount paid was somewhat higher. Worth of noticing is the fact that 652 farmers were granted support in 2011 under the measure "Semi-subsistence Farming". The measure is exclusively oriented to support farmers who are farming in their restructured semi-subsistence farms. As compared to 2010, the number of support beneficiaries increased by more than 3 times. The effectiveness of that measure was conditioned by the amendment to the programme initiated by the Ministry of Agriculture in 2010 and related to the expansion of the interval of the economic size unit (ESU) of the holding. In 2010 all holdings eligible for support under this measure constituted from 2 to 3.99 ESU, and from 2011 smaller holdings, from 1 to 3.99 ESU, could also be eligible for support.

In 2011, as in 2010, the farmers were quite actively using the support measures under Axis 2 "Improving the Environment and the Countryside". Over 108 thousand applications were submitted, and payments amounted to LTL 444 million. In 2011, most of the applications were submitted by the farmers engaged in agricultural activities in the areas with handicaps, other than mountain areas. In 2011, 87.8 thousand applications, i.e. 80% of the total number of the applications filed, were submitted under Axis II support measures, and payments made amounted to LTL 191.7 million (43% of the total number of payments under Axis II support measures in 2011). Farmers have also used actively the agrarian environmental payments. In 2011, 16.7 thousand applications were submitted (by 8% more than in 2010); about 36% of all the payments were paid under Axis II support measures, i.e. LTL 160.5 million.

After making amendments to the implementation of the measures "Transition to Non-agricultural Activities" and "Support for Business Creation and Development" under Axis III "The Quality of Life in Rural Areas and Diversification of the Rural Economy" of the Programme and to the simplified implementation rules, a lot of applicants applied for support in the production of alternative fuel (fuel granules and briquettes from waste, one of the constituent parts thereof is hay and straw, or wood shavings, etc.). Within 2011 according to the measures "Transition to Non-agricultural activities", "Support for Business Creation and Development", "Encouragement of Rural Tourism Activities" and "Village Renewal and Development (implementing by way of planning)" under Axis III of the Programme, a total of 830 projects were submitted for evaluation, i.e. by nearly 10% more than in 2009. About LTL 102.5 million were paid under the measures of Axis III, i.e. by 5 times more than in 2010.

Implementing "Leader" method measures under Axis IV, 11 applications were submitted in 2011 (by 74% less than in 2010), and the requested support sum comprised LTL 1.7 million, including 8 applications under the measure "Inter-territorial and Transnational Cooperation" and 3 applications under the measure "Support to LAG Activities, Acquisition and Active Application of Skills". Taking into account that about 100 applications were submitted in 2009 and 2010, their administration also proceeded in 2011, therefore in that year LTL 41.2 was paid under Axis IV measures, i.e. almost by two times more than in 2010 (Fig. 1.6).



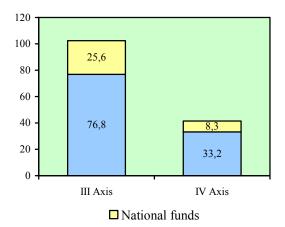


Fig. 1.6. Funds for rural development measures in 2011, LTL million

Source: Data of the National Paying Agency.

Implementing the 2007–2013 Rural Development Programme, in 2011 support amounting to LTL 898.2 million was paid from the EU budget funds, and the national budget part constituted LTL 267 million.

Aiming to increase the support absorption in 2011, the existing and prepared new rules for the implementation of the 2007–2013 Lithuanian Rural Development Programme were revised.

In 2011 new revisions of the rules for implementation in 2011 and simplified implementation in 2011 of the measures "Transition to Non-agricultural Activities" and "Support for Business Creation and Development" under Axis 3 of the Programme were developed and approved. In both cases when correcting the implementation rules, lists of kinds of the supported activities were revised and extended, thus affording the opportunity to farmers, rural population and enterprises operating in rural areas to cultivate trades of more variegated types. New and simplified rules for implementing the measure "Encouragement of Rural Tourism Activities" under Axis III in 2011 were prepared and approved.

State support. To ensure the competitive and effective perspective of agricultural and food sector development, state aid measures are also financed from the Rural Development and Business Promotion Programme national budget funds. In 2011, as in 2010, the following state aid measures were financed from those funds: compensation of insurance premiums; livestock breeding, credit interest compensation; farmers' training and consulting, scientific research, agricultural international and national exhibitions; animal by-products elimination; bee-keeping; compensation of guarantee payment and part of insurance premiums for credit beneficiaries, who took credits with a guarantee from the Rural Credit Guarantee Fund. In 2011 provision of state support was discontinued for the growers of energy crops, designed for biofuel production. This support was temporary applied in 2010 when payments for energy crops to the growers of energy crops were discontinued for the first time. Aiming to compensate losses for compulsorily slaughtered animals due to infectious diseases (bovine tuberculosis, bovine brucellosis, enzootic bovine leucosis), a new measure of support was implemented in 2011. Support by compensating expenses related to the application of phytosanitary measures was also provided in 2011.

Unfavourable conditions for winter crops within the past years encouraged the farmers to use more actively insurance services: comparing the insured crop areas in the business year 2010–2011 with the previous years, they increased by 3.5 times in Lithuania, and the number of farmers who insured their crops increased by 2.2 times. It is predicted that in Lithuania in the business year 2011–2012 insurance will cover about 212 thou. ha of the crop areas. Since 2008 when insurance services have been started to be applied for the crops, the state covered 50% of the insurance premium. In 2011, with account taken of the national budget opportunities, insurance premiums for the utilized agricultural areas were compensated up to 50%. As farmers expressed the high interest in insurance services, the support for compensating insurance premiums amounted to LTL 27.1 million or almost 50% of the total funds for the state aid measures.

Farmers are more interested in breeding high-valued pedigree animals and improving their pedigree qualities, increasing animal productivity and improving the genetic potential. Therefore in 2010 and 2011 the substantial share of funds was allocated to the breeding system development. Even though no support for acquisition of pedigree animals is granted, much attention, however, is devoted to the supervision of breeding and product quality improvement. In 2011, LTL 8.9 million was allocated for animal breeding support, i.e. 16% of the total funds foreseen for financing state aid measures.

In 2011, nearly LTL 5.6 million, or about 10% of the state aid funds, was granted to animal by-product elimination. This support allowed animal breeders to dispose of dead animals with fewer losses.

As in the previous years, payment of credit interest compensations was continued in the year 2011. This measure was designed for rural operating entities which were granted credits prior to 31 December 2009. In 2011 the total compensation sum comprised LTL 4.2 million, i.e. almost by half less than in 2010 and by 3.5 less than in 2009 (Fig.1.7).

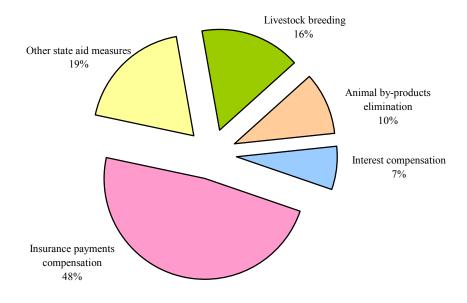


Fig. 1.7. Structure of state-financed measures in 2011

 $Source: Data\ of\ the\ Ministry\ of\ Agriculture.$

In comparison with the year 2010, financing of all the state aid measures increased by 25.7% and constituted LTL 56.8 million in 2011.

Measures for encouraging the development of the fisheries sector. Aiming at creating favourable conditions for the competitiveness and development of the fisheries sector, for preserving fish resources and their rational use, four priorities are envisaged in the 2007–2013 Operational Programme for the Lithuanian Fisheries Sector.

In 2010 the major portion of payments were paid out for the measures of the priority 1 "Adaptation of the Marine Fishing Fleet", whereas in 2011 no support was granted. Such result was determined due to the implementation of the objectives foreseen in the action programme under this axis until 2011 and striving to preserve the capacities of the fishing fleet. This was the reason why in 2011 calls for support applications under the measure "Permanent Cessation of Fishing Activities" of priority 1 were not organized. Moreover, none of the applications for support were received according to the measure "Modernization of Fishing Vessels" of priority 1. In 2011 the preparation of a new plan for regulation of the efforts of Lithuanian fisheries for 2012–2013 has been started.

In 2011, measures under priority 2 "Aquaculture, Inland Fishing, Processing and Marketing of Fishery and Aquaculture Products" were quite actively implemented. In the same year LTL 14.3 million of support funds was paid out according to the water-environmental measures under priority 2, i.e. by 43% more than in 2010, of which the EU funds comprised LTL 6.1 million. However, special attention was accorded to the measures related to aquaculture under priority 2. In 2011 payments under these measures constituted over LTL 15 million.

With an aim at creating the competitive fisheries sector, stimulating the collective activities of its representatives, organizations of the recognized fishery product manufacturers and other organizations, as well as representing the interests of the fisheries sector, in 2011 efforts were made to more actively implement measures of priority 3 "Measures of Common Interest" under the 2007–2013 operational programme for the Lithuanian fisheries sector. According to the statistics for the implementation of this priority, in 2011 the major portion – about LTL 3.8 million (by 52% more than in 2010) – was paid out for the activity area "Support Measures of Common Interest".

Under priority 4 "Sustainable Development of Fisheries Areas", oriented to local action groups in the fisheries regions, in 2011 LTL 2.1 million was paid out, i.e. by 2.5 times more than in 2010 (Fig. 1.8).

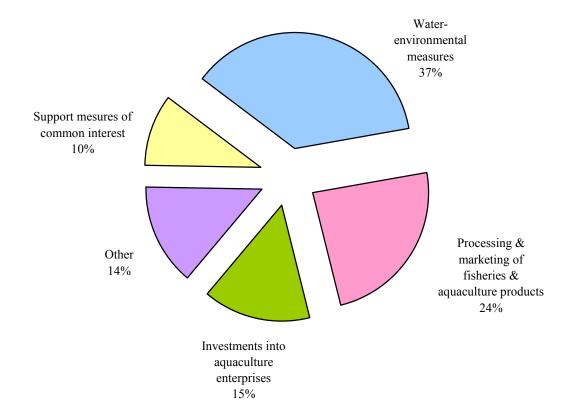


Fig. 1.8. Structure of fisheries measures funding in 2011

Source: Data of the National Paying Agency.

A total of LTL 38.7 million was paid out according to the measures encouraging the development of the fisheries sector, i.e. by nearly 19% more than in 2010.

A review relating to the application of the 2007–2013 support programmes in Lithuania every year gives the opportunity to make an insight into the existing problems and achievements. This helps to improve the systems for promotion of the programmes of direct payments, market regulation measures, rural development and fisheries, and at the same time to reduce social exclusion between the rural and urban population, to create more favourable conditions for competitiveness and development of the fisheries sector.

II. LITHUANIAN AGRICULTURAL AND FOOD SECTOR IN THE SINGLE MARKET

1. Changes in the trade of agricultural and food products in the domestic market

Food, beverages and tobacco turnover in terms of value in 2011 reached the level of 2007, and earnings – only the level of 2002. The value of food, beverages and tobacco sale per capita increased by 9.4% (Table 2.1), the purchasing power of earnings decreased for the major part of products.

Table 2.1. Retail sales of food products, alcoholic beverages and tobacco products in 2007–2011

Indicators	2007	2008	2009	2010	2011
Total sales, LTL mill.	11384,4	13192,4	11391,5	10717,2	11498,5
Per capita, LTL	3373	3929	3411	3261	3569

Source: Data of Statistics Lithuania.

In 2011 the gross average monthly earnings increased by 2.7%, whereas the price index of food products went up more rapidly by 5.5%. As compared to 2010, in 2011 the population of the country could buy only boiled sausages and eggs, whereas sugar, butter, and beef ham – somewhat less (Table 2.2).

Table 2.2. Purchasing power of net earnings of employees in the whole economy in 2007–2011

Indicators	2007	2008	2009	2010	2011	Change 2011 compared to 2010, %			
Average monthly earnings, LTL	1352	1651	1602	1552	1592	2,6			
Purchasing power of average net m	Purchasing power of average net monthly earnings in Quarter IV								
beef ham with bone, kg	114	92	86	101	91	-10,0			
pork ham without bone, kg	124	124	125	130	124	-4,6			
boiled sausages (best quality), kg	117	110	100	101	107	5,9			
milk, 2.5% fat, l	682	768	895	757	684	-9,6			
butter, 82% fat, kg	68	96	93	79	71	-10,1			
eggs, 10 pcs	381	410	400	442	459	3,8			
rye bread, kg	418	403	379	362	342	-5,5			
sugar, kg	486	554	521	543	424	-21,9			

Source: Data of Statistics Lithuania.

According to the data of the Department of Statistics, the supply of grain raised in Lithuania in 2011 was by 14% higher than in 2010. Slaughtered livestock and milk production indicators were almost the same as in 2010. The purchase of agricultural products was almost the same as in the previous year, only of grain and potatoes was less, as farmers anticipated better prices and were in no hurry to sell them (Table 2.3).

Table 2.3. Production and purchase of agricultural products in 2007–2011, thousand tonnes

Indicators	2007	2008	2009	2010	2011	Change 2011 compared to 2010, %
Production						
Grain production	3073	3484	3892	2867	3304	15,2
Sugar beet for industry	856	339	682	723	878	21,4
Livestock & poultry, slaughtered (l. w.)	349	295	272	296	299	1,0
Milk production	1937	1884	1791	1737	1754	1,0
Egg production, mill. pieces	959	891	853	825	817	-1,0
Purchase						
Cereals	1764	2398	2544	1916	1648	-14,0
Rapeseed	330	299	368	386	395	2,3
Potatoes	17	49	50	55	46	-16,4
Vegetables	42	56	57	56	47	-16,1
Fruit & berries	57	40	23	25	41	64,0
Livestock & poultry (l. w.)	271	243	215	235	234	-0,4
Natural milk	1349	1376	1274	1278	1317	3,1
Milk (equivalent of base fatness)	1628	1661	1534	1540	1587	3,1
Eggs, mill. pcs.	461	454	448	446	412	-7,6

Source: Data of Statistics Lithuania.

In 2011, due to the richer harvest of grain crops in the world, the grain prices on the London exchange were decreased by one-fifth as compared to the beginning of the year. In our country grain procurement prices decreased by about 15% in the second half of the year, whereas of their products – bread and flour – almost did not get reduced. In general, the procurement prices on livestock products of all kinds were higher at the end of the year, while crop-growing products became cheaper – partly due to the more abundant harvest in neighbouring Russia.

In 2011 retail prices on almost all key products were by 5–10% higher than in 2010 (Table 2.4). Retail prices for the major part of dairy and grain products were higher than in the pre-crisis year 2008. Meat prices, however, were lower, even though their VAT rate has increased since 2009 by even 16 percentage points, and prices on feed increased by one third. This witnesses the dependence of our domestic market on the EU market tendencies.

Table 2.4. Retail prices of food products in December 2007–2011, LTL per kilogram

Products	2007	2008	2009	2010	2011	Change 2011 compared to 2010, %
Beef ham with bone	18,40	18,44	18,69	16,47	18,27	10,9
Pork ham with bone	10,60	13,09	11,88	10,63	11,36	6,9
Chicken, drawn	7,77	8,49	8,80	8,11	8,59	5,9
Boiled sausages	10,05	12,50	12,15	11,70	11,64	-0,5
Milk, 2.5 %, LTL/l	2,24	2,31	1,83	2,24	2,43	8,5
Butter, 82 % fat	22,44	18,26	18,99	22,10	23,39	5,8
Sour cream, 20-25 % fat	6,46	5,77	5,35	5,90	6,37	8,0
Curd, 5–9 % fat	13,19	11,64	9,63	11,39	12,30	8,0
Best quality wheat flour	2,35	2,30	2,24	2,40	2,59	7,9
Rye bread	3,67	4,42	4,31	4,63	4,85	4,8
Best quality wheat flour bread	4,32	5,08	4,90	5,42	5,70	5,2
Potatoes	1,42	1,31	0,86	1,21	0,78	-35,5

Source: Data of Statistics Lithuania.

The share of sales of agricultural and food products on the domestic market shows the dependence of Lithuanian milk producers, animal breeders, poultry farms and vegetable and fruit processors on the situation on the external markets, since a substantial portion of their products are exported (Table 2.5). However, the share of sales of pork and grain products remains high on the domestic market.

Table 2.5. The share of sales of key food products in the domestic market in 2008–2011, per cent

Products	2008	2009	2010	2011
Dairy products	48,7	50,3	50.0	48,9
Beef	29,3	28,3	27,0	24,6
Pork	94,8	95,7	87,7	94,6
Poultry meat	77,2	71,1	63,3	72,3
Eggs	70,0	92,3	100,0	97,8
Rye bread	96,5	95,2	94,7	95,0
White bread	91,8	92,2	92,7	95,2
Wheat flour	95,1	90,6	86,0	91,5
Rye flour	94,0	95,2	97,3	98,1
Cereal groats	73,1	66,3	68,2	66,2
Pastry and confectionery	96,5	96,2	95,3	97,0
Potato products	44,8	46,1	45,5	56,7
Fruit and vegetable products	59,9	78,7	65,2	64,5

Source: Data of Statistics Lithuania.

A significant part of agricultural products – grain (about 50%), calves (about 30%), pigs (about 18 %) – is exported directly by the producers, therefore the supply on the domestic market is decreasing.

2. Foreign trade in agricultural and food products

According to the preliminary data of the Department of Statistics (February 2012), Lithuania exported agricultural and food products in 2011 for LTL 11565 million (by 19.1% more than in 2010), imported for LTL 9,568 million (correspondingly by 19.9% more). Import growth rates were somewhat more rapid if compared to export. Balance of trade in agricultural and food products has been positive since 2004 when Lithuania entered the EU membership. It has been growing annually since 2004, except for the year 2009, and later started increasing again. In 2011, as compared to 2010, balance increased by LTL 264 million and constituted LTL 2.0 billion (increased by 15.2%). Foreign trade turnover, as compared to 2010, increased by 19.5% (LTL 3.4 billion) and reached LTL 21.1 billion (Fig. 2.1). The rate of import coverage by export is 121%.

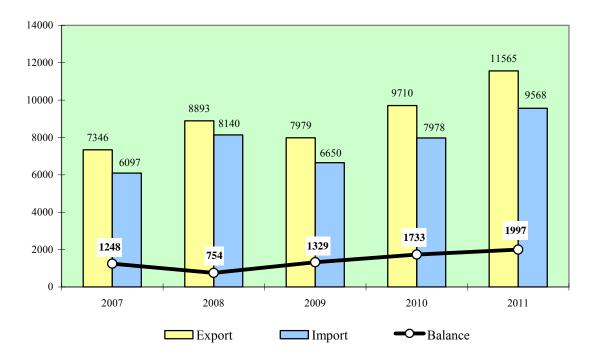


Fig. 2.1. Export, import and foreign trade balance of agricultural and food products in 2007–2011, LTL million

Source: Data of Statistics Lithuania.

The share of turnover in the trade of agricultural and food products in Lithuania's trade turnover in all goods has been increasing every year until 2009. In 2009, in the hardest year of economic crisis, when daily consumer goods were in higher demand, foreign trade in agricultural and food products accounted for 17% of the total turnover. It was due to the reduction of the purchasing power during crisis in Lithuania and other countries. In 2010, the global economy started to revive, the scale of international trade and demand for not essential goods increased. Therefore the share of agricultural and food

products started decreasing and in 2011 accounted for 14.3%. Export covered 16.6% of the total export of goods, import – 12.2% of the total import (Table 2.6).

Table 2.6. The share of trade of agricultural and food products in total Lithuania's foreign trade in 2007–2011

Indicators	Country group	2007	2008	2009	2010	2011*
	Total	17,0	16,0	19,6	18,0	16,6
Export	EU	17,6	15,3	19,6	17,8	15,8
Export	Third countries	15,9	17,2	19,6	18,2	17,9
	CIS	18,6	20,4	22,4	20,9	19,9
	Total	9,9	11,1	14,7	13,1	12,2
Import	EU	11,9	16,0	20,5	19,7	18,3
Import	Third countries	5,5	4,6	6,2	4,5	4,6
	CIS	3,2	2,7	3,2	2,3	2,4
	Total	12,9	13,3	17,0	15,4	14,3
Turnover	EU	14,2	15,7	20,1	18,8	17,1
Turnover	Third countries	10,1	9,8	12,1	10,6	10,4
	CIS	10,0	9,2	10,7	9,7	9,4

^{*} Preliminary data.

Source: Data of Statistics Lithuania.

Noteworthy is the fact that a certain periodic variation in exports and imports is observed in making analysis by quarters of the year. Every year the trade turnover in Quarter I, as compared to Quarter IV of the previous year, gets decreased. In Quarter I of 2011 export decreased by 15%, import by 5.0%, and turnover by 12.2%. Subsequently trade became more intensive every quarter.

According to the Eurostat data, in 2011 exports of all goods constituted of the EU total export (on the EU domestic market and on the markets outside the EU): Lithuania – 0.5%, Estonia and Latvia – 0.2% in each, Poland – 1.9%, import – 0.6%, 0.1%, 0.2% and 2.6%., respectively. As seen from the data provided, Lithuania's foreign trade turnover exceeds the volumes in Estonia and Latvia and is lower than in Poland (export of the latter by 3.8 times, import by 4.3 times). Even though the volumes of export of foodstuffs, beverages and tobacco products from Lithuania into third countries is less than the average on the EU domestic market, they exceed the export volumes of Estonia and Latvia – by 3.3 and 2.3 times, respectively, and import from third countries – by 2.2 and 1.7 times. Trade indicators with third countries of Poland, one of the main trade partners of Lithuania in agricultural and food products, are by several times higher than those in Lithuania: export by 4.6 times and import by 4.2 times more.

In 2011 Lithuania exported goods into 178 countries, agricultural and food products were exported into 127 countries. Products were exported for LTL 11.6 billion, of which of the Lithuanian origin for LTL 7751 million (67%). As previously, refund payments of export into third countries were paid out. Those payments amounted to LTL 14.3 million, i.e. by LTL 7.2 million less than in 2010. 99% of payments were made to cattle meat exporters. Decrease in payments was determined due to the increased export prices.

The major share of exports included the products in the group of the ready-made food products, beverages, spirits, and tobacco products. The value of this group products reached LTL 4091 million and accounted for 35.4% of the total value of exported agricultural and food products. The value of exported vegetable products comprised 34.5% (LTL 3995 million, 29.0% – live animals and products of animal origin (LTL 3349 million) and only 1.1% – fats and oils (LTL 130 million).

The main list of exported products, their value accounting for 61% of the total export of agricultural and food products, as in 2010 covered seven product groups. In 2011 the largest part of exports consisted of milk and dairy products, birds' eggs and natural honey, fruit and vegetables, tobacco products, cereals, fish and products used for animal fodder. The value of those products accounted for LTL 7018 million.

The structure of export in the products of Lithuanian origin differed from the structure of the total export of agricultural and food products. Here 65% goes to milk and dairy products, birds' eggs and natural honey, tobacco products, cereals, meat, products used for animal fodder, and fish. Their export amounted to LTL 5057 million (Fig. 2.2).

Exported dairy products amounted to LTL 1625 million and they accounted for 14.1% of the total export of agricultural and food products. As compared to 2010, the share of those products reduced by 0.5 percentage points. 97% of the exported dairy products were produced in Lithuania.

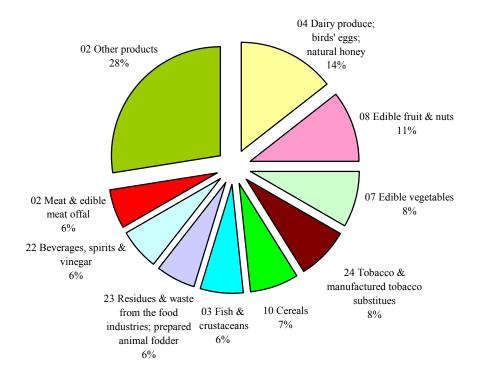
Fruit takes the second place by export value; their export amounted to LTL 1229 million. Nevertheless, fruit of Lithuanian origin accounted for 6.6% (in 2010 - 5.6%). Bilberries picked in Lithuania and frozen were exported most of all (4.0 thou. t for LTL 53 million).

72% of all exported fruit and nuts were shipped to Russia, 7% to each, Latvia and Belarus. 59% of fruit and berries of Lithuanian origin were exported to three countries: Sweden (30%), Germany (18%), and Poland (11%).

In 2011 the export of vegetables amounted to LTL 953 million (8.2% of the total export of agricultural and food products). The share of their export increased by 0.9 percentage points. Within the reference period, export increased by 33%, whereas products of Lithuanian origin accounted only for 15%. Nearly 83% of the exported vegetables of Lithuanian origin consist of champignons grown in Lithuania (exported for LTL 54 million, accounted for 38% of the exported vegetables of Lithuanian origin), chanterelles (LTL 32 million, 23%), dried peas (LTL 17 million, 12%), and potatoes (LTL 14 million, 10%). Of exported vegetables of non-Lithuanian origin, tomatoes make the major part (accounted for 28% of exported vegetables of non-Lithuanian origin), paprika (20%), champignons (7%), aubergines (5%), and head lettuce (5%), in total – about 65% of the exported vegetables of non-Lithuanian origin.

The major part of vegetable exports goes to Russia – 79% of all exported vegetables. 61% of vegetables of Lithuanian origin are shipped to Russia (20%), Germany (16%), Sweden (15%), and Latvia (10%).

All products



Products of Lithuanian origin

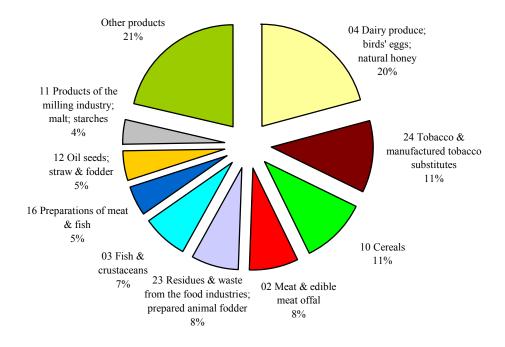


Fig. 2.2. Structure of the export agricultural and food products in 2011

Source: Data of Statistics Lithuania.

In 2011 tobacco products covered 7.7% of export value. Their export amounted to LTL 889 million and their value during the reference period increased by 44%. 99.9% of exported tobacco products are of Lithuanian origin.

Cereals accounted for 7.4% of the agricultural and food product export value. In 2011, their export amounted to LTL 858 million, as compared to 2010, and their value increased by 4.8%, and the share of cereals in the total export of agricultural and food products dropped by 1.0 percentage point. Almost 96% of the exported cereals were grown in Lithuania.

Plenty of fish and crustaceans – for LTL 727 million (6.3% of the total agricultural and food product export) – were exported. Export of the products of Lithuanian origin amounted to LTL 551 million; they comprised 76% of exported fish and crustaceans. Dried, salted or otherwise processed fish made the largest share in the export amounting to LTL 325 million (their share is 45 %). Fish fillet and other fish meat export constituted LTL 284 million (40% correspondingly), frozen fish for LTL 73 million (10%).

71% of fish and crustaceans were exported to Germany (45%), Poland (7.4%), Latvia (7.0%), Italy (6.2%), and Belgium (4.9%).

Residues and waste from the food industries and prepared animal fodder (CN Chapter 23) were exported for LTL 688 million, as compared to 2010, their export value reducing by LTL 16 million. Products of Lithuanian origin accounted for 86% of the total value of the mentioned products (LTL 589 million). Products used for animal feed made the major part of exported products – for LTL 497 million. The main countries of export of products under CN Chapter 23 are the United Kingdom (LTL 144 million, 21% of the total export value of the products of the said Chapter), Russia (LTL 90 million, 13%), Latvia (LTL 75 million, 11%), and Poland (LTL 60 million, 8.7%).

The value of exported non-alcoholic and alcoholic beverages reached LTL 684 million, within the reference period it increased by 25% and accounted for 5.9% of the total export of agricultural and food products in 2011. Products of Lithuanian origin comprised only 34% of the total export of beverages. Exported non-alcoholic beverages (mineral and carbonated water) amounted to LTL 128 million, 19% of the exported beverages. The value of exported alcoholic beverages constituted LTL 555 million (79%), vinegar – LTL 1.0 million. Main partners of export of non-alcoholic beverages are Latvia (43%) and Estonia (31%), alcoholic beverages – Russia (74%) and Latvia (12%).

The export share of 5.9% belongs to meat and meat offal. Their shipment amounted to LTL 678 million, export within the reference period increased by 1.3 times. Products of Lithuanian origin accounted for 87% of the total meat and offal exports. In total 25.5 thou, t of cattle meat were exported for LTL 321 million (accounted for 48% of the exported meat value), poultry meat – 31.3 thou, t for LTL 201 million (30% correspondingly), and pork – 8.7 thou, t for LTL 67 million (10%).

Lithuanian farmers and food manufacturers strive to sell the larger amounts of their grown and manufactured products on the foreign markets, as the opportunities on the domestic market are limited, prices not always are favourable for producers, whereas production volumes of most products are increasing. In 2007 export in products of Lithuanian origin amounted to LTL 5391 million, in 2011, despite of the 2008–2009 crisis that affected production and trade, export increased by 44%.

In 2011, as compared to 2010, export of almost all products of Lithuanian origin (according to the CN chapters of two symbols) increased. Export of meat and fish preparations decreased to the greatest extent – by 33% (Fig. 2.3).

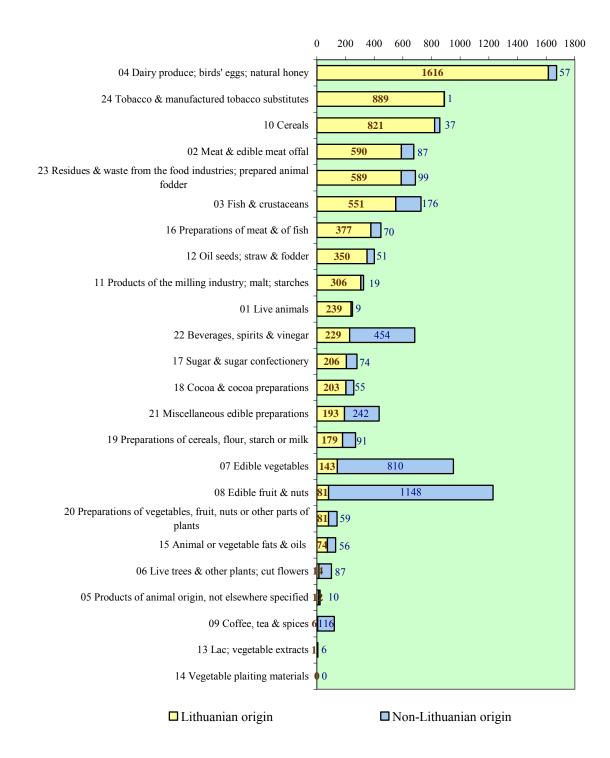


Fig. 2.3. The exports of Lithuanian and non-Lithuanian origin agricultural and food products in 2011, LTL million

Source: Data of Statistics Lithuania.

Within the reference period, export of Lithuanian milk and dairy products increased by 16%, the value reached LTL 1578 million (the total export of milk and dairy products of Lithuanian and non-Lithuanian origin amounted to LTL 1625 million).

Exported cheeses and curd comprised 50% of export in dairy products. In 2011 export of these products amounted to 66.1 thou. t, by 6.1 thou. t more than in 2010. Export value increased by almost 14% and reached LTL 813 million. Exported nonconcentrated cream and milk amounted to 141.0 thou. t, by 1.9 times more, the value reached LTL 418 million (26% of the dairy product export) and increased by over 1.4 times. Concentrated milk and cream comprised 14%; their export amounted to LTL 222 million, and value decreased by 16%. In comparison with 2010, export of whey of various forms was by 2.2 times higher. The amount of exported butter increased by 6.3% (3.0 thou. t were shipped), but with the increase of the average export price by 8.8% (from 11.10 LTL/kg in 2010 to 12.08 LTL/kg in 2011), its export value increased by nearly 16%

The average export price on cheeses and curd increased insignificantly: unfermented – from 10.45 to 10.70 LTL/kg, fermented cheeses from 12.02 to 12.29 LTL/kg.

Within the past years, raw milk exports have increased rapidly: in 2009 its export amounted to 10.4 thou. t, in 2010-23.6 thou. t, in 2011-70.7 thou. t. In 2011, 70% of milk was exported to Poland, 26% to Estonia, and 4% to Latvia.

Export of dairy products covered a total of 69 countries. The major part went to Russia – for LTL 501 million. Export to this country accounted for 31% of the total export in dairy products, as compared to 2010, its value increased by 1.1 times. Export to Italy comprised 15% of the total value of exported dairy products – LTL 242 million, its value increased by 6.7%, to Poland – correspondingly 14% (LTL 232 million, increased by 1.2 times), and to Germany by 13% (LTL 207 million, increased by 1.3 times). In 2011, export to the above countries accounted for 73% of the total dairy product export. Export to Romania increased by 8.0 times, to Kazakhstan by 6.8 times, and to Estonia by 2.2 times.

Cheeses and curd were exported to 36 countries, of which 56% to Russia and 28% to Italy. Non-concentrated cream and milk was shipped to 18 countries, mostly to Germany (42%) and Poland (40%). Concentrated milk and cream (skimmed and whole milk powder, concentrated milk with or without sugar) was exported to 50 countries, of which the major part to Poland (20%), Estonia (14%), the Netherlands (9%), and Belgium (8%).

Even though tobacco is not cultivated in Lithuania, in 2011, 11% of the export value of Lithuanian origin products consisted of tobacco products. Their export amounted to LTL 889 million. 99.9% of exported tobacco products are of Lithuanian origin. Cigarettes accounted for 87%, smoking tobacco for 11%. 73% of tobacco products were shipped to the EU states (for LTL 652 million). The main export partners are Sweden (19% of the total export of tobacco products), Germany and Finland (16% each), Egypt (11%), Latvia (9.4%), Norway (7.6%), and Turkey (7.4%).

Cereals comprised 11% of the export value of agricultural and food products of Lithuanian origin. In 2011, their export amounted to LTL 821 million, as compared to 2010, their value increased by 2.3%. In total, export of various cereals constituted 1061 thou. t: 798 thou. t (by 1.6 times less than in 2010) of wheat for LTL 635 million, 204 thou. t (by 1.3 times more) of barley for LTL 138 million, 16 thou. t (by 1.3 times less) of rye for LTL 12 million, 8.3 thou. t (by 26% less) of oat for LTL 6.6 million, 8.3 thou. t (by 2.0 times more) of maize for LTL 6.6 million, 592 t of buckwheat for LTL 0.7 million, 25 thou. t of other cereals for LTL 22 million (Fig. 2.4). In 2011, as

compared to 2010, the average export price on oat increased (from 383 to 893 LTL/t) to a largest extent – by 2.3 times. The average export price on rye increased by 1.6 times (from 468 to 754 LTL/t), on barley by 1.4 times (from 486 to 674 LTL/t), on wheat by 1.3 times (from 607 to 796 LTL/t), on maize by 1.2 times (from 657 to 791 LTL/t). Only the price on buckwheat decreased, which was much higher in 2010. Buckwheat price dropped by 1.5 times – from 1805 to 1232 LTL/t.

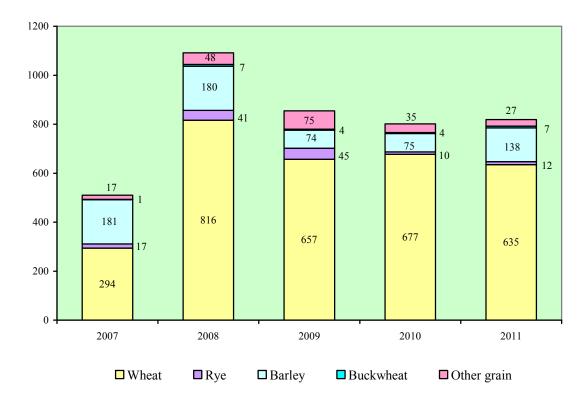


Fig. 2.4. Structure of the export of Lithuanian origin cereals in 2007–2011, LTL million

Source: Data of Statistics Lithuania.

66% of wheat went to Saudi Arabia, Germany, Latvia, Turkey, Spain, and the Netherlands, 73% of barley to Saudi Arabia and Latvia (54 and 19%, respectively, 85% of rye to Poland, Germany, and Latvia, 86% of oat to Germany and Denmark, 72% of maize to Estonia, 92% of buckwheat to Poland and Germany (66 and 26%, respectively). In total by export value the major part was exported to Saudi Arabia (21%), Latvia (14%), Germany (13%), and Turkey (7.5%).

As compared to 2010, export of meat and edible meat offal of Lithuanian origin increased by 1.3 times, reached LTL 590 million and accounted for 7.6% of the total export in agricultural and food products of Lithuanian origin.

Export of cattle meat made the largest share, its value LTL 320 million (54% of the total export of Lithuanian origin meat and edible meat offal). In comparison with 2010, export volumes reduced by 700 t, but with the prices increased the export value within the reference period increased by 1.2 times. The average export price of fresh or chilled cattle meat increased from 9964 to 12678 LTL/t (27%), frozen – from 10116 to 12199 LTL/t (21%). 81% of cattle meat was exported to Russia (for LTL 185 million), Sweden (LTL 28 million), Italy (LTL 25 million), and the Netherlands (LTL 21 million).

Export of Lithuanian poultry meat amounted to 21.1 thou. t in 2010 and in 2011 it increased and comprised 27.2 thou. t for LTL 185 million. During the reference period the export value increased by 24%. 95% of the exported poultry meat consisted of chicken, its export value amounting to LTL 175 million. The average chicken meat export price dropped from 7067 to 6815 LTL/t. 81% of poultry meat was exported to the Netherlands (23%), Latvia (23%), Estonia (13%), France (12%), and the United Kingdom (10%).

Export of pork was by 1.5 times higher than in 2010 amounting to 3.9 thou. t for LTL 31 million, the average export price decreased from 8268 to 8033 LTL/t. 61% of pork was exported to Latvia, 10% to Russia, and 8.7% to Estonia.

Analysis of export in 2011 of agricultural and food products to the EU and third countries revealed that export to the EU amounted to LTL 6764 million (58% of the total export), to third countries – LTL 4801 million (Fig. 2.5). In comparison with 2010, export into the EU states increased by LTL 894 million (15%), to third countries – LTL 960 million (25%). The value of export to the old EU Member States (EU-15) accounted for 56% of the total value of products exported to the EU countries. Lithuanian origin products comprised 82% of the export to the EU (LTL 5577 million) and during the reference period increased by 14%, to third countries by 45% (LTL 2174 million, increased by 18%). Export of non-Lithuanian origin products increased by 23%, to third countries by 32%.

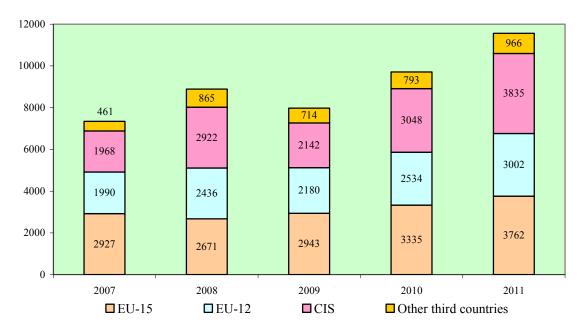


Fig. 2.5. The export of agricultural and food products by country group in 2007–2011, LTL million

Source: Data of Statistics Lithuania.

The largest part of export into the EU states consisted of various dairy products, eggs and honey (for LTL 1071 million), fish (for LTL 669 million), tobacco products (for LTL 652 million), prepared animal fodder and residues from the food industries (for LTL 536 million), and cereals (for LTL 484 million). These products comprised 50% of the total agricultural and food export to the EU countries.

Most of export into third countries consisted of fruit (for LTL 1000 million), vegetables (for LTL 791 million), dairy products, eggs and honey (for LTL 602 million), non-alcoholic and alcoholic beverages (for LTL 437 million), cereals (for LTL 374 million), meat (for LTL 303 million). Export value of the above products accounted for 73% of the total value of products exported to third countries.

Export to the CIS countries increased by 26% and constituted LTL 3835 million, or 80% of export to third countries. Export consisted mostly of fruit (for LTL 985 million), vegetables (for LTL 773 million), dairy products, eggs and honey (for LTL 528 million), non-alcoholic and alcoholic beverages (for LTL 425 million), and meat (for LTL 298 million).

The most important partners of export in 2011 of agricultural and food products were Russia, the export value into which reached LTL 3411 million (30% of the total export of agricultural and food products; the value during the year increased by 1.3 times), Latvia – LTL 1512 million (13% and 11%, respectively.), Germany – LTL 1191 million (10% and 18%), Poland – LTL 821 million (7.1% and 44%), Estonia – LTL 547 million (4.7% and 17%), Italy – LTL 438 million (3.8% and 14%), the Netherlands (3.3% and 45%) (Fig. 2.6). Export to these countries accounted for 72% of the total export of agricultural and food products. In 2011, as compared to 2010, export mostly increased to Egypt – 2 times, to Sweden – 1.3 times, Finland – 1.2 times, Saudi Arabia and Belarus – 13% each. In 2011 export to Romania decreased by 2.2 times, to Belgium by 1.5 times, to Kazakhstan by 26%, and to Denmark by 1.1 times.

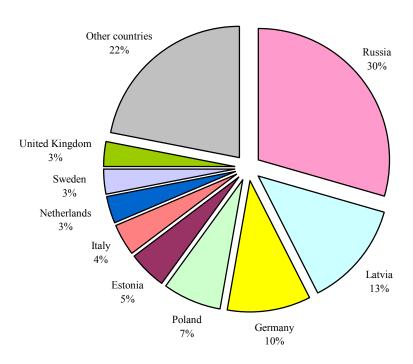


Fig. 2.6. Structure of the export of agricultural and food products by country in 2011

Only 32% (value – LTL 1090 million) of agricultural and food products exported to Russia were cultivated or manufactured in Lithuania. The major part of export is constituted of cheeses and curd of Lithuanian origin – for LTL 437 million, cattle meat for LTL 185 million, products used for animal feed for LTL 81 million, fermented beverages for LTL 50 million, and spread mixes for LTL 48 million. Those products accounted for 73% of Lithuanian origin products exported to Russia. Of non-Lithuanian origin products the substantial part consisted of vegetables (paprika, champignons, aubergines, and lettuces) for LTL 304 million, wine from fresh vineyards for LTL 281 million, tomatoes for LTL 210 million, apples and pears for LTL 200 million. They comprised 43% of the export of non-Lithuanian origin products.

Export to Latvia of Lithuanian origin products amounted to LTL 931 million. Those products accounted for 62% of the total export of agricultural and food products to this country. The major part of export consisted of Lithuanian origin cigarettes (for LTL 83 million), rapeseed (for LTL 82 million), wheat (for LTL 71 million), sugar (for LTL 63 million), cheeses and curd (for LTL 43 million), and poultry meat (for LTL 42 million). Of non-Lithuanian origin products the lead belongs to coffee and its extracts (LTL 73 million), spread mixes, food additives and protein concentrates (LTL 47 million), soya-bean oil-cake and oil extraction residues (LTL 25 million), citrus fruits (LTL 21 million), and bananas (LTL 19 million).

Export of Lithuanian origin agricultural and food products to Germany in 2011 amounted to LTL 1082 million and accounted for nearly 91% of the total agricultural and food products exported to Germany. The major part of exported Lithuanian origin products consisted of fish fillet, other fish meat, fish products and canned fish (for LTL 293 million), cream (LTL 175 million), cigarettes (LTL 143 million), wheat (LTL 97 million). The value of the abovementioned products accounted for 65% of the Lithuanian origin product export to Germany. Of non-Lithuanian origin products, most of export consisted of fish fillet and other fish meat for LTL 28 million, chanterelles for LTL 22 million, and frozen bilberries for LTL 12 million.

In 2011 Lithuania imported goods from 155 countries, agricultural and food products were imported from 102 states.

In 2011 import of agricultural and food products into Lithuania amounted to LTL 9568, by 19% more than in 2010. Of the 24 CN product chapters, including agricultural and food products, import of only two products decreased, import of products of the remaining 22 chapters increased or remained the same. Import of plants and cut flowers increased by 1.8 times, of cereals, sugar, milling products by 1.7 times each, milk and dairy products by 1.4 times, vegetables and fruit, meat, fats and oils by 1.2 times. Import of fish and crustaceans decreased by 2.2%, oilseeds, straw and fodder – by 18%. Import of the products under the remaining CN chapters, as compared to 2010, remained almost unchanged.

In 2011, as previously, the major part of import consisted of fruit and nuts (for LTL 1426 million, 15% of the total import of agricultural and food products). Plenty of various beverages were imported (LTL 998 million), vegetables (LTL 945 million), fish and crustaceans (LTL 808 million), milk and dairy products, eggs and honey (LTL 623 million), meat (LTL 581 million), miscellaneous edible preparations of Chapter 21 (extracts, food additives, and spreads) – for LTL 459 million, tobacco and tobacco products – for LTL 446 million, various fodder – for LTL 436 million. The value of the above products accounted for 70% of the total import of agricultural and food products (Fig. 2.7).

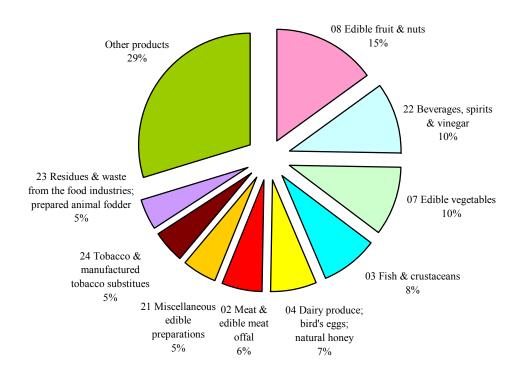


Fig. 2.7. Structure of the import of agricultural and food products in 2011 *Source: Data of Statistics Lithuania.*

Every year the largest part of import consists of edible fruit and nuts. In 2011 the import of fruit and nuts increased by 18% and comprised 15% of the total import of agricultural and food products. A substantial part (19%) of import of fruit and nuts consisted of citrus fruit, their import amounting to 97 thou. t for LTL 266 million. Import was mostly constituted of apples and pears (91 thou. t for LTL 224 million, 16%), fresh kiwi, strawberries, raspberries, bilberries (29 thou. t for LTL 204 million, 14%), apricots, cherries, peaches (39 thou. t for LTL 164 million, 12%.), grapes (LTL 158 million, 11%.), avocados, pineapples (LTL 110 million, 7.7%), frozen bilberries, strawberries, wild strawberries, raspberries (LTL 97 million, 6.9%), bananas (LTL 69 million, 4.9%). 75% of fruit and nuts were imported from Netherlands (47%), Italy (13%), Spain (7.7%), Belarus (4.4%), and Poland (3.4%).

In 2011 non-alcoholic and alcoholic beverages take the second place by import value. The import of beverages increased by 30%, as compared to 2010. Wine accounted for 43% in this group of imports, strong spirits 21%, mineral and carbonated water with sugar or sweetening matter and other additives 13%, and beer 8.6%. Wine is imported from 38 countries of the world, but the import from France (LTL 169 million), Italy (LTL 88 million) and Spain (LTL 79 million) accounted for 80% of the total imported wines. Strong spirits were mostly shipped from France, Latvia, Germany, Spain, Russia, and Sweden (over 64%), mineral and carbonated water with various additives – from Poland, Latvia, Austria, and Germany (more than 70%), beer from Belarus, Latvia, Estonia, Germany, and Poland (more than 70%).

During the reference period, the import of vegetables increased by almost 24% and accounted for 9.9% of the total import of agricultural and food products. Champignons, paprika, chanterelles, aubergines comprise 40% of import in this product

group, tomatoes 27%, various sorts of lettuce 7.2%. The major part of vegetables is imported from the Netherlands (72%), Poland (8.8%), and Spain (6.1%).

The import of fish and crustaceans by its value decreased by LTL 18 million and reached LTL 808 million. 26 thou. t of fresh and frozen fish, 31 thou. t fish fillet and other fish meat, 35 thou. t of frozen fish was imported. Fish trade volumes most often depend on the kind and price of fish. Import prices for all fishes, except fresh or chilled and live, increased or remained the same (average fresh and chilled fish import price decreased from 14584 to 13167 LTL/t). 30% of fish and crustaceans are imported from Sweden (LTL 240 million), 12% from Germany (LTL 97 million), 9.7% from Norway (LTL 78 million), 8.6% from Kazakhstan (LTL 69 million), 8.0% from Latvia (LTL 68 million). Import from those countries accounted for 68% of the total value of imported fish and crustaceans.

The import of milk and dairy products, birds' eggs and natural honey, as compared to 2010, increased by more than 39%. Eggs and honey constitute a very small part (1.9%) of export value of products of this group. As every year, the major part of import consisted of raw milk accounting for 55% of the total value of imported raw milk. It should be noted that the import of raw milk, as compared to 2005, when it was started, increased by 7.5 times (from 39 to 295 thou. t), and its average price by 1.2 times (from 950 to 1145 LTL/t). 70% of raw milk is imported from Latvia, 30% from Estonia.

The import in value of cheeses and curd increased by 1.3 times: in 2011, 7.5 thou. t for LTL 89 million (in 2010, 6.1 thou. t for LTL 67 million) was imported. 41% of cheeses and curd by value was imported from Poland, 20% from Latvia, and 13% from Germany. 9.5 thou. t of whole milk powder for LTL 27 million (47% from the Czech Republic, 31% from Latvia), 3.2 thou. t of skimmed milk powder for LTL 19 million (25% from Estonia, 20% from Poland, 17% from Denmark), 2.6 thou. t of condensed milk for LTL 13 million (80% from the Netherlands and Germany) was imported.

Import from the EU states accounted for 83.5% of the total agricultural and food product import and was by 1.4 percentage points less than in 2010, its value reached LTL 7992 million. Share of the old EU Member States (EU-15), as compared to 2010, decreased by 1.8 percentage points. Import from these countries comprised 60% of agricultural and food products (for LTL 4800 million) (Fig. 2.8).

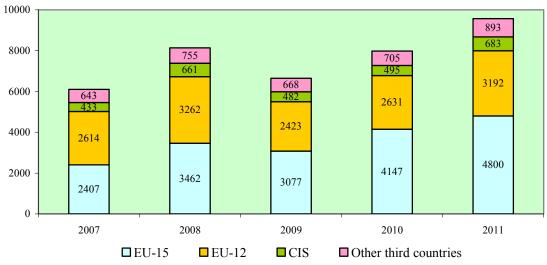


Fig. 2.8. Dynamics of the import of agricultural and food products by country group in 2007–2011, LTL million

Volumes of import from the CIS and other third countries during the reference period varied: in the first years of economic crisis, import from the groups of all countries decreased significantly, but started increasing again in 2010, and in 2011 it exceeded by 18% the pre-crisis level of 2008.

In 2011 import from third countries, as compared to 2010, increased by LTL 376 million, its value amounted to LTL 1576 million and increased by 1.4 percentage points. Agricultural and food products from the EU countries accounted for 18% of the total import of goods from the EU to Lithuania, and from third countries – 4.6% of the total import of goods from third countries (in 2010 those shares were the same).

Import from the Netherlands, Poland, Latvia and Germany comprised almost 54% of the total value of imported agricultural and food products.

Within the reference period the major part of products were imported from the Netherlands (Fig. 2.9). Import from this country, as compared to 2010, increased by almost 1.2 times and accounted for 18% of the total import of agricultural and food products: fruit, nuts (LTL 679 million), vegetables (LTL 668 million), live plants and cut flowers (LTL 106 million). The import value of these three product groups was 83% of the total value of agricultural and food product import from the Netherlands. Vegetables of CN 0709 group accounted for 14%. Import consisted of 31 thou. t of paprika for LTL 152 million, 8.4 thou. t of aubergines for LTL 40 million, 3.8 thou. t of zucchini for LTL 14 million. Tomatoes imported amounted to 47 thou. t for LTL 211 million, various berries for LTL 136 million, citrus fruit for LTL 132 million, apples and pears for LTL 129 million.

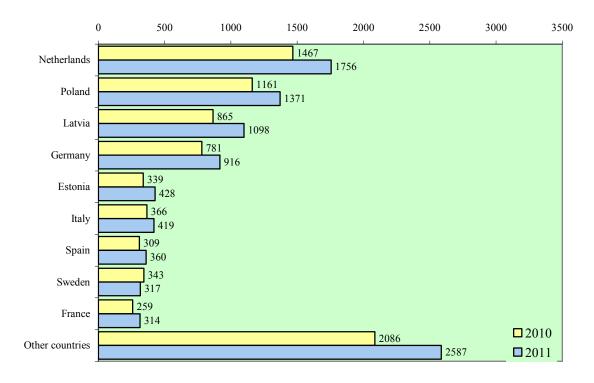


Fig. 2.9. The import of agricultural and food products by country in 2010 and 2011, LTL million

Poland, Lithuania's neighbour, is in the second place by import volume, accounting for 14% of imported agricultural and food products. Value of import from Poland in 2011 increased by 18%, or by LTL 209 million more than in 2010. The major part of import from Poland consists of meat and edible meat offal (LTL 192 million), by LTL 23 million more than in 2010. Pork import amounted to 15 thou. t for LTL 83 million (6.1% of agricultural and food products imported from Poland). Pork import by amount somewhat decreased, but with the average import price having increased from 5347 LTL/t in 2010 to 5673 LTL/t in 2011, import value increased by LTL 1.2 million. Imported poultry meat amounted to 13 thou. t for LTL 64 million, the volume remained at the level of 2010, but after the jump of imported poultry prices from 4468 to 4768 LTL/t, the imported poultry value in 2011 was by LTL 4.5 million higher. The second place by import value from Poland belongs to sugar and sugar confectionery. White sugar accounts for 93% of import value in this group of products, amounting to 40 thou. t for LTL 103 million. As compared to 2010, the volume by amount increased by 1.7 times, by value – 2.4 times, the average price of imported white sugar is 2514 LTL/t. Miscellaneous edible preparations (CN Chapter 21) are in the third place by import volume, including various extracts and concentrates, sauces and condiments, food additives, and ice-cream. Import value of these products amounted to 7.4% of the total import of agricultural and food products from Poland. Imported dairy products, eggs and honey amounted to LTL 95 million (cheeses for LTL 36 million, various yogurts for LTL 28 million, eggs for LTL 6.7 million), plenty of vegetables (LTL 83 million), mineral, carbonated water with various flavourings (LTL 59 million) were imported.

Import from Latvia in 2011 increased by nearly 1.3 times and accounted for 11% of agricultural and food product import to Lithuania. The major part of import from Latvia consisted of dairy products, including 98% of raw milk, amounting to 209 thou. t for LTL 235 million. By amount its import was by 1.3 times more and by value by 1.5 times more, as the average import price increased from 993 LTL/t in 2010 to 1125 LTL/t in 2011. Alcoholic and non-alcoholic beverages and vinegar are in the second place. Products imported in this group amounted to LTL 112 million, of which 62% spirit, liqueurs and other spirits, 17% – water with various flavourings, and 12% – bear. Cereals were imported for LTL 43 million (including wheat – 58 thou. t for LTL 43 million), fish and crustaceans for LTL 65 million, pastries for LTL 59 million. The above products accounted for more than 50% of the total agricultural and food products imported from Latvia.

As already mentioned, after Lithuania's accession to the EU, balance of trade in agricultural and food products, in difference from Lithuania's foreign trade in plenty of other goods, is positive (Fig. 2.10). Of 24 CN chapters, export of 12 products in 2011 was higher than import; foreign trade surplus has been achieved. Total surplus of products with positive trade balance comprised LTL 3372 million, total deficit of products with negative trade balance – LTL 1375 million. Most positive were balances of trade in CN Chapter 04 products: milk and dairy products, eggs and honey (LTL 1.0 billion), cereals (LTL 633 million), tobacco products (LTL 44 million), waste from the food industries; prepared animal fodder (LTL 252 million), meat and fish products (LTL 250 million). Most negative balances were in the trade in various beverages, fats and oils, coffee and tea, fruit and nuts.

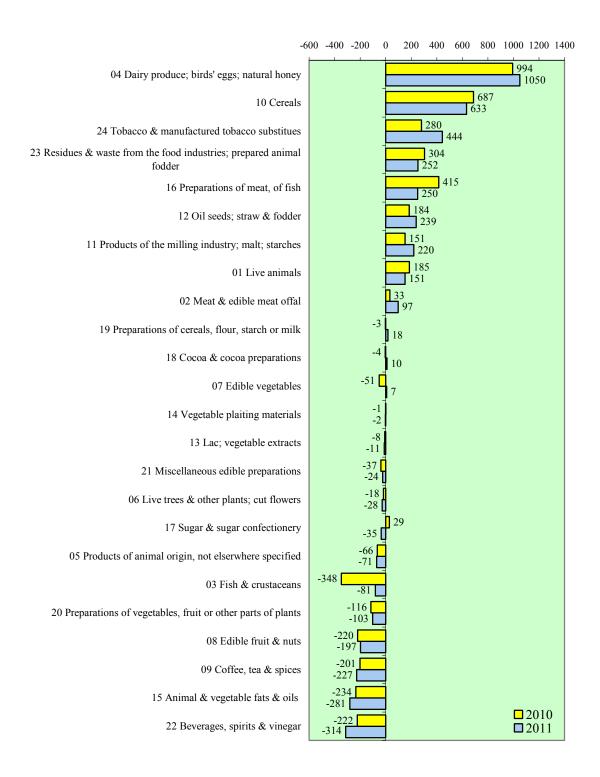


Fig. 2.10. Foreign trade balance of agricultural and food products in 2010 and 2011, LTL million

Previously in 2010 negative balances of trade in vegetables, products from flour and starch, cocoa and its products became positive in 2011. Meat trade surplus increased by 2.9 times, tobacco and tobacco products by 1.6 times, products of the milling industry, malt, and starches by 1.5 times. Negative fish trade balance decreased significantly – by 4.3 times.

Trade balance with the EU countries, as in 2010, was negative, deficit increased from LTL 908 to 1228 million. Trade surplus with third countries within the reference period increased from LTL 2641 to 3225 million.

The largest trade surplus was with Russia (LTL 3162.6 million), Latvia (LTL 414 million), United Kingdom (LTL 287 million), Germany (LTL 184 million), the largest trade deficit was with the Netherlands (LTL 1372 million), Poland (LTL 549 million), Spain (LTL 225 million), and France (LTL 135 million).

In 2010, foreign trade turnover of agricultural and food products after the fall in 2009 started increasing, in 2011, as compared to 2009, turnover increased by 44% and accounted for LTL 21.1 billion (Fig. 2.11). Lithuania's total foreign trade turnover increased by 71%; therefore its share in the turnover of agricultural and food products decreased.

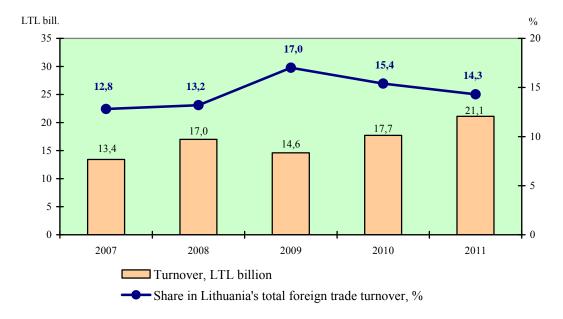


Fig. 2.11. Turnover of foreign trade of agricultural and food products and its share in total Lithuania's foreign trade in 2011

Further tendencies of Lithuania's foreign trade in agricultural and food products will depend on the global foreign trade tendencies that have an impact on the consumer markets and business environment. Development rates of most important trade segments will be of special importance in Lithuania. Due to the objective globalization processes, importance of trade for the world economy will increase still more. Cheaper and faster transport operations, possibility to communicate easier, development of Internet made preconditions for achieving this. Very important and more frequent international treaties which liberalize the flows of goods reduce or completely eliminate tariff and non-tariff barriers.

3. Competitiveness of agricultural and food products in the domestic and foreign markets

3.1. Cereals

Lithuania enjoys favourable conditions for cultivating grain crops: the average yielding soils prevail and by their natural yielding capacity they are close to the soils of some other countries in the region (Poland, Denmark, South Scandinavian countries, etc.), even though conditions in our country are worse by the duration of vegetation and the average temperature. Lithuania has a relative advantage only in comparison with the neighbouring countries situated further north. Lack of grain on the global and EU grain markets encouraged Lithuanian farmers to increase grain production, though their areas were increasing slower than of other crops. In 2011 grain crop area covered 54.1% of the total crop area (in 2010 – 54.5%, in 2009 – 59.2%, in 2008 – 60.6%, 2007 – 60.4%). In 2011, as compared to 2010, grain crop area increased by 2.8%, and during 2007–2011 – by 7.4% (Fig. 2.12).



Fig. 2.12. Crop area in Lithuania in 2007–2011, thousand hectares

Cultivation. Within the period of previous five years the area under grain crops and the structure thereof was changing in dependence on the demand for grain on the global, the EU and Lithuanian markets, purchase prices, foreign trade conditions, and direct payments.

During the reference period, in many countries of the world natural conditions for grain producers were not always favourable. Every year within the period of 2006 to 2010 the global consumption of grain was exceeding the yield. Even though in 2011 the grain yield in the world was by 9.7% higher than in 2010, and constituted 1919.3 mill. t, the global stocks decreased to 360.2 mill. t. Therefore the global demand in grain imports increased, and the key global grain exporters, including Russia, the Ukraine, and Kazakhstan, could supply to the market only about 90% of the required amount.

In Lithuania, as mentioned, crop areas under grain in 2011, as compared to 2007, increased by 7.4% (Fig. 2.13).

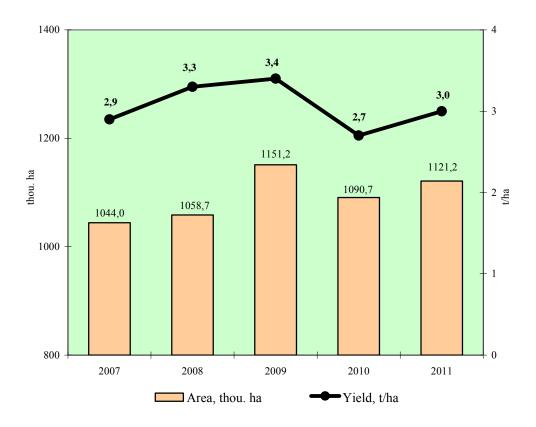


Fig. 2.13. Crop area and yield of grain crops in 2007–2011

Source: Data of Statistics Lithuania.

Within the above-mentioned period, the crop areas increased by 7.2%, pulse by 13.5%. The largest part of grain crops in 2011 consisted of wheat -51.7%, barley -23.6, triticale -9.0, oat -5.9, rye -4.0, buckwheat -2.6%.

Rather unfavourable hydrometeorological conditions during the 2010/2011 winter period did not allow agricultural crops to survive winter normally, to grow and ripen. Quite large areas under winter crops were frozen or soaked. For that reason, areas under winter crops in 2011, as compared to 2010, decreased by 23.1% (120.5 thou. ha): winter wheat by 23%, winter triticale 15.5%, winter barley 81.8%, and rye 13.5%. In total, crop area under winter crops in Lithuania in 2011 covered 400.6 thou. ha: winter wheat covered 279.6 thou. ha, winter triticale 75.5 thou. ha, rye 42.8 thou. ha, winter barley 2.7 thou. ha.

Spring crops in 2011 accounted for 60.2% of total grain crops area, the major part was under spring wheat – it covered the area of 276.4 thou. ha. Spring barley covered 251.3 thou. ha. In addition to the above grain crops, in Lithuania the area of 63.9 thou. ha was under oats, 46.2 thou. ha under pulse, 24.0 thou. ha under mixed cereals, 27.5 thou. ha under buckwheat, and 9.6 thou. ha under grain maize.

In 2011, as much as 83.0% of all grain crops were cultivated in farmers' farms (930.3 thou. ha), and the remaining part – at agricultural companies and enterprises (190.9 thou. ha). In comparison with 2010, the area under grain crops at farmers' farms increased by 4.6%, and at agricultural companies and enterprises decreased by 5.0%.

In 2011 the hydrometeorological conditions were quite favourable for crop development. Therefore the yielding capacity in that year was much higher than in 2010 (Table 2.7).

Table 2.7. Average yield of grain crops in 2007–2011, tonnes per hectare

Kind of grain crops	2007	2008	2009	2010	2011
Grain crops	2,94	3,29	3,38	2,69	2,98
cereals	3,01	3,35	3,45	2,75	3,03
winter cereals	3,65	4,14	3,89	3,04	3,03
wheat	4,16	4,76	4,40	3,40	3,32
triticale	2,95	3,27	3,16	2,34	2,54
rye	2,37	2,76	2,53	1,76	2,02
barley	3,15	3,94	3,83	2,50	2,92
spring cereals	2,53	2,69	2,87	2,44	3,03
wheat	3,08	3,01	3,41	3,07	3,47
barley	2,64	2,88	3,03	2,36	3,01
triticale	2,17	2,33	2,73	2,00	2,41
oat	1,94	2,07	2,23	1,53	2,03
buckwheat	0,96	0,76	0,67	0,74	0,96
mixed cereals	1,92	1,91	2,01	1,68	1,98
grain maize	4,82	4,24	4,33	6,66	7,49
other cereals	1,13	0,73	0,55	1,51	2,00
dried pulses grain	1,39	1,70	1,80	1,36	1,72

The yielding capacity of grain crops in Lithuania in 2011, as compared to 2010, increased by 10.8%, cereals by 10.2%. The highest increase in the yielding capacity was achieved in cultivating buckwheat – by 29.7%, spring triticale – by 20.5%, winter barley – 16.8%, maize – by 12.5%.

National producers of cereals applying more advanced technologies in cultivating and harvesting at large specialized farms are continuously increasing the efficiency of grain production; however, grain crops still are of much higher yielding capacity in some neighbouring countries of the EU than in Lithuania. For example, in 2011 the yielding capacity of grain crops was higher: in Ireland – by 2.8 times (8.45 t/ha), the Netherlands – 2.6 times (7.93 t/ha), Germany – 2.1 times (6.45 t/ha), Denmark – 96.0% (5.94 t/ha), the Czech Republic – 84.8% (5.60 t/ha), Hungary – 70.0% (5.15 t/ha), Sweden – 55.8% (4.72 t/ha), Bulgaria – 39.3% (4.22 t/ha), and Poland – 13.2% (3.43 t/ha).

In 2011 in Lithuania the harvest of grain amounted to 3304 thou. t, or by 437 thou. t (15.2%) more than in 2010 (Table 2.8).

Table 2.8. Average harvest of grain crops in 2007–2011, thousand tonnes

Kind of grain crops	2007	2008	2009	2010	2011
Grain crops	3073	3484	3892	2867	3304
cereals	3017	3422	3806	2797	3226
winter cereals	1553	1921	2440	1592	1192
wheat	1151	1381	1749	1250	912
triticale	199	286	394	218	187
rye	165	205	208	87	85
barley	38	49	89	37	8
spring cereals	1464	1501	1366	1205	2034
wheat	240	341	351	460	957
barley	976	922	770	513	752
triticale	29	25	31	41	50
oat	120	141	143	94	128
buckwheat	21	21	15	14	26
mixed cereals	53	19	33	35	47
grain maize	26	32	24	47	72
other cereals	0,8	0,2	0,1	1	1
dried pulses grain	56	62	86	70	78

Source: Data of Statistics Lithuania.

According to the data of the Department of Statistics, the harvest of grain crops in Lithuania in 2011, as compared to 2010, increased by 15.2%. The increase in the yielding capacity of grain crops was reached due to the enlarged grain crop areas by 2.8% and the yielding capacity higher by 10.8%.

The harvest of cereal grains, as compared to 2010 increased by 15.3% due to the enlarged crop areas by 3.8% and the yielding capacity by 10.2%. The crop areas under winter cereals were by 23.1% less, the yielding capacity was worse by 0.3%. The crop area under spring cereals increased by 33.5% and the yielding capacity by 24.2%.

In 2011, as compared to 2010, crop areas under pulse decreased by 15.2%, and the yielding capacity increased by 26.5%.

In 2011, in comparison with 2007, farmers received by 23.2% lower harvest of winter grain, by 38.9 higher harvest of spring cereals and by 39.3% higher harvest of pulse. The total increase of grain crop harvest within the mentioned period amounted to 7.5%, of which the harvest of cereal grains increased by 6.9%.

Grain procurement in Lithuania. With the consumption decreased, in 2011 procurement of cereal grains from producers in Lithuania was by 14.0% less (268.0 thou. t) than in 2010 (Table 2.9). Purchase of rye (26.0 thou. t), of Class I food wheat (116.0 thou. t) and of triticale (37.0 thou. t) decreased mostly. However, within the said period the purchase of buckwheat, maize, oat and food barley was considerably higher.

Table 2.9. Purchase of cereal grains in 2007–2011, thousand tonnes

Kind of grain	2007	2008	2009	2010	2011	Change 2011 compared to 2010,
Total	1769	2398	2544	1916	1648	-14,0
wheat	992	1445	1717	1366	1195	-12,5
food wheat, class I	144	211	635	613	497	-18,9
food wheat, class II	436	710	700	256	195	-23,8
feed wheat	412	524	382	497	503	1,2
rye	101	114	115	51	25	-51,0
food rye, class I	20	65	78	17	12	-29,4
barley	523	591	439	372	320	-14,0
food barley	40	43	34	32	40	25,0
malt barley	61	78	60	68	56	-17,6
feed barley	422	470	345	272	224	-17,6
oats	14	28	16	12	15	25,0
buckwheat	8	3	3	2	9	4,5 k.
triticale	85	184	252	110	73	-33,6
maize	7	9	2	3	11	3,7 k.

Sources: Data of Statistics Lithuania and AMFIS – Agricultural and Food Market Information System (2011).

In 2011, as within the several previous years, the major part of purchased cereal grain consisted of wheat -72.5% and barley -19.4%, triticale - only by 4.4%, and rye - by 1.5%.

Grain procurement prices during the reference period varied. Dropping prices on grain in the global and the EU markets in 2009 influenced the declining level of prices on grain in the Lithuanian market. In that year cereal grains in Lithuania were purchased at 35.5% lower price than in 2008 (Table 2.10). Prices started increasing at the end of the first half-year of 2010 and went on increasing until June 2011. The average purchase price of cereal grains in 2010, as compared to 2009, increased by 44.5%, and in comparison with 2010 – by 28.1%. The highest procurement prices were on oat, food rye, malt and feed barley.

Table 2.10. Average purchase price of grains in 2007–2011, LTL per tonne

Kind of grain	2007	2008	2009	2010	2011	Change 2011 compared to 2010, %
Total	625	561	362	517	662	28,1
wheat	638	595	396	544	677	24,5
food wheat, class I	657	675	415	578	740	28,0
food wheat, class II	691	622	411	564	684	21,3
feed wheat	567	501	371	511	605	18,4
rye	527	480	248	391	591	51,2
food rye, class I	577	496	255	404	625	54,7
barley	637	518	317	446	628	40,8
food barley	643	519	298	437	585	33,9
malt barley	793	659	394	503	729	44,9
feed barley	600	508	305	433	612	41,3
oats	511	446	204	307	523	70,4
buckwheat	914	663	564	1753	1190	-32,1
triticale	536	440	269	471	554	17,6
maize	749	708	438	579	571	-1,4

Sources: Data of Statistics Lithuania and AMFIS – Agricultural and Food Market Information System (2011).

Grain procurement prices in Lithuania started dropping since June 2011. Even though the average purchase price of grain has increased within the past years, the significant fluctuations were observed during the year. The average purchase price of food wheat as at December 2011 was by 9.1%, feed wheat by 6.2% and feed barley by 5.1% lower than in December 2010, whereas price on food rye almost has not changed (Fig. 2.14–2.17.). During the second half-year of 2011 grain prices dropped: feed barley by 14.6%, food rye by 19.7%, food wheat by 24.1%, and feed wheat by 28.6%.

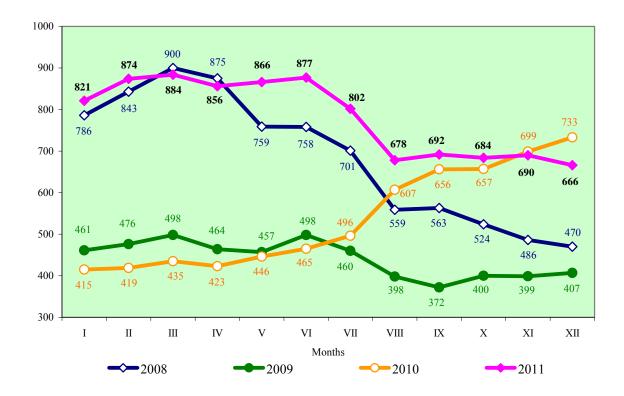


Fig. 2.14. Food wheat purchase prices in 2008-2011, LTL per tonne

Sources: LIAE calculations, AMFIS – Agricultural and Food Market Information System.

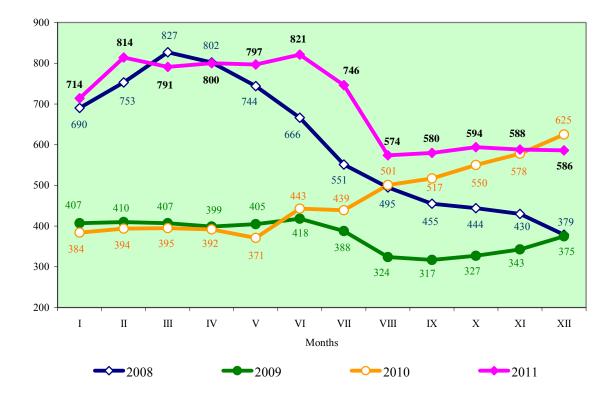


Fig. 2.15. Feed wheat purchase prices in 2008–2011, LTL per tonne

Sources: LIAE calculations, AMFIS – Agricultural and Food Market Information System.

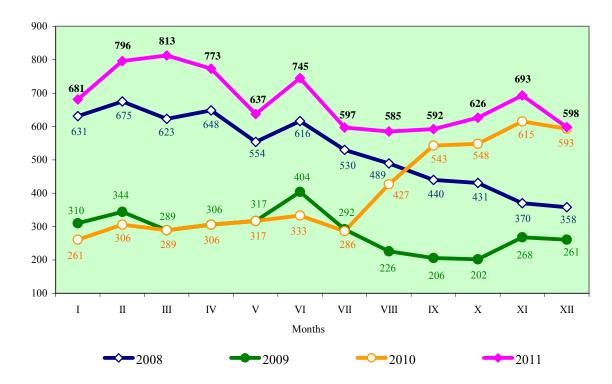


Fig. 2.16. Food rye purchase prices in 2008–2011, LTL per tonne

Sources: Data of Statistics Lithuania and AMFIS – Agricultural and Food Market Information System (2011).

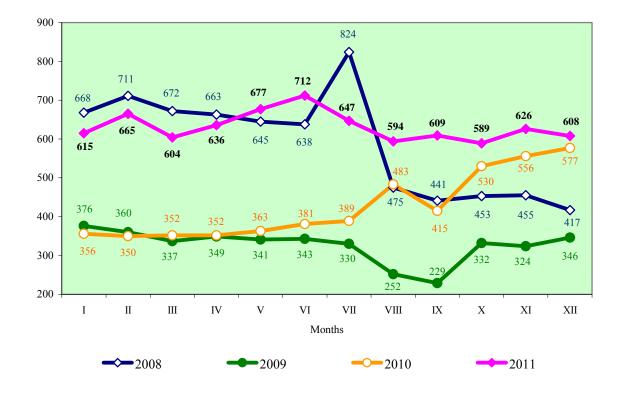


Fig. 2.17. Feed barley purchase prices in 2008–2011, LTL per tonne

Sources: Data of Statistics Lithuania and AMFIS – Agricultural and Food Market Information System (2011).

A drop in grain prices in the neighbouring markets and Lithuania is related with the opportunities for higher supply of grain to the markets, as in 2011, in comparison with 2010, the higher yield of grain was received: in the world – by 9.7%, EU-27 – by 3.2%, Kazakhstan – by 77.1%, Russia – by 54.0%, the Ukraine – by 30.5%, Lithuania – by 9.5%.

Processing. Within the year 2011, national grain processing companies processed 983.8 thou. t of grain, or by 50.2 thou. t (4.8%) less than in 2010 (Table 2.11).

Table 2.11. Grain processing in 2007–2011, thousand tonnes

Kind of grains	2007	2008	2009	2010	2011	Change 2011 compared to 2010,
Wheat	506,5	472,0	494,5	556,1	590,6	6,2
food wheat, class I	126,0	57,5	89,9	193,9	257,0	32,5
food wheat, class II	141,6	200,2	198,0	133,5	80,3	-39,8
feed wheat	238,9	214,3	206,6	228,7	253,3	10,8
Rye	52,5	48,0	44,2	88,5	40,8	-53,9
food rye	20,9	18,9	25,1	31,3	30,6	-2,2
feed rye	31,6	29,1	19,1	57,2	10,2	-82,2
Barley	228,0	236,3	197,2	225,7	227,0	0,6
food barley	0,8	0,1	0,2	0,1	0,2	2 k.
malt barley	105,0	111,5	77,8	91,2	100,4	10,1
feed barley	122,2	124,8	119,2	134,4	126,4	-5,9
Oats	4,0	10,4	12,2	14,6	4,9	-66,4
Buckwheat	5,5	9,3	7,0	5,0	5,5	10,0
Triticale	31,2	54,0	119,6	116,6	42,2	-63,8
Maize	53,3	102,7	33,9	20,7	68,3	3,3 k.
Peas	4,4	6,1	5,4	6,8	4,5	-33,8
Total	885,4	938,8	914,0	1034,0	983,8	-4,8

Source: AMFIS – Agricultural and Food Market Information System

During the mentioned period the processing of maize, Class I food and feed wheat and buckwheat increased mostly, and of oats, triticale, rye and Class II food wheat decreased. Such changes were conditioned by the modifications in the production and consumption of grain in the country. In addition, grain processing changes by assortment were considerably influenced by a better quality of grain. For example, total processing of wheat in 2011, as compared to 2010, increased by 6.2%, and of Class I food wheat even by 32.5%. Processing of Class II food wheat decreased by 39.8% within the mentioned period.

Grain stocks as at the end of the year 2011 amounted to 326.8 thou. t of wheat, 23.7 thou. t of rye, 92.6 thou. t of barley, 32.4 thou. t of triticale, 8.7 thou. t of oats, and 6.0 thou. t of buckwheat. In comparison with December 2010, grain stocks in the main sorts of grain increased by 5.3 times of buckwheat, 2.6 times of oats, 56.5% of triticale, 21.5% of rye, 8.3% of barley, and wheat stock decreased by 16.6%.

Production of flour increased mostly during the recent years (by 12.5%) (Table 2.12). Production of products in other groups decreased: cereal groats by 26.8%, fresh bread by 6.0%, pastry and confectionery by 0.4%.

Table 2.12. Production of grain products in 2007–2011, thousand tonnes

Products	2007	2008	2009	2010	2011
Flour	252,3	249,2	269,0	296,9	334,1
Cereal groats	20,0	23,5	22,4	19,4	14,2
Fresh bread	141,4	142,0	134,3	134,1	126,1
rye bread	62,7	60,9	59,8	59,9	59,0
other bread	78,7	81,1	74,5	74,2	67,1
Pastry and confectionery	32,2	26,9	24,1	23,5	23,4

Source: Data of Statistics Lithuania.

The decreasing purchasing power of population had a direct impact on the trade (Table 2.13). In 2011, as compared to 2010, sales decreased mostly of semolina (50.0%), buckwheat (34.5%) and wheat (44.0%). Fewer amounts of fresh bread (4.5%) and rye flour (2.8%) were sold.

Table 2.13. Sales of grain products in 2007–2011, thousand tonnes

Products	2007	2008	2009	2010	2011	Change 2011 compared to 2010,
Wheat flour	136,2	117,7	108,6	106,0	117,7	10,9
Rye flour	23,9	16,4	18,6	28,8	28,0	-2,8
Cereal groats	13,8	16,1	14,4	13,3	9,0	-32,3
wheat	3,1	3,8	2,7	2,5	1,4	-44,0
semolina	1,2	1,6	0,9	0,2	0,1	-50,0
buckwheat	3,4	4,5	4,5	2,9	1,9	-34,5
Fresh bread	133,1	132,4	124,8	125,2	119,5	-4,5
rye bread	60,4	58,3	56,4	56,6	55,8	-1,4
other bread	72,7	74,1	68,4	68,6	63,7	-7,1
Confectionery	31,2	25,8	23,1	22,3	22,4	0,5

Average wholesale prices on grain products in 2011 in comparison with 2010 were increasing mostly on cereal groats and rye flour (Table 2.14).

Table 2.14. Average wholesale prices of grain products in 2007–2011, LTL per tonne

Products	2007	2008	2009	2010	2011	Change 2011 compared to 2010,
Wheat flour	944	1162	937	970	1186	22,3
Rye flour	860	1014	698	704	1014	44,0
Cereal groats	1301	1419	1077	1265	1887	49,2
wheat	998	1114	741	868	1282	47,7
semolina	1128	1170	813	850	1319	55,2
buckwheat	2396	2194	1775	2786	4178	50,0
Fresh bread	2463	3076	2992	2739	3055	11,5
rye bread	2304	2881	2886	2658	3010	13,2
other bread	2595	3230	3082	2806	3094	10,3
Confectionery	6697	8790	8300	7660	8164	6,6

Source: Data of Statistics Lithuania.

Average wholesale prices on grain products that started dropping in August 2008, were decreasing insignificantly until July 2010, and later started increasing again. The increased level of wholesale prices is either stable, as for example on the best-quality wheat flour (Table 2.18), or is further rising. During the year 2011 alone, wholesale prices increased: sifted rye flour by 2.0% (Table 2.19), rye bread by 3.1% (Table 2.20), and loaf of white bread from the best-quality wheat flour by 4.6% (Table 2.21).

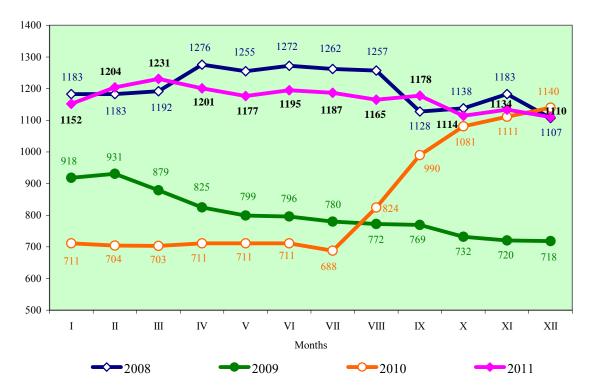


Fig. 2.18. Wholesale price of the best-quality wheat flour in 2008–2011, LTL per tonne Source: Data of Statistics Lithuania.

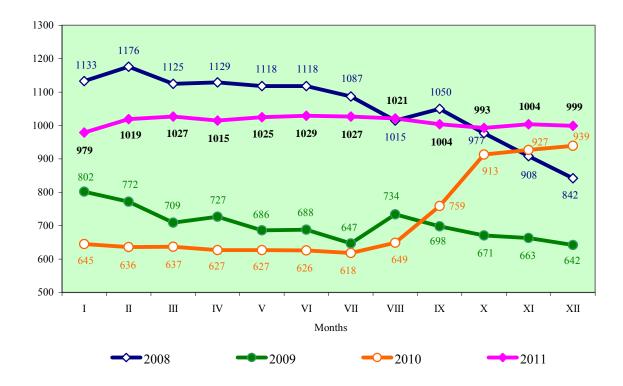


Fig. 2.19. Wholesale price of sifted rye flour in 2008–2011, LTL per tonne Source: Data of Statistics Lithuania.

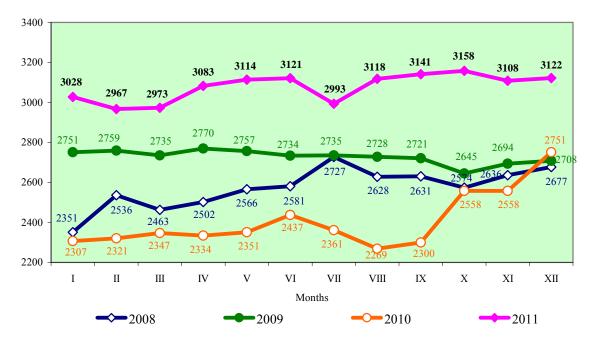


Fig. 2.20. Wholesale price of rye bread in 2008–2011, LTL per tonne Source: Data of Statistics Lithuania.

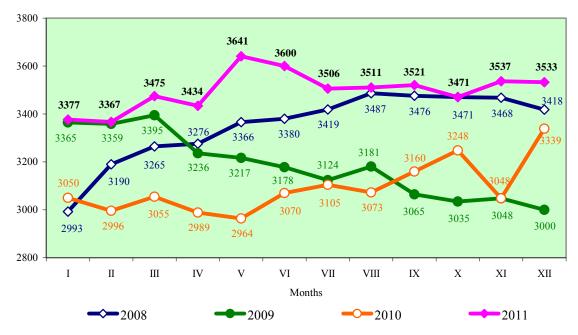


Fig. 2.21. Wholesale price of a loaf of white bread made from the best-quality wheat flour in 2008–2011, LTL per tonne

 $Source: \ Data\ of\ Statistics\ Lithuania.$

Changes in wholesale and retail prices varied. Differences in retail prices on rye bread and on loaf of white bread from the best-quality wheat flour in 2011 and 2010 were less than the difference in wholesale prices of these products. The average retail prices as at December 2011 in comparison with December 2010 were: rye bread by 7.8% higher (Table 2.22), loaf of white bread from the best-quality wheat flour by 2.0% lower (Fig. 2.23).



Fig. 2.22. Retail prices of rye bread in 2008–2011, LTL per kilogram

Source: Data of Statistics Lithuania.

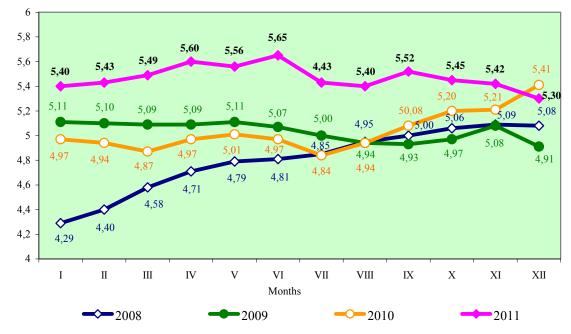


Fig. 2.23. Retail prices of a loaf of white bread made from the best-quality wheat flour in 2008–2011, LTL per kilogram

Source: Data of Statistics Lithuania.

Average retail prices on grain products within 2011 varied: price on rye bread increased by 6.9% and on loaf of white bread from the best-quality wheat flour decreased by 1.8%.

Balance. Grain harvest in the period of 2007–2011 was sufficient to satisfy national needs (Table 2.15). The major part of grain is consumed in livestock breeding. In 2007–2011, 32.9% of grain produced on Lithuanian farms was used for feedstuffs.

Table 2.15. Balances of grain and grain products in 2007–2011, thousand tonnes

Indicators	2007	2008	2009	2010	2011*
Beginning stocks	755,7	1083,7	1300,0	1272,5	866,1
Production	3073,4	3484,2	3892,3	2867,2	3303,9
Import	293,8	415,3	199,3	294,2	308,0
Total resources	4122,9	4983,2	5391,6	4433,9	4478,0
Export	905,9	1839,8	2067,6	1708,6	1549,5
Domestic uses	2133,3	1843,4	2051,5	1859,2	1915,5
seeds	228,1	214,0	230,6	221,4	226,5
animal feed	1263,2	1019,4	1194,4	980,8	1015,6
losses	61,5	52,2	57,1	52,8	53,2
industrial uses	168,8	175,7	178,8	242,7	259,7
human consumption	411,7	382,1	390,6	361,5	360,5
Per capita consumption, kg	122	114	117	110	113
Ending stocks	1083,7	1300,0	1272,5	866,1	1013,0
Self-sufficiency level, %	144,1	189,0	189,7	154,2	172,5

^{*} LIAE calculations.

Source: Agriculture in Lithuania 2010. Vilnius: Department of Statistics 2011. ISSN 2029-3658.

The consumption of grain and grain products is decreasing in Lithuania – within the period of 2007–2011 domestic uses reduced by 10.2%. In 2011, as compared to 2007, per capita consumption was by 7.4% lower, and the total population consumption fund decreased within the mentioned period by 12.4%.

Foreign trade in grain and grain products. No doubt, the situation on the markets of grain and grain products is significantly influenced by export and import. Export of cereal grains in 2011, as compared to 2010, decreased by 20.6% (Table 2.16), whereas import increased by 1.7% (Table 2.17). Within the mentioned period export of cereal grains to the EU countries dropped by 22.6% and in 2011 constituted 56.7% of the total export of cereal grains. Although the export of cereal grains to third countries in 2011 in comparison with 2010 decreased by 17.9%, its comparative percentage of the total export in cereal grains increased by 1.5 percentage points. The main reason was the reduced opportunities due to the global crisis to allocate sufficient funds for the purchase of the required amount of grains, whereas export of smaller amounts thereof was economically not useful for Lithuania. Export of milling products within the said period increased by 15.8% and import by 20.0%.

The major part of Lithuanian wheat in 2011 was sold to Saudi Arabia – 15.8% and Germany – 14.3%. Most of rye was exported to Poland – 55.5% and Germany – 26.6%, and barley – to Saudi Arabia – 54.9%, Latvia – 19.5%. Lithuania sold wheat flour to Latvia – 62.0%, Russia – 16.6%, and rye flour to Poland – 80.6%, United Kingdom – 10.5%. Cereal grains were sold to Latvia – 62.0%, Estonia – 23.3%, Germany – 8.7%

Table 2.16. Exports of cereal grains and grain products in 2007–2011, thousand tonnes

Products	2007	2008	2009	2010	2011	Change 2011 compared to 2010, %
Cereal grains	722,5	1608,3	1778,8	1379,5	1094,9	-20,6
of which: wheat	438,4	1129,9	1275,6	1123,1	807,7	-28,1
rye	24,1	60,1	118,2	20,8	26,6	27,9
barley	227,6	316,1	189,0	154,0	204,3	32,7
Milling products	113,7	141,9	147,5	159,8	185,1	15,8
of which: wheat flour	13,1	6,8	11,3	15,3	9,8	-35,9
rye flour	1,3	1,1	0,7	0,7	1,7	2,4 k.
cereal groats	2,9	3,1	4,2	3,9	2,8	-28,2

Source: Data of Statistics Lithuania.

Import of cereal grains in 2011, as compared to 2010, as was mentioned, increased only by 1.7% (Table 2.17). Most of wheat was imported from Latvia -91.0%, Poland -8.3%, rye - from Russia -77.8%, Belarus -15.9%, and barley - from Latvia -38.1%, Estonia -36.9%, Finland -21.7%.

Table 2.17. Imports of cereal grains and grain products in 2007–2011, thousand tonnes

Products	2007	2008	2009	2010	2011	Change 2011 compared to 2010,
Cereal grains	192,5	331,1	92,3	172,7	175,9	1,7
of which: wheat	44,6	115,4	39,5	95,3	64,1	-32,7
rye	18,0	2,8	5,4	23,9	41,3	72,8
barley	57,3	37,6	6,0	8,8	68,1	7,7 k.
Milling products	50,3	42,0	48,9	50,0	64,8	20,0
of which: wheat flour	5,5	5,4	16,4	26,2	28,4	8,4
rye flour	16,6	17,2	13,3	3,2	4,9	53,1
cereal groats	1,8	1,5	2,7	6,9	9,8	42,0

Source: Data of Statistics Lithuania.

Lithuania purchased from Poland 56.5%, Belarus -19.5%, Latvia -17.5% of the total imported wheat flour. Rye flour was purchased from Latvia -95.3%, Estonia -4.4%. Cereal groats were mostly imported from Latvia -71.4%, Poland -15.5%, Hungary -10.3%

Average prices on exported grains in 2011, as compared to 2010, increased by 32.0% and were by 6.4% higher than in 2007 (Table 2.18). The highest export price was gained on rye and cereal groats.

Import prices on rye and barley during the reference period increased by 50.1 and 81.1%, respectively. Prices on imported cereal grains in 2011, as compared to 2007, were by 14.0% higher. Highest prices on imported grain products were paid for rye flour – their average price in 2011, as compared to 2010, increased by 39.2%.

Table 2.18. Average prices of exported and imported cereal grains and grain products

in 2007–2011, LTL per tonne

Products	2007	2008	2009	2010	2011	Change 2011 compared to 2010 %
Cereal grains	736	696	486	593	783	32,0
wheat	682	725	515	607	796	31,1
rye	702	687	382	468	754	61,1
barley	810	577	390	486	674	38,7
Milling products	1230	1436	1300	1345	1757	30,6
wheat flour	820	1135	816	858	1201	40,0
rye flour	850	1087	805	819	1007	22,9
cereal groats	1047	1376	959	954	1449	51,9
		Import p	rices			
Cereal grains	714	785	735	759	814	7,3
wheat	586	683	454	672	738	9,8
rye	608	1175	541	415	623	50,1
barley	683	974	630	376	681	81,1
Milling products	1335	1496	1043	1177	1619	37,6
wheat flour	860	1159	726	781	1018	30,4
rye flour	871	1011	739	684	952	39,2
cereal groats	1067	1160	797	1062	1195	12,5

Source: Data of Statistics Lithuania.

Market regulation measures and support. After Lithuania's accession to the EU, similar grain market regulation measures are applied in Lithuania as in other EU Member States: intervention purchase system, direct payments, and import and export regulation measures.

In implementing the EU CAP reform, where one of the goals is to decouple support from production outcomes, principles of the disbursement of support by direct payments for crops have been changed since 2007. The amount of support for applicants engaged in farming and in the production of agricultural products in 2007–2011 consisted of the basic payments for areas, disbursed from the EU budget, and complementary national direct payments coupled with production. The basic, or the so-called lump-sum payment, paid for the declared utilized agricultural areas (UAA) and crop areas meeting the set requirements, in 2011amounted to 369.81 LTL/ha, irrespective of the kinds of cultivated crops.

In 2011 the number of registered applications for direct payments totalled 166.76 thousand (in 2010 – 172.18 thousand). The declared crop area eligible for the basic support was 2.74 mill. ha (in 2010 – 2.69 mill. ha) and for the complementary part of direct payments was 1.42 mill. ha (in 2010 – 1.32 mill. ha). In 2011 the EU budget allocated for Lithuania the amount of LTL 1000.38 million (in 2010 - LTL 905.71 million) for direct payments, and the complementary national payments from the state budget amounted to LTL 41.31 million (in 2010 – LTL 43.84 million).

The total amount of direct payments for crop areas was calculated by adding the basic payment, paid from the EU budget, and complementary payments coupled with production, paid from the national budget.

Economic indicators. Analytical data reveal that within the reference period the sector of cereal grains was developing unevenly due to the global supply changes and natural conditions. The increased grain supply which exceeded the demand in satisfying domestic needs had a certain impact on cereal grain prices and the efficiency of the activities of crop growers in Lithuania – in 2011 by almost 2.3 times (in 2010 by 2.4 times, in 2009 by 2.6 times, in 2008 by 2.7 times, in 2007 by 1.9 times). This created realistic economic preconditions for grain purchase prices, and simultaneously for decreasing the profitability of the entire branch (Fig. 2.24).

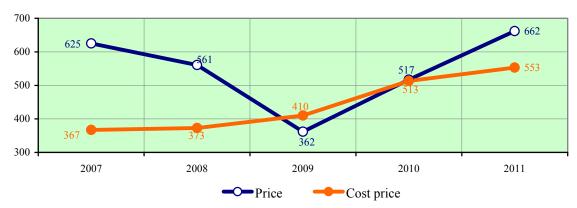


Fig. 2.24. Average purchase price and cost price of grain in family farms in 2007–2011, LTL per tonne

Source: LIAE calculations.

In 2011, as compared to 2010, an increase of average grain purchase price by 28.1% had a significant impact on increasing the profitability of grain production.

In 2007 the profitability of grain produced in farmers' farms without subsidies amounted to 70.3%, while in 2009 and 2010 grain production without subsidies was unprofitable, in 2011 it increased to 19.7%, and with subsidies to 54.1%.

The main reason for grain price reduction in 2009 was grain surplus due to the increasing yield and lower consumption of cereal grains for domestic needs. As a result national grain stocks and demand for grain increased. Even though in 2009 grain export was increasing rapidly, this did not reduce considerably the still more growing grain surplus and could have a little effect on supply and demand interdependence. In 2010, as compared to 2009, export of cereal grains decreased, and the still worse harvest of cereal grains affected their supply on the market and made preconditions for grain price increase.

To create the economic conditions for the increase of future prices on grain at least to the extent of inflation, crop growers are recommended to apply more actively the preliminary agreements with grain processors or exporters and to secure preliminary guarantees for selling the future harvest. Being aware of the need in grain, the growers could plan more realistically the crop structure. Statutory provisions strengthening the consumer purchasing power and encouraging the consumption would have a considerable influence on the increase of amounts for national human consumption and simultaneously on the demand. An increase in the feed grain demand would be predetermined by the development of livestock-breeding and production relations developed on the co-operation basis among large-sized specialized plant-growing and livestock-breeding farms.

3.2. Milk

The dairy sector in Lithuania's agriculture remains of high importance. Milk in 2007 accounted for 25.7% and in 2010 for 24.7% of the total agricultural production. This is the largest segment in the national agriculture. The global economic crisis, however, has slowed down the commercial milk production. In 2011 the pre-crisis milk procurement level still has not been achieved. As a result of abrupt price fluctuations and different milk sale prices, when lower purchase prices were paid to small producers, the number of small milk producers reduced notably. Farms keeping even 10–19 cows are reducing in number, though in the previous years this group of milk producers used to increase. And though due to the increasing productivity of cow milk procurement has not reduced so markedly as the number of cows, the amount of milk purchased in the country does not satisfy the needs of Lithuanian milk processors. Due to this, import of raw milk has been rapidly increasing and as a result the amount of processed milk in 2011 was by 3.7% higher than in 2007. At the same time the increased prices on dairy products in 2011 enabled the Lithuanian milk processors to receive by 17% higher income than in 2007.

Milk production and procurement. In 2011 milk yield amounted to 1754 thou. t, 75% of which was purchased for processing (Table 2.19). In comparison with 2010, milk production in 2011 increased by 1.0%, but as compared to 2007 it decreased by 9.4%. Milk procurement during 2011 increased by 3.0%, and within the five-year period decreased by 2.3%. Milk production and purchase volumes were greatly influenced by the global economic crisis: in 2009, as compared to 2008, milk production dropped by 5% and procurement by 7.4%. Until 2011 neither milk production nor procurement reached a pre-crisis level.

Table 2.19. Milk production and purchase in 2007–2011, thousand tonnes

Indicators	2007	2008	2009	2010	2011	2011 compared to 2007, %
Milk production	1936,6	1883,8	1791,0	1736,5	1754,0	91
Milk purchase						
natural fatness	1348,5	1375,6	1274,2	1278,3	1317,1*	98
basic fatness**	1628,2	1660,8	1534,3	1540,4	1587,2	97

^{* 4,14 %} milk fat, 3,27 % protein.

Sources: Economic and Social Development in Lithuania. December 2011. Vilnius: Department of Statistics, 2012. ISSN 1392-2874; Agriculture in Lithuania 2010. Vilnius: Department of Statistics, 2011. ISSN 2029-3658.

Almost the total milk yield is received by milking cows. Goat milk in 2010 just accounted for 0.2% and since 2007 has been continuously decreasing by physical weight and relatively. In 2007 goat milk accounted for 0.3% of the total milk yield.

^{** 3,4 %} milk fat, 3,0 % protein.

The major part of milk is produced in farmers' farms and family farms, though the relative weight of agricultural companies and enterprises has been increasing gradually. In 2007 the latter produced 13.7% of milk and in 2010 - 16.2%.

Import of raw milk in 2011, as compared to 2010, increased by 44% and amounted to 294.7 thou. t. Import countries remained traditional – Latvia (70% of imported milk) and Estonia (30%). In comparison with 2007, in 2011 the amount of imported raw milk was by 2 times higher. The average imported raw milk price in 2011 was 1145 LTL/t. During 2011 export of raw milk amounted to 70.7 thou. t. As compared to 2010, the exported amount of raw milk was by 3 times higher, export geography has also got expanded. Prior to 2010, 99% of raw milk was exported to Poland, and in 2011 only 69% of milk was exported to this country, 27% to Estonia and 4% to Latvia. The average price of the exported raw milk was 1199 LTL/t. In comparison with 2007, the exported amount of raw milk in 2011 was by 11.5 times higher. From the day of accession to the EU, trade in raw milk has been still more increasing, and in 2011 it was highest within the mentioned period.

Since 2007 the procured milk quality and milk composition indicators have changed slightly. In 2007 - 69% and in 2011 - 95.7% of the total purchased milk met the EU veterinary and hygiene requirements. The average milk fatness of purchased milk in 2007 and in 2011 was 4.14%, and protein content -3.29% in 2007 and 3.27% in 2011.

Milk procurement prices stopped rising at the second half of 2008 – the first half of 2009 and in Quarter II of 2011. During other periods from 2007 to 2011 the milk procurement price went up. In 2011, as compared to 2007, the average annual procurement price on milk with basic indicators increased by 19% – to 818 LTL/t (Fig. 2.25).

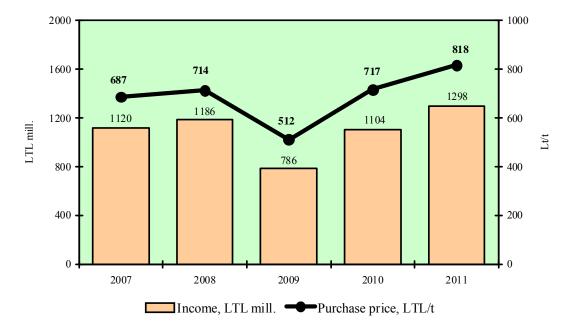


Fig. 2.25. Purchase price and income from sales of milk of basic indicators in 2007–2011

Sources: Economic and Social Development in Lithuania. December 2011. Vilnius: Department of Statistics, 2012. ISSN 1392-2874;
Agriculture in Lithuania 2010. Vilnius: Department of Statistics, 2011. ISSN 2029-3658.
Agricultural and Food Market Information System. Milk Sector, Domestic Market.- PE Agricultural Information and Rural Business Centre [interactive], [20 April 2012]. Access through Internet < http://www.vic.lt/?mid=348>

Fluctuations of milk procurement prices were mostly influenced by the changes in the global demand for milk products and correspondingly increased or decreased export prices on milk products and seasonality. Similar tendencies of changes in milk procurement prices were observed in other EU countries as well, but in our country their increase or decrease was more abrupt and more profound. In 2010 the milk procurement price in Lithuania jumped up from the lowest position in the EU from the years of its accession to the EU leaving Romania behind. In 2011 the price on raw milk in Lithuania was by 2.2% higher than in Romania, but lower than in other EU countries. In 2011 the milk procurement price in Lithuania was by nearly 3% lower than in Latvia. The price on procured milk in Estonia was somewhat higher – by 13% more than in Lithuania (Fig. 2.26). One of the main reasons for the low milk procurement price in Lithuania are the prevailing small-scale milk producers and much lower price paid to them as compared to large-scale producers.

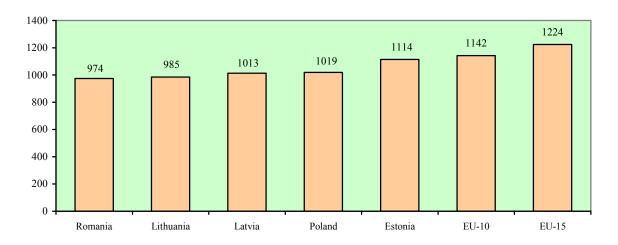


Fig. 2.26. Milk (natural fatness) procurement price in Lithuania and selected EU countries in 2011, LTL per tonne

Source: EU milk prices – GD Agri. DairyCo [interactive], [20 April 2012]. Access through Internet: http://www.dairyco.net/library/market-information/datum/eu-milk-prices-dg-agri.aspx.

The average Lithuanian dairy farm is among the smallest in the EU Member States. In 2007 the number of cows per farm was 3.3, this accounting for 33% of the average in the EU. Smaller average milk farms were only in Romania (1.6 cows) and Bulgaria (2.9 cows). Milk production, however, in Lithuania is notably expanding. In 2011, as compared to 2007, the average milk farm increased by 4.2 cows, or by 27%.

During the period from 2007 to the end of 2011 the number of dairy farms keeping cows reduced by 36%. The largest reduction was among farmers keeping 1–2 cows – 36265, or 39%, the number of farmers keeping 3–9 cows decreased by 30%, keeping 10–19 cows by 18%. However, the number of dairy farms keeping 30 or more cows increased by 188, or 15%, and the number of cows kept here by 12% (Table 2.20). Nevertheless, small-scale dairy farms are still prevailing. Only 4.8% of national milk producers are keeping 10 and more cows.

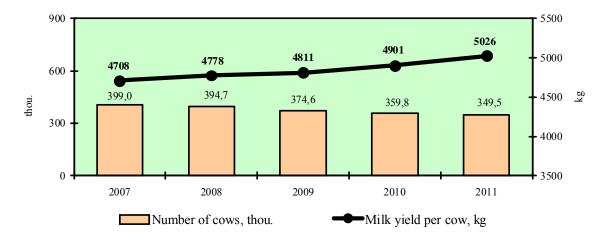
Table 2.20. Dairy farms by number of cows in 2007 and 2011 (at the end of the year)

NI 1 C		2007	2011		
Number of cows per farm	' number of number of co		number of farms	number of cows, thou.	
1–2	92932	114,9	56667	70,7	
3–9	22219	100,5	15592	72,1	
10–19	3524	46,3	2873	38,6	
20–29	1036	24,6	1024	24,4	
30–49	700	26,1	787	29,8	
50–99	361	24,1	433	29,1	
>=100	210	59,4	239	63,6	
Total	120982	395,9	77615	328,4	
Average		3,3		4,2	

Sources: PE Agricultural Information and Rural Business Centre [interactive], [20 April 2012]. Access through Internet:

Due to the dominating position of small-scale farms in the country, the average productivity per cow is significantly lower than the average in the EU, accounting for 78% of the EU average. However, their productivity during the reference period has been continuously increasing. In 2011 milk yield per cow amounted to 5026 t of milk. The average yield of milk per cow under control during the control period of 2010–2011 reached 6392 kg – by 2.9% more than in 2009–2010. In the control period of 2010–2011, 43% of all kept cows were under control.

The number of dairy cows decreased from 2007 to 2011 by 49.5 thou. heads (Fig. 2.27). Their number was continuously decreasing throughout the period under analysis. In 2009, when prices dramatically dropped, the number of dairy cows decreased most significantly – by 5.1%. In 2011, as compared to 2010, the number of cows decreased by 2.9%.



^{*} Preliminary data.

Fig. 2.27. Number of cows and milk yield per cow in 2007–2011 (at the end of the year)

Source: Agriculture in Lithuania 2010. Vilnius: Department of Statistics, 2011. ISSN 2029-3658.

http://www.vic.lt/uploads/file/06_ukiu110101_pagal_gyvas_karvs11.pdf;

<http://www.vic.lt/uploads/file/07_ukiu110101_pagal_gyvus_karvs21.pdf>;

http://www.vic.lt/uploads/file/08_ukiu110101_pgl_gy_kar22.pdf>.

Manufacturing of dairy products. The dominant position in the Lithuanian sector of milk processing belongs to the three groups of milk processing companies: AB "Rokiškio sūris", AB "Pieno žvaigždės", AB "Žemaitijos pienas". These groups of companies in 2011 raised nearly 63% of the total income from the sales in the milk processing sector, by 7 percentage points less than in 2010. The said groups of companies are also major exporters of dairy products. In the past years one more group of processing companies – AB "Vilkyškių pieninė" – has come into life. In 2011, as in 2010, this company received nearly 10% of the income of the milk processing sector. Other milk processing companies and their groups are smaller; however, some of them are also exporting the major part of their output.

All Lithuanian dairy companies and their subsidiaries have implemented the EU sanitary and hygiene requirements for food production and are entitled to export their production to the EU Member States. 12 milk processing companies have licences for exporting their production to Russia, and 9 – to Belarus.

In the period of 2007–2011 after the increase of the global demand for dairy products and prices in 2007 their sales growth was most rapid. In 2007, as compared to 2006, sales in dairy products increased by 29%, and export by 35%. The notably decreased global demand for dairy products in 2008 and 2009 conditioned the reduction of sales and export. In 2010–2011 with the global economy reviving after the global crisis the demand for dairy products increased again (Table 2.21). In 2011, as compared to 2010, sales of dairy products (including ice-cream, lactose and casein) increased by 26%, of which export by 18%.

Table 2.21. Key indicators of the milk processing industry in 2007–2011

Indicators	2007	2008	2009	2010	2011
Number of milk processing enterprises & subsidiaries		33	32	31	31
Sales of dairy products, LTL mill.		2294,8	2043,3	2169,0	2736,6
share in total production of foodstuffs, %	31	28	28	28	30
Export income, LTL mill.	1388,7	1340,6	1154,4	1457,7	1718,7
share in total income from sales, %	60	58	56	67	63

 $Sources:\ Production\ of\ Commodities\ 2007-2011.\ Vilnius:\ Department\ of\ Statistics.\ ISSN\ 1648-5777;$

Department of Statistics data [interactive], [4 May 2012]. Access through Internet:

http://db1.stat.gov.lt/statbank/default.asp?w=1440;

State Food and Veterinary Service [interactive], [4 May 2012]. Access through Internet: http://vetlt1.vet.lt/vepras/.

The key area in the specialization of dairy industry in Lithuania is the production of cheese. These products also prevail in the structure of export. The most substantial part of dairy products was manufactured in 2007–2008, when the global demand for dairy products was highest, and the domestic market had not experienced crisis and was not so shrunk due to emigration. In 2011, in comparison with 2007, the production of curd (23%), fresh cheeses and dried milk and whey products (by 10% each) increased most of all. However, the production of a lot of dairy products has not reached the production volumes of the boom period of 2007–2008 (Table 2.22).

Table 2.22. Production of main dairy products in 2007–2011, thousand tonnes

Products	2007	2008	2009	2010	2011	2011 compared to 2007, %
Drinking milk	97,8	105,0	99,5	94,0	102,6	105
Sour milk, kefir	35,3	35,9	34,8	35,7	33,9	96
Yogurt	17,3	15,3	14,4	14,4	14,6	84
Sour cream & mixes	26,6	27,9	28,6	27,8	28,3	106
Curd	21,5	23,3	23,5	24,4	26,5	123
Butter and other milk fats	12,3	9,0	12,0	8,5	8,7	71
Fresh cheese	22,6	30,7	34,8	24,0	24,8	110
Unprocessed cheese	52,3	56,3	37,6	43,9	46,8	89
Dried milk and whey products	35,7	40,0	41,4	36,6	39,2	110
Ice cream, mill. l	24,3	25,1	21,1	24,5	18,1	74
Canned dairy products	22,0	29,8	21,0	25,0	21,5	98

Sources: Production of Commodities 2007–2011. Vilnius: Department of Statistics. ISSN 1648-5777; Economic and Social Development in Lithuania. December 2011. Vilnius: Department of Statistics, 2012. ISSN 1392-2874.

Domestic market in dairy products. In Lithuania, per capita consumption of milk and dairy products (in milk equivalent) during the period of 2007–2010 increased by 1.2%. Consumption of individual dairy products, excluding products manufactured in the farms and consumed for own needs and direct sales, in 2011, as compared to 2007, increased by 9–43%, whereas consumption of sour milk products by the population reduced by 5% (Table 2.23). Even though within the said period, prices on the major part of dairy products increased, the purchasing power due to the increased wages was also increasing, and this conditioned the growth in the consumption of dairy products.

In 2008, as compared to 2007, the increased prices of dairy products did not have a strong impact on consumption, as the increase in wages, on the average, was more rapid than that of dairy product prices. In 2009, due to economic crisis, prices on dairy products reduced and the purchasing power of the working population increased: in comparison with 2008, the opportunity to buy dairy products increased by 7–54%. Moreover, wages then have not dropped so drastically. However, with the increase of unemployment, the consumption of some dairy products became lower. In 2010–2011, as compared to 2009, with wages not increasing and the prices on dairy products having increased due to the global demand, the purchasing power even of the working population dropped, and the total consumption of milk and dairy products in milk equivalent decreased, even though the amount of the major part of dairy products consumed was almost the same in 2009, and of some of them even more.

Table 2.23. Changes in consumption of milk and dairy products and factors influencing consumption in 2007–2011

Products	2007	2008	2009	2010	2011	2011 compared to 2007, %
Per capita consumption	of milk	and dai	ry produ	icts, kg		
Milk and dairy products (in milk equivalent)	259	268	289	262	n. d.	
Cheeses and curd*	13,6	14,3	13,6	14,1	14,8	109
Butter*	1,4	1,3	2,2	1,9	2,0	143
Sour milk products*	25,5	22,5	20,7	23,5	24,3	95
Drinking milk*	24,2	39,1	30,2	30,7	30,8	127
Purchasing power of average	Purchasing power of average net wages and salaries per month					
Butter, kg	75	87	93	78	81	108
Sour cream, 20-30 % fat content, kg	186	206	317	276	253	136
Curd, 5–9% fat content, kg	124	131	153	148	130	105
Milk, 2.5% fat content, l	697	703	778	773	658	94
Average retail price of milk and dairy products, Lt/kg						
Butter	18,01	19,04	17,26	19,91	19,62	109
Pasteurized milk, 2.5% fat content, Lt/l	1,94	2,35	2,06	2,01	2,42	125
Sour cream, 20–30 % fat content	7,28	8,01	5,35	5,63	6,29	86
Curd, 5–9% fat content	10,90	12,59	10,50	10,53	12,25	112

^{*} Own-produced and consumed products and direct sales excluded.

Sources: Production of Commodities 2007–2011. Vilnius: Department of Statistics. ISSN 1648-5777; Economic and Social Development in Lithuania 2008–2011. Vilnius: Department of Statistics. ISSN 1392-2874; Agriculture in Lithuania 2010. Vilnius: Department of Statistics, 2011. ISSN 2029-3658; Department of Statistics data.

The major part of dairy products sold on the domestic market is produced in Lithuania. However, the share of import has a tendency to increasing. In 2007, the imported dairy products accounted for 16% of all dairy products sold on the Lithuanian market (excluding raw milk import), and in 2011 - 18%, even though in 2009 their amount dropped to 14%. Cheese and fermented and sour dairy products, ice-cream are dominating in the structure of import of dairy products. In 2011 the amount of imported dairy products (including ice-cream, lactose and casein) totalled LTL 279.8 billion (excluding raw milk). The total market of dairy products constituted LTL 1.6 billion, and also including products with vegetable fats – LTL 1.7 billion.

Wholesale prices of dairy products, sold by Lithuanian producers on the domestic market, increased by 22% in December 2011 as compared to December 2006. Wholesale prices were increasing in 2007 and reached the highest level within the reference period in December 2008. The jump of prices on milk and dairy products in 2007 was influenced by the increase in global prices. In 2009, prices of dairy production enterprises under the impact of crisis and the global drop of prices decreased. They reached the lowest level in September 2009 and were by 5% lower than in December 2006. From September 2009 wholesale prices of dairy products on the Lithuanian market increased, most slowly – in 2011. Over this year the prices increased by 9.5%.

Export of dairy products. Balance of the Lithuanian foreign trade in milk and dairy products within the period of 2007–2011 was positive, though it has been changing not to the benefit of the Lithuanian milk processors, as the still more substantial part of the market was taken by the imported dairy products. In 2007 export exceeded import by 4.6 times, and in 2011 – only by 2.8 times. The growth rate of import exceeded that of export: during the period of 2007–2011 import increased by 2 times, export by 24%. In 2011, as compared to 2010, import increased by 36%, and export by 18%.

In 2011 export of dairy products (including ice-cream, lactose and casein) amounted to LTL 1718.7 million. Export was most rapidly increasing in 2007 – by 36%, as compared to the previous years. The growth of the global demand had a major impact on export. Cheese and curd accounted for about a half of the total export. In 2007 and 2011 the relative weight of cheese and curd comprised 47% of export, in 2008 – 58%, in 2009 – 56%. In 2011 non-concentrated cream accounted for 18% and milk powder for 9% of the export in dairy products. In 2011, as compared to 2007, export of almost all dairy products was increasing, most of all – yogurt (by 5.7 times). Only export of casein, butter and skimmed milk powder decreased (Table 2.24).

Table 2.24. Net exports of dairy products in 2007–2011, LTL million

CN code	Products	2007	2008	2009	2010	2011	2011 compared to 2007, %
0401	Milk & cream, not concentrated	275,3	180,2	177,5	291,3	418,1	152
0402	Milk & cream, concentrated	230,5	189,1	163,4	256,2	221,9	96
040210	Skimmed milk powder	168,3	83,0	66,5	151,2	135,2	80
040221	Whole milk powder	3,5	23,2	30,7	28,9	10,5	300
040291	Condensed milk without sugar	28,5	34,1	25,1	42,4	36,8	129
040299	Condensed milk with sugar	30,0	47,5	40,4	33,4	39,2	131
0403	Fermented or acidified milk & cream	13,8	15,7	15,2	16,6	36,7	266
040310	Yogurt	2,3	2,2	2,3	2,7	13,1	570
0404	Whey & products consisting of natural milk constituents	93,0	63,7	61,0	83,2	99,0	106
0405	Butter & other fats & oils derived from milk, dairy spreads	69,5	52,2	39,8	33,5	36,8	53
0406	Cheese & curd	646,0	782,8	647,9	716,0	813,0	126
040610	Fresh cheese & curd	199,4	269,7	252,9	293,7	332,7	167
040690	Other cheese	444,0	509,2	391,5	416,6	467,9	105
210500	Ice cream	30,6	31,5	34,4	42,3	48,2	158
350110	Casein	0,9	9,0	3,2	0,03	0,3	33
170211-19	Milk sugar	29,1	16,0	12,0	18,1	44,7	154

The main countries for export of Lithuanian dairy products were the EU countries and Russia. In 2011 most of the dairy products were exported to the EU countries – 63% of the total export, to Russia – 30% (Fig. 2.28). In 2007 export accounted for 65% and 29%, respectively. The share of export to Russia is so high since there is an opportunity here to sell Lithuanian cheese under its own trademark for a higher price than selling it in the EU countries as industrial cheeses. Cheese comprised the major portion of dairy products exported to Russia (88% in 2011).

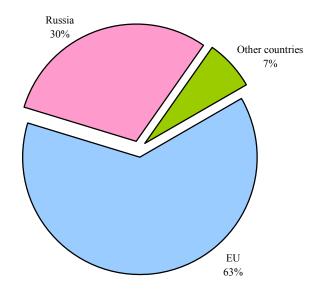


Fig. 2.28. Structure of the export of dairy products by country group in 2011 Source: Data of Statistics Lithuania.

The prices of dairy product exported in December 2011, as compared to December 2006, increased by 67%. Price variation tendencies during the reference period were similar as on the domestic market, just the price jumps or falls were much bigger. In 2010 dairy product export prices were increasing especially rapidly: in December 2010, as compared to December 2009, they increased by 26%. And in December 2011, as compared to December 2010, dairy product export prices did not change.

Market regulation measures. In Lithuania, as in the EU, common market organizational measures for milk and dairy products as well as milk quota system are operating.

In 2004 the total amount of national milk production quota of 1647 thou. t was approved for Lithuania: 1280 thou. t on sales for processing and 367 thou. t for direct consumption. Since the quota period of 2006–2007 (the quota year starts on 1 April and continues until 31 March of the following year) it has been increased by 57.9 thou. t, from the quota year of 2008–2009 by 2 % – up to 1739 thou. t, afterwards each year being increased by 1%. The allocated quota is sufficient and does not restrict the commercial milk production (Table 2.25).

Table 2.25. Fulfilment of national milk production quota in 2006–2011, per cent

Quota year	Quota for processing	Quota for direct consumption
2006–2007	85	7
2007–2008	85	54
2008–2009	84	56
2009–2010	76	61
2010–2011	77	n. d.

Source: National Paying Agency [interactive], [10 April 2012]. Access through Internet: http://www.nma.lt/index.php/parama/kvotos/pieno-kvotos/statistika/1498.

National direct payments for the quota milk sold in 2007 amounted to LTL 70.4 million, in 2008 to LTL 119.6 million; in 2009 LTL 121 million was allocated. In 2010 direct payments for the quota milk sold amounted to LTL 117.2 million and EU payments to milk processors who suffered from the dairy sector crisis amounted to LTL 10.6 million. In 2011 LTL 92 million of decoupled direct national payments for the quota milk were allocated to milk producers.

Of the Single Market organizational measures in 2007–2011 export refund compensations were most widely used. In 2007 milk processing companies received LTL 71.6 million for dairy product export to third countries, even though after the increase in the global prices for dairy products, since July 2007 refund payments for the export to third countries have been withdrawn. However, milk processing companies received additionally LTL 3.8 million of refund compensations in 2008 for the exported production in the previous years. In 2009 export refund payments were resumed and LTL 17.55 million was paid out to dairy product exporters, of which to Lithuanian companies – LTL 13.95 million. In 2010 just LTL 3.4 million of export compensations was paid out, as due to the increased prices, compensations were withdrawn again. In 2011 LTL 0.05 million of export compensations was paid out.

Of other Single Market organizational measures for milk and dairy products in all the years under analysis support was used for private warehousing of long-term maturation cheese: support was annually allocated to two companies for warehousing of 700 t of cheese. In 2009 the milk processing companies for the first time used the measure for butter and skimmed milk powder intervention purchase as prices for dairy products on the foreign market have dropped considerably. Until then intervention purchases have not been performed, since none of milk processing companies was willing to sell their production to intervention warehouses. Purchase to intervention warehouses amounted to 1.84 thou. t of butter and 10.34 thou. t of skimmed milk powder. In 2010 – 12.18 thou. t of intervention dairy products, and in 2011 – 6.0 thou. t.

Economic indicators of the dairy sector. In 2007–2010 milk production at specialized dairy farms was profitable. According to the FADN data on respondent farms, at farmers' farms, the main income of which was income derived from milk production, the total profit and subsidies per 1 LTL of sales income in 2007 accounted for 79% (43% – subsidies exclusive). In 2010 the profitability dropped to 77%, subsidies inclusive (21% – subsidies exclusive). Milk production was profitable also in agricultural partnerships and enterprises, except for 2009 when losses amounted to 0.04% (Fig. 2.29). Milk production in agricultural companies and enterprises is one of the more profitable branches of the economy, even though the gap from the average

profitability of agricultural production sales somewhat decreased: from 9.9 percentage points in 2007 to 7.8 percentage points in 2010.

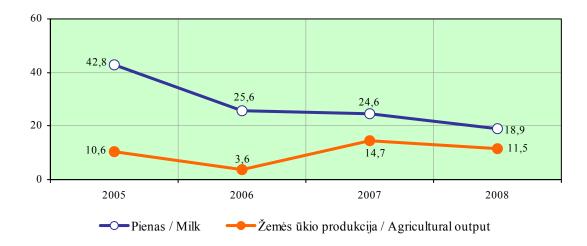


Fig. 2.29. Profitability of milk and total agricultural output in agricultural companies and enterprises in 2007–2010, per cent

Sources: Official statistical forms of agricultural companies and other agricultural enterprises 2008–2011.

Profitability of milk production in 2007–2010 was mostly influenced by the fluctuations in milk purchase prices. The cost price of milk production output underwent fewer changes, for example, in 2008, even with the purchase price increasing due to the increased cost price, the profitability of milk production decreased. In 2007 the average cost price of sold milk production in agricultural companies and enterprises was 540 LTL/t, if calculated by reckonable weight, and in 2010 increased up to 640 LTL/t, i.e. by 18.5%, and in comparison with 2008 decreased by 12%. The cost price of liquid milk increased by 8.2% in 2010 as compared to 2007.

In 2008 the activities of the four major groups of milk processing enterprises (before 2008 – of three), enrolled in the lists of the Vilnius Stock Exchange, referred as profitable in 2007, suffered 1.9% losses (Table 2.26). However, since 2009 profit has been gained again. In 2011 the profitability reached 3.1%.

Table 2.26. Net profitability of major dairy enterprises in 2007–2011, per cent

Indicator	2007	2008	2009	2010	2011
Net profitability	5,3	-1,9	2,6	4,0	3,1

Source: NASDAQ OMX [interactive], [4 April 2012]. Access through Internet: http://www.nasdaqomxbaltic.com/market/?pg=reports.

In 2007 the profitability was considerably influenced by the export refund payments, paid out for products exported to third countries. In that year the profitability increased still more through the rise of global prices for dairy products. In 2008, the said refund payments were discontinued, the global prices on dairy products dropped, and the operation of Lithuanian milk processing enterprises exporting more than half of its output was loss-making. In 2009 export refund payments were resumed again, and in 2010–2011 the rise in profitability was influenced by the increased prices for dairy products.

3.3. Meat

The livestock-breeding sector in Lithuania is an important branch of agriculture, supplying the domestic consumers with various livestock products, and the source of Lithuania's export. Livestock products account for half of agricultural output, of which milk comprises almost half, and the remaining part is cattle and poultry meat. Only an insignificant part consists of eggs, wool, honey, wax and other livestock-breeding output. The number of cattle has been decreasing each year, though provision with their products remains rather high. Within the reference period, the number of cows decreased most of all, but due to the higher milk yield, the amount of milk produced is twice as much as needed for the domestic market. Even though one-third of calves are exported, beef is produced by almost three times more than is consumed by the domestic consumers. Poultry farming is expanding most rapidly, since poultry is the cheapest and most marketable meat. Pork accounts for the major part of consumption in the country, even though only one-third of the total demand is produced in Lithuania. Two-thirds of pork is imported from the EU countries. Due to insufficient attention and promotion as well as strict environmental requirements, pig-breeding is losing positions it has held for decades. The major part of livestock-breeding products was exported. In terms of value, meat, cattle and poultry export in 2011 was by 36% higher than import. In 2011 the number of slaughtered cattle and poultry was almost the same as in 2010. This corresponds to the pre-crisis level of 2008.

Livestock-breeding. According to the data of the Department of Statistics, in 2011 the number of dairy cows, pigs and poultry kept by farmers and companies was less than that of cattle and sheep as compared to 2010. The largest drop was observed in the pig-breeding sector (Table 2.27).

Table 2.27. Number of livestock and poultry in 2007–2011 (at the end of the year), thousand

Kind of animals	2007	2008	2009	2010	2011*
Cattle	787,9	770,9	759,4	748,0	752,4
of which dairy cows	404,5	394,7	374,6	359,8	349,5
Pigs	923,2	897,1	928,2	929,4	790,3
Poultry	9874,8	9107,5	9308,7	9466,3	8921,2
Sheep	43,3	47,5	52,5	58,5	60,4

^{*} Preliminary data of the Department of Statistics Lithuania.

Source: Agriculture in Lithuania 2010. Vilnius: Department of Statistics, 2011. ISSN 2029-3658.

Cattle. According to the data of the Department of Statistics, as at the end of 2011 the number of cattle kept in Lithuania amounted to 752.4 thousand, of which dairy cows accounted for 46% (Table 2.27). The largest number consisted of the Lithuanian Black-and-White (66%) and the Lithuanian Red (19%) cows. Beef and cross-breed cattle account for 14%.

By the end of 2011 cattle was raised in 87.4 thousand farms, i.e. two times less than five years ago (Table 2.28). The number of small-scale farms is reducing. The average farm is still very small. On the average, 8 heads of cattle were raised per farm (the EU – about 37).

Table 2.28. Farms by number of cattle in 2006 and 2011 (at the end of the year), thousand

Number of cattle per	20	06	20	11
farm, heads	number of farms	number of cattle	number of farms	number of cattle
1–2	95,9	132,0	48,8	67,1
3–5	38,2	140,9	19,2	71,2
6–10	15,9	118,5	9,1	68,9
11–20	8,0	114,1	5,1	73,4
21–30	2,2	55,7	1,8	44,9
31–50	1,5	59,8	1,5	60,4
51-100	0,9	64,0	1,1	77,5
101–150	0,2	26,1	0,3	40,5
>=151	0,3	148,5	0,4	166,7
Total	163,1	859,6	87,3	670,6
Average, heads		5,3		7,7

Source: AIRBC data.

In Lithuania three main groups of cattle-growing farms may be distinguished – large, average and small-scale cattle keepers. In 2011 small farms where up to 20 heads of cattle are kept accounted for 94% of all the farms and 42% of the total cattle raised here. The number of small-scale farms with up to 50 heads of cattle is decreasing.

Cattle production is dependent on the milk production tendencies. With milk production increasing, the number of cattle of dairy kinds also increases. Since the number of cattle for slaughter by three times exceeds the amount of meat needed for the domestic market, the excess of cattle has a negative influence on the purchase prices. Export of live animals is an alternative for an increase of prices on cattle. Therefore export of calves continuing for more than a year is partly justifiable. In 2011, 41% of born calves were exported. It is important to note that meat of dairy cattle is not so much valued as that of meat cattle.

The raising of beef cattle is a comparatively young branch of livestock-breeding. Currently in Lithuania 13 pedigree and two meat crossbred cattle breeds are raised. Of pedigree cattle most popular are Limousine, Charolais and Aubrac breeds. However, crossbred cattle breeds are most numerous. The number of meat and crossbred cattle breeds increased within five years (2007–2011). The number of suckler cows increased by more than two times, up to 22.5 thousand, but pedigree cattle comprised only one-fourth, whereas the number of heifers was not increasing. By the end of 2011, the number of pedigree and crossbred cows and heifers amounted to 59.9 thousand, and with the offspring – 94.9 thousand. They were raised in 18.3 thousand farms. Five heads of cattle, on the average, were bred per farm.

In all EU countries slaughter animal carcasses are evaluated according to the unified carcass classification system SEUROP. The system is mandatory in the EU countries and enables the fair payment to be made for sold animals, to declare prices and to compare them in all EU countries. Classification of slaughter animal carcasses in Lithuanian slaughterhouses has been carried out since 2002. The 2011 results of carcass assessment show that Classes E, U and R (together) accounted for 9%, and the prevailing Class O for 54% (Table 2.29).

Table 2.29. Cattle carcasses by SEUROP conformation class in 2007–2011, per cent

Class	2007	2008	2009	2010	2011
E, U, R	8,5	8,6	8,5	12,6	8,7
O	46,7	48,6	47,2	55,9	54,3
P	44,8	42,8	44,3	31,5	37,0
Total	100,0	100,0	100,0	100,0	100,0

Source: AIRBC data.

Pigs. According to the data of the Department of Statistics, by the end of 2011 in Lithuania 790.3 thousand of pigs were raised, of which pedigree breeding pigs accounted for 68.3 thousand (Table 2.30). In 2011 pig breeders raised about 1.17 million of pigs, of which 261 thousand were exported, and 916 thousand were slaughtered. Two-thirds of pigs were slaughtered in slaughterhouses. During 2006–2011 the number of pigs decreased by almost one-third. Pig breeding is among few agricultural sectors, where direct refund payments for fuel are not applied, and the prices for feed grains in 2007–2011 went up considerably. Therefore a lot of small farms discontinued their pig-breeding activities. To provide the Lithuanian population with pork of own production, the production volumes should be increased by more than two times.

Table 2.30. Number of pigs by group in 2006 and 2011 (at the end of the year), thousand

Group of pigs	2006	2011	Change,%
Pigs, total	1127,1	790,3	-29,1
piglets up to 20 kg	249,8	138,6	-44,5
piglets 20–50 kg	260,7	208,5	-20,0
fattening pigs 50-80 kg	252,3	202,3	-19,8
fattening pigs 50-80 kg	198,1	117,4	-40,7
fattening pigs over 110 kg	66,7	54,1	-18,9
pedigree sows	81,9	68,3	-16,6
boars	2,0	1,1	-45,0

Source: Data of Statistics Lithuania.

In 2011 the quality of pig carcasses did not change (Table 2.31), but their quality is sufficiently high – pigs of carcass conformation Classes S, E and U accounted for 99%.

Table 2.31. Pig carcasses by SEUROP conformation class in 2007–2011, per cent

Class	2007	2008	2009	2010	2011
S	30	34	46	47	47
Е	46	46	42	42	44
U	19	16	11	10	8
R	4	3	1	1	1
O	1	1	0	0	0
P	0	0	0	0	0
Total	100	100	100	100	100

Source: AIRBC data.

Sheep and goats. According to the data of the Agricultural Information and Rural Business Centre (AIRBC), by the end of 2011, 61 thousand of sheep (of which 27.7 thousand of ewes) were raised in 4.7 thousand farms and 6.7 thousand of goats (of which 3.0 thousand of breeding goats) – in 3.1 thousand of farms. Over the period of 2006–2011, the number of sheep increased by 26%, whereas the number of goats decreased by 1% (Table 2.32). Sheep-breeding in Lithuania is not a popular branch of agriculture, while the number of sheep is increasing.

Table 2.32. Farms by number of sheep and goats in 2006 and 2011 (at the end of the year)

Number of sheep or	Sheep farms			Goat farms				
goats per farm	20	2006		2011		2006		11
	farms	sheep	farms	sheep	farms	goats	farms	goats
1–2	1400	1992	1770	2570	3065	3903	2453	3234
3–5	744	2837	1134	4347	412	1437	502	1768
6–10	430	3269	717	5367	67	497	87	626
11–20	325	4763	496	7306	10	159	18	257
21–30	173	4317	221	5526	1	26	2	54
31–50	140	5434	186	7022	1	42	5	194
51-100	98	6646	118	8321	1	52	2	151
101–150	27	3259	32	3983	0	0	1	105
>=151	34	15778	37	16552	3	622	1	299
Total	3371	48295	4711	60994	3560	6738	3071	6688
Average		14		13		2		2

Source: AIRBC data.

In 2011 the number of slaughtered sheep amounted to 25.3 thousand, output - 0.4 thou. t of mutton, consumption - 700 t (0.2% of the total meat).

Poultry. According to the data of the Department of Statistics, by the end of 2011 the number of poultry raised in Lithuania amounted to 8.9 million (Table 2.33). During the period of 5 years, the number of turkeys increased by almost two times.

However, the number of poultry of other kinds was on the decrease. Most of all the number of broilers decreased – by 14%.

Table 2.33. Number of poultry in 2007 and 2011, thousand

Kind of poultry	2007	2011
Broilers	5383,2	4624,0
Laying hens	4309,6	4034,1
Geese	36,9	17,5
Ducks	34,3	29,3
Turkeys	104,4	207,7
Other	6,4	8,7
Total	9874,8	8921,2

Source: Data of Statistics Lithuania.

Meat production. According to preliminary data, in 2011 animal and poultry carcass meat produced in all farms amounted to 220.1 thou. t. This is by 1.1 thou. t less than in 2010 (Fig. 2.30).

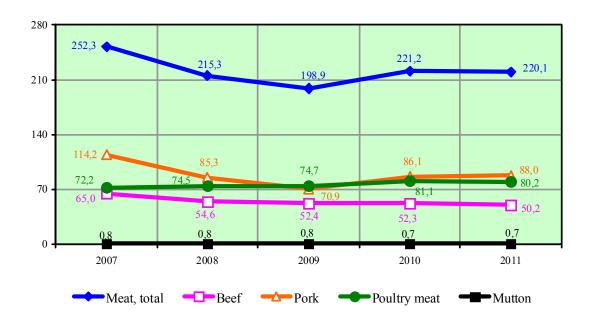


Fig. 2.30. Meat production (carcasses) in 2007–2011, thousand tonnes

Source: Agriculture in Lithuania 2010. Vilnius: Department of Statistics, 2011. ISSN 2029-3658.

In 2011 the volume of purchased cattle and poultry amounted to 233.7 thou. t (live weight), accounting for 1% more than in 2010. Slaughterhouses and meat processing enterprises purchased 151.3 thousand of cattle (by 1% less than in 2010) and produced 38.0 thou. t of carcass meat. Mostly cows (44%) and bulls (40%) were purchased. Purchases of cows were higher than in 2010 (by 2%) and purchased heifers were fewest in number -6%. The average purchase price of cattle in 2011 was by 19% higher than in 2010 (Fig. 2.31).

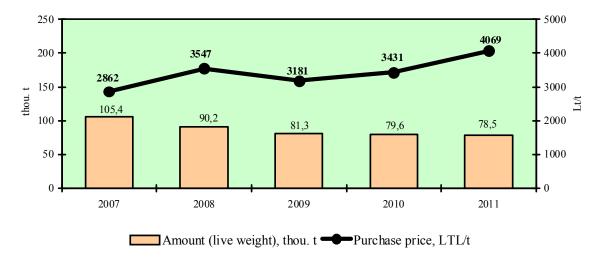


Fig. 2.31. Amount purchased and average price of cattle in 2007–2011

Sources: Agriculture in Lithuania 2010. Vilnius: Department of Statistics, 2011. ISSN 2029-3658. AIRBC data.

In 2011 purchase prices on cattle in Lithuania were highest over the entire reference period. The average purchase price of Class O2 bulls increased by one-fifth per year. Those prices increased almost in all EU countries (on the average, by 15%). By the end of the year the purchase prices in Lithuania were only by 3.8% behind the EU average, but nearly 3% higher than in Poland. Purchase prices of Class O2 bulls raised in Lithuania on the EU market were higher than purchase prices in 13 EU countries.

In 2011 slaughterhouses and meat processing enterprises purchased 46% (519 thousand) of pigs raised in all farms. In 2011 the average purchase price on pigs under carcass classification scale SEUROP was by 6% higher than in 2010.

Purchase price of pigs (Class E) in Lithuania -154.0~EUR/100~kg – was in compliance with the EU average. However, in June–October due to the outbreak of swine-fever and export suspension, the purchase price in Lithuania was by 4% lower than the EU average (Fig. 2.32).

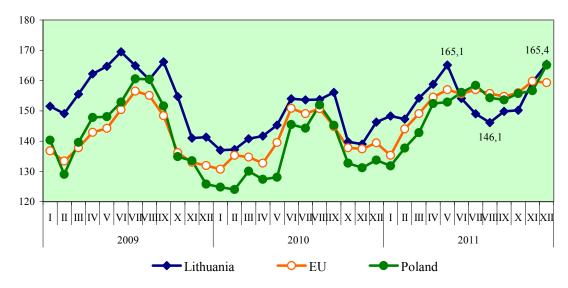


Fig. 2.32. Purchase price of pigs in Lithuania, Poland and EU in 2009–2011, EUR per 100 kilogram

Source: Data of Eurostat.

In 2011 the highest purchase prices of pigs (Class E) were in Malta (181.4 EUR/100 kg), Italy (172.7 EUR/100 kg) and Greece (172.5 EUR/100 kg), lowest – in Denmark (138.9 EUR/100 kg), the Netherlands (140.8 EUR/100 kg) and Belgium (141.3 EUR/100 kg). The highest rise in prices was in Italy (15%), in Latvia and France (13%).

40.3 million heads of poultry were slaughtered in 2011 (by 2% more than in 2010), including 38.6 million of broiler chicken (by 13% more). In 2011, as compared to 2010, the average wholesale price of chicken was by 6% higher than in 2010 and reached the level of 2009 (Fig. 2.33).

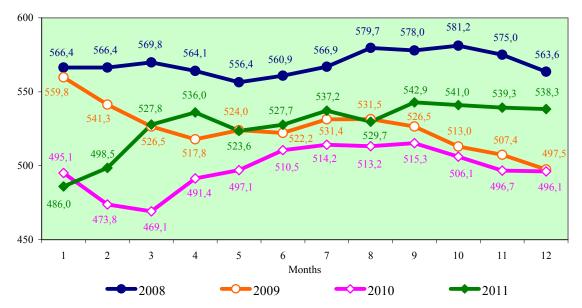


Fig. 2.33. Average sale price of poultry meat in 2008–2011, LTL per 100 kilogram Source: AIRBC data.

Domestic market. In 2011, 277.7 thou. t meat and meat products were sold on the domestic market for LTL 1.9 billion (Table 2.34). As compared to the pre-crisis 2008 period, market volumes decreased by about 15%, and value by 28%. The population consumption structure underwent changes. Consumption of raw meat and poultry did not decrease, but consumption of meat products decreased by almost twice.

Table 2.34. Sales of meat and meat products in the domestic market in 2008 and 2011

Products	20	08	2011		
rioducts	quantity, thou t	value, mill. Lt	quantity, thou t	value, mill. Lt	
Meat and sub-products	95,1	706,2	106,8	684,3	
Poultry meat and sub-products	39,7	251,6	49,9	246,1	
Meat products	174,8	1553,6	100,2	819,5	
Imported meat products	20,0	118,3	20,8	121,3	
Total	329,6	2629,7	277,7	1871,2	

Source: Data of Statistics Lithuania.

By LIAE calculations, in 2011 annual per capita consumption in Lithuania was 72 kg of meat and meat products (including Category I and II sub-products). As compared to 2010, by 2 kg more (Table 2.35). The annual consumption of meat and meat products in the EU countries is on the average by one-fourth higher.

Table 2.35. Per capita consumption of meat products in 2007–2011, kilograms

Meat by kind	2007	2008	2009	2010	2011*
Meat, total	77	81	72	70	72
of which:					
beef	7	6	5	4	4
pork	46	46	42	41	43
poultry meat	22	24	22	21	22
sub-products, category I and II	2	3	2	3	3

^{*} LIAE calculation.

Sources: Agriculture in Lithuania 2010. Vilnius: Department of Statistics, 2011. ISSN 2029-3658.

Even though pork is most popular in our country, however, capacities are lacking for raising pigs; therefore half of the consumed pork is imported. The consumption of beef is almost by half less than the EU average. Its consumption is gradually decreasing in Lithuania, since as in many new EU countries the price on this meat is going up most rapidly. According to the Department of Statistics, cows and heifers account for 56% of the slaughtered cattle, therefore beef quality is not the best. According to the 2010 meat balance, the country was provided with beef meat by 284%, poultry -111%, and pork -54%.

Foreign trade. In 2011 balance of Lithuanian foreign trade in meat and animals was positive (Fig. 2.34). Export volumes increased by 17%, and import by 14%. Pork export increased almost by two times, but its share accounted only for 7% of the total export of meat and animals. The major part of export consists of cattle meat (34%) and live animals (25%). Calves and pigs comprised the major part of export.

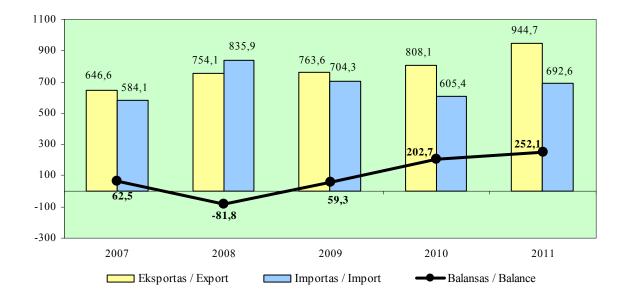


Fig. 2.34. Foreign trade balance of meat and animals in 2007–2011, LTL million *Source: Data of Statistics Lithuania.*

In 2011 export of cattle meat amounted to 30 thou. t (Table 2.36). The main importers: Russia (65%), the EU countries – Italy, Sweden, and the Netherlands. Pork was mostly purchased in Latvia, Russia and Belarus, and poultry meat in the EU countries –Latvia, the Netherlands, Estonia, and France.

Table 2.36. Meat exports by kind in 2007–2011*, thousand tonnes

Meat by kind	2007	2008	2009	2010	2011**
Meat, total	79,3	74,0	71,4	87,3	105,0
of which:					
beef	35,5	30,9	29,7	31,7	30,3
pork	12,6	13,6	12,9	15,3	28,9
poultry	21,6	19,9	22,4	29,1	37,6

^{*} Meat products converted into meat.

Sources: Agriculture in Lithuania 2010. Vilnius: Department of Statistics, 2011. ISSN 2029-3658; Data of the Department of Statistics.

A significant part of import consists of pork (Table 2.37). During 2011 almost 82 thou. t of pork was imported, mostly from Germany (25%), Poland (23%), and Belgium (17%). In 2011 the major part of poultry meat was imported from Poland (62%).

Table 2.37. Meat imports by kind in 2007–2011*, thousand tonnes

Meat by kind	2007	2008	2009	2010	2011**
Meat, total	123,3	147,0	133,1	114,5	122,2
of which:					
beef	6,2	6,3	2,9	3,4	3,5
pork	70,3	94,5	95,6	78,5	81,8
poultry	36,4	33,2	26,1	21,6	25,2

^{*} Meat products converted into meat.

Sources: Agriculture in Lithuania 2010. Vilnius: Department of Statistics, 2011. ISSN 2029-3658; Data of the Department of Statistics.

Livestock-breeding business, as compared to plant-growing, is less attractive. Firstly, direct payments to livestock breeders are not directly dependent on the number of animals and development of the farm. Secondly, contribution of the farmer's work to the plant-growing and livestock-breeding differs greatly, and the outcomes, on the contrary, are distributed only by the arable land. If such stimulation system does not change, animals in the farms may become a rarity.

^{**} LIAE calculations.

^{**} LIAE calculation.

3.4. Rape

Application of alternative energy sources has become still more important due to the high prices of oil and worsening ecological situation. Experts of the United Nations Food and Agricultural Organization forecast that after 15–20 years one-fourth of the fuel demand will be satisfied by biofuel, the considerable part thereof being produced from rapeseed. According to the preliminary data of the USA Department of Agriculture, the global rape harvest in 2011 reached 60.4 mill. t and was by 1.0% lower than in 2010 (Table 2.52). Its reduction was influenced by the lower yielding capacity due to unfavourable climate conditions and the aggregate yield in some countries cultivating the major part of rapeseed – China, Canada, France, Germany, Poland, etc. The major producers of rape in 2011 remained in the EU – 20.7 mill. t (in 2010 – 21.6 mill. t), China – 13.1 mill. t (13.7 mill. t), and Canada – 12.8 mill. t (12.9 mill. t). Even though the yield decreased, the global consumption of rapeseed on the domestic markets in 2011 was increasing and comprised 61.0 mill. t (in 2010 – 59.6 mill. t). Rapeseed stocks at the end of 2011, as compared to 2010, decreased by 5.3% – to 10.7 mill. t.

Table 2.52. World supply and demand of rapeseed in 2007–2011, million tonnes

Indicators	2007	2008	2009	2010	2011
Initial stock	6,6	4,9	7,7	9,9	11,3
Harvest	48,8	57,9	59,9	61,0	60,4
EU-27	18,4	19,0	21,6	21,6	20,7
Russia	0,6	0,8	0,7	0,7	0,7
Ukraine	1,1	2,9	1,9	1,9	1,5
Canada	9,6	12,6	11,8	12,9	12,8
USA	0,7	0,7	0,7	0,7	1,1
China	10,4	12,1	12,8	13,7	13,1
India	4,9	6,7	6,3	6,4	7,0
Australia	1,1	1,8	1,9	1,9	2,4
other countries	2,0	1,3	2,2	1,2	1,1
Total supply	55,4	62,8	67,6	70,9	71,7
Uses	50,5	55,1	57,7	59,6	61,0
Final stocks	4,9	7,7	9,9	11,3	10,7

Source: USA Agricultural Department data.

In 2011, 34.3% of the total global rape yield was harvested in the EU countries. The EU at present is the major producer of biofuel from rapeseed, sunflower and soya oil and has set a goal to achieve that share of biofuel in 2015 would make 8% of the fuel used for transport. In 2011 the rapeseed yield was by 0.6 mill. t (1.0%) lower than in 2010. The amounts of rapeseed processed into biofuel are rapidly increasing. Of the EU countries, the major yield of rape was harvested in Germany – 5.70 mill. t (in 2010 – 6.31 mill. t), France – 4.82 mill. t (5.62 mill. t), and Poland – 2.24 mill. t (2.51 mill. t).

The increase of the demand in biofuel and the EU financial support obligations stimulate the farmers in our country to grow larger amounts of rape.

Cultivation. The situation on the rapeseed market currently is rather favourable: the new form of relations is being applied – agreements between rape growers and biofuel producers, the purchase prices are increasing, demand for rape which is one of the most cost-effective plants for biofuel production is constantly growing. During the reference period, the rape crop areas increased by 43.5%, the yield capacity by 8.4%, and the yield was by 55.3% more abundant (Table 2.53). Even though in Lithuania in 2011, as compared to 2010, rape was harvested in the area which was by 0.7% smaller, however, due to the yielding capacity higher by 17.6% the yield increased by 16.2% and reached almost half a million tonnes.

Table 2.53. Crop area, harvest and yield of rape in 2007–2011

Indicators	2007	2008	2009	2010	2011	2011 compared to 2010, %
Area, thou. ha	174,4	161,6	191,9	251,9	250,2	99,3
Harvest, thou. t	311,9	330,3	415,8	416,7	484,3	116,2
Yield, t/ha	1,79	2,04	2,17	1,65	1,94	117,6

Source: Data of Statistics Lithuania.

Winter rape crop areas decreased by 73.8%, and those of spring rape increased by 39.5% (Fig. 2.49). Decrease in winter rape areas was determined by unfavourable natural conditions. In the autumn of 2010 Lithuanian rape growers sowed winter rape in the area of 89.3 thou. ha, but due to unfavourable wintering conditions more than a half of crop areas decayed.

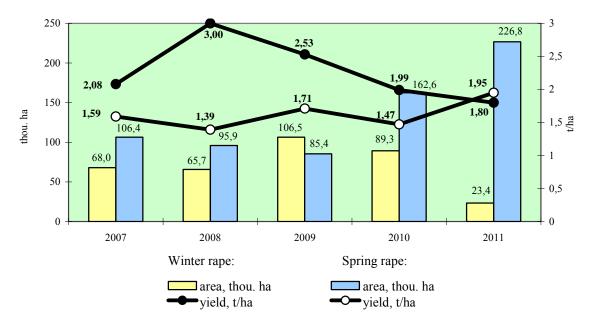


Fig. 2.49. Area under rape crops and seed yield in 2007–2011

Source: Data of Statistics Lithuania.

Rape yielding capacity and its total yield has been influenced by the fact that the number of farms growing rape in the areas over 50 ha is increasing. The average crop area under rape per farm increased annually by nearly 3.5%. Therefore the opportunities for applying more advanced technologies are improving.

Market. During 2011 in Lithuania 395.0 thou. t of rapeseed, or by 9.1 thou. t (2.4%) more than in 2010 (Table 2.54), was purchased from rapeseed growers. With the increase of biofuel output capacity, the demand in the raw material for its production increased in 2011.

Table 2.54. Purchase of rapeseed in 2007–2011

Indicators	2007	2008	2009	2010	2011
Amount, thou. t	329,8	299,4	368,0	385,9	395,0
Price, LTL/t	952	1269	836	1099	1458
Value, LTL mill.	314,0	379,9	307,7	424,1	575,9

Sources: Agriculture in Lithuania 2010. Vilnius: Department of Statistics, 2011. ISSN 2029-3658; AIRBC data.

Due to the increasing demand in rapeseed, its average purchase price during the period of 2007–2011 increased by 53.2%. In December of 2011 the price was by 4.2% higher than in December 2010, even though if compared to December 2008, the difference in purchase prices was considerably higher (Fig. 2.50).

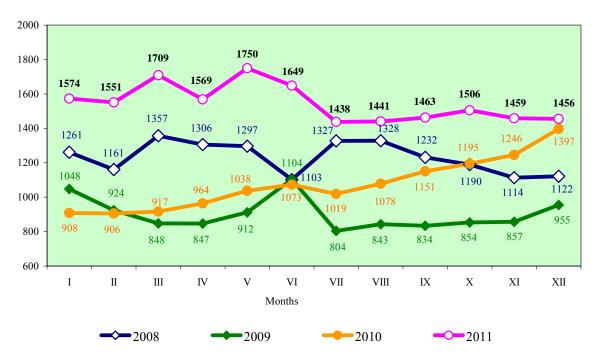


Fig. 2.50. Average purchase price of rapeseed in 2008–2011, LTL per tonne Source: AMFIS.

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In 2011 the rapeseed purchase prices in some Central and East European countries, as compared to 2007, also increased greatly (Table 2.55). For example, in the 45th week of 2011, as compared to the same period in 2007, the prices for rapeseed increased by 22.2% in Germany, by 37.0% in Lithuania, 55.7% in Poland, 44.7% in Latvia, and 31.0% in Estonia.

Table 2.55. Average price of rapeseed in selected EU countries in the 45th week of 2007–2011, LTL per tonne

Countries	s 2007	2008	2009	2010	2011	Change 2011 compared to 2010,
Germany	1192	1069	853	1368	1456	6,4
Lithuania	1026	1032	829	1318	1406	6,7
Poland	982	1155	912	1277	1529	19,7
Latvia	978	1225	724	1213	1415	16,7
Estonia	1154	1042	804	1128	1512	34,1

Source: AMFIS.

In 2011, in comparison with 2010, rapeseed export in Lithuania increased by 5.5% by value (Table 2.56). This was influenced by the growing demand in rapeseed on the markets of other states. The average price of exported rape due to the constantly increasing demand in their seeds for biofuel production and their insufficient supply within 2007–2011 increased by 47.0%, and in 2011, as compared to 2010, by 34.1%.

Table 2.56. Export of rapeseed in 2007–2011

Year	Amount, thou. t	Price, LTL/t	Value, LTL mill.
2007	205,8	1038	213,6
2008	193,2	1201	232,0
2009	297,3	953	283,3
2010	278,5	1138	316,9
2011	219,1	1526	334,3

Source: Data of Statistics Lithuania.

In 2011 the major part of rapeseed from Lithuania was purchased by Poland – 33.7%, Latvia – 24.6%, Germany – 20.6%, Belgium – 9.7%, and Finland – 6.8%.

Balance of foreign trade in rapeseed is positive – export to a certain extent exceeded import. The main portion of imported rape is intended for seed. In 2011 import of rapeseed to Lithuania amounted to 20.9 thou. t. Rape for seed was imported from the EU countries: Germany – 49.1%, Denmark – 24.4%, and Sweden – 7.7%.

Lithuania is importing quite plenty of alimentary rapeseed oil (Table 2.57). In 2011 its import amounted to 37.8 thou. t.: 54.2% from the EU countries, 45.8% from other states. The average imported oil price increased by 44.5% over the period of 2007 and 2011, and in 2011, as compared to 2010, by 44.0%. This was influenced by the changes in rapeseed prices: in 2011 its price was by 32.7% higher than in the previous year, but as compared to 2007 – increased by 53.2%.

Table 2.57. Import and export of alimentary rapeseed oil in 2007–2011

Year -	Amoun	t, thou. t	Price,	LTL/t	Value, LTL mill.		
i cai	import	export	import	export	import	export	
2007	38,3	21,7	2355	2451	90,2	53,2	
2008	56,6	27,9	3287	3434	186,1	95,8	
2009	57,3	17,2	2130	2241	122,1	38,5	
2010	53,8	10,8	2362	2649	127,0	28,7	
2011	37,8	9,1	3402	3495	128,6	31,8	

Source: Data of Statistics Lithuania.

In 2011 export from Lithuania of alimentary rapesed oil amounted to 9.1 thou. t.: 65.9% to the EU countries, 34.1% to other countries. The average exported oil price was by 31.9% higher than in 2010 and by 42.6% higher than in 2007.

Processing. In 2011 the Lithuanian enterprises processed 202.6 thou. t. of rapeseed – by 13.4 thou. t. (7.1%) more than in 2010. In 2011, 2.2 thou. t. of alimentary rapeseed oil was produced, and the remaining part of rapeseed was processed into methyl ester.

Rapeseed processing production capacities, as well as the demand for crude rapeseed, have been increasing until 2009. To ensure the better use of the available production capacities, not less than 540 thou. t of rapeseed should be produced annually. In 2011, 484.3 thou. t of rapeseed, or almost 90.0% of the required amount, was produced by farmers.

The global volumes of rape processing are increasing. Just only in 2011, as compared to 2010, the amount of processed rapeseed was by 2.3% higher. This was conditioned by the constantly increasing demand for biodiesel.

Support and economics. The development of rape crop areas is stimulated by the support provided. The main direct payment -369.81 LTL/ha paid from the EU budget and complementary direct payments from the national budget related to the production -75.00 LTL/ha were paid in 2010 for the declared rape crop areas.

Following the advanced agrotechnical requirements for rape cultivation, the high rape yielding capacity and production profitability has been achieved. From 2007 to 2009 the annual input for rape cultivation per tonne in farmers' farms was almost the same, and from 2009 to 2011 it jumped up for almost 37.0% (Fig. 2.51). The higher cost price of rapeseed in 2011 was conditioned by unfavourable wintering conditions and the increased prices for material and technical resources.

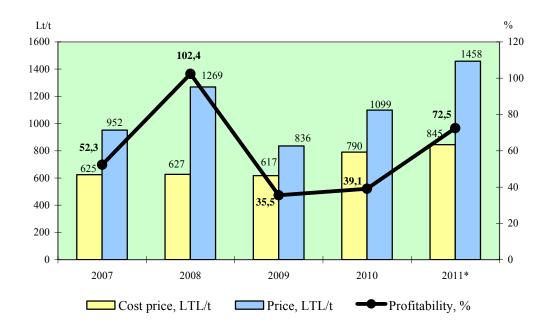


Fig. 2.51. Average cost price, purchase price and profitability of rapeseed in family farms in 2007–2011

Source: LIAE calculations.

In 2008, with the rise of the average purchase price to 1269 LTL/t and the significant increase of the rape yielding capacity, the profitability excluding subsidies reached 102.4%. In 2009, as compared to 2008, with the rapeseed purchase price decreased by 34.1%, the profitability of rapeseed decreased to 35.5%. In 2010, as compared to 2009, with the rapeseed purchase price increased by 32.1%, its profitability jumped up to 39.1%, and in 2011, after the purchase price increased by 32.7%, the profitability increased to 72.5%.

Analysis shows that soils good for rape growing in Lithuania account for approx. 60–70%. According to the agrotechnical requirements, their rotation takes 4–5 years, therefore areas under rape may constitute about 20–25% of the crop areas. Thus Lithuania has the potential opportunities for increasing rape crop areas and satisfying the demand of the oil industry and biofuel production and expanding exports. To increase the efficiency of the rape production, it is necessary to select favourable soils for rape crop cultivation areas, to sow much more of the certified seeds, to timely apply the fertilizers, advanced measures for protection against pests, and to devote much more attention to the renovation of the park of harvesting machines, since due to the worn-out machinery the major part of the yield is lost during its harvesting.

III. STRUCTURAL CHANGES IN THE AGRICULTURAL AND FOOD SECTOR

1. Gross agricultural output

According to the preliminary data of the Department of Statistics, the gross agricultural output in 2011 amounted to LTL 7.86 billion (at current prices), i.e. by 23% more than in 2010. This was influenced by the increased purchase prices for agricultural products by 18.4% and higher production volumes. If calculated by comparable prices, the growth was considerably lower. The volume of agricultural production in 2011, as compared to 2010, increased by 6.0%, including plant-growing production – by 11% and livestock-production – only by 0.8 percent. The share of crop output in the gross agricultural output increased by 4.6 percentage points (Table 3.1).

Table 3.1. Structure of gross agricultural output in 2007–2011

Output	2007		2008	2008		2009		2010		ķ	
Output		LTL mill.	%								
Ī	Total	6912,2	100	7340,0	100	5707,0	100	6388,2	100	7856,0	100
	crop output	3980,1	52,7	4125,5	56,2	3239,5	56,8	3476,2	54,4	4635,0	59,0
	animal output	2932,1	47,3	3214,5	43,8	2467,5	43,2	2912,0	45,6	3221,0	41,0

^{*} Preliminary data.

Source: Data of Statistics Lithuania.

Within the entire period under analysis, the crop output comprised the major part of the gross agricultural output value as compared to the livestock output. This was conditioned by the higher price ratio between the crop output and raw materials necessary for its production, as compared to livestock output, as well as higher direct and refund payments. During the period of 2007–2011, variations in the volumes of crop and livestock output, as compared to the previous years, are not the same (Fig. 3.1). In 2010 the crop output reduced mostly by 17.4%. Its highest increase was in 2007. Livestock output changes until 2009 were insignificant. In 2009, as compared to 2008, the production volume of these products reduced by 6.1%, in 2010, as compared to 2009, increased by 3%, in 2011, as compared to 2010, by 0.8%.

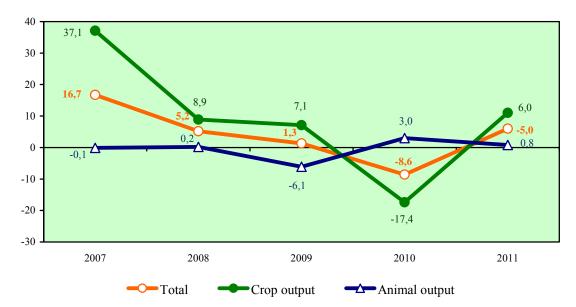


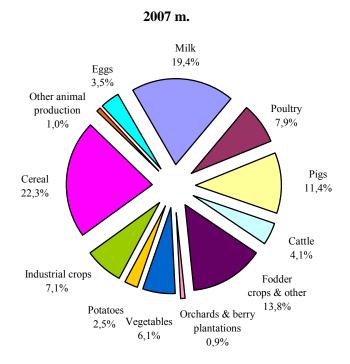
Fig. 3.1. Changes in gross agricultural output in 2007–2011 (compared to the previous year), per cent

Source: Data of Statistics Lithuania.

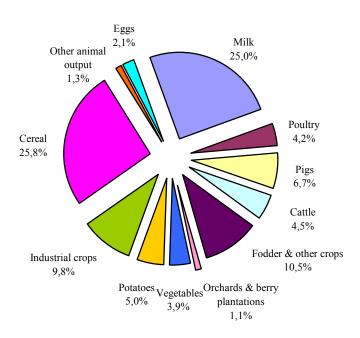
The value of crop output in 2011, as compared to 2010, was considerably higher. This was conditioned by the purchase prices for crop products that increased by 27.4% and the higher yield of agricultural crops.

In 2011, as compared to 2010, rapeseed and cereal purchase prices were, respectively, by 32.5% and 27%, potatoes by 25.6%, and sugar-beets by 1.7% higher. Vegetables were purchased at 3.3% lower prices. Increase in the volume of crop output in 2011, as compared to 2010, was determined by the increased grain harvest – 15.2% (due to 4.5% larger area and 10% higher yielding capacity), field vegetables – 75.4% (respectively, 3.7 and 70.0%), potatoes – 23.2% (3.3 and 20.0%). Rapeseed harvest increased by 16.2% due to the productivity higher than 17.6% and area larger by 7.3%. Growth of the harvest of sugar-beets by 24.2% was conditioned by the increase in the yielding capacity by 5.3% and the area by 15.0%.

The value of livestock output in 2011, as compared to 2010, increased by 10.6%. This was due to the increase of livestock product purchase prices by 13.3%. In 2011, as compared to 2010, slaughtered animals and poultry (live weight) were by 0.7% and eggs produced by 0.7% less, and milk produced by 1% more. Purchase prices of animals, poultry, pigs and milk increased respectively by 18.5%, 16.0%, 15.0% and 14.1%. Such situation determined the structural changes in the gross agricultural output branches.



2011 m.*



^{*} Preliminary data.

Fig. 3.2. Structure of gross agricultural production in 2007 and 2011 Source: Data of Statistics Lithuania.

The major part in the gross agricultural output structure in Lithuania in 2007 and 2011 was taken by cereals (22.3 and 25.8%, respectively) and milk (19.4 and 25.0%).

In 2011, as compared to 2007, the share of milk and cereals increased mostly in the gross agricultural output structure – by 5.6 and 3.5%, respectively. Due to the comparatively low competitiveness and profitability, the share of pigs and poultry decreased respectively by 4.7 and 3.7 percentage points.

The gross agricultural output structure in the EU countries is varied. In 2011 livestock output in Lithuania constituted the portion similar to that as in Latvia and France. The share of livestock output accounted for more than 50.0% in nine EU countries. This share was highest in Ireland, Denmark, the United Kingdom, Belgium, and Malta.

The volume and structural changes of the agricultural production in Lithuania were also conditioned by the ever changing market conditions. Volumes of purchased agricultural products of various types during the period of recent years varied unevenly.

In 2011, in comparison with 2010, procurement of potatoes, vegetables and grain decreased by 16.0%, 15.0% and 14.0%, respectively, and of fruit and berries, sugar-beet and rapeseed increased by 65.0%, 21.0% and 2.0%, respectively. Procurement volumes of animals, poultry and livestock products also varied unevenly. Purchased animals and poultry (live weight) increased by 1.0%, milk by 3.0%, whereas eggs were purchased by 8.0% less. This was influenced by the prices of agricultural products and material resources required for their manufacture.

Price index variation tendencies during the entire reference period were different. The highest price index on crop production was fixed in 2007, as compared to 2006; it increased by 30.9 percentage points. The lowest price index was in 2009. Crop production prices in 2011, as compared to 2010, increased by 27.4%. The highest purchase price index on animals and livestock products was reached in 2011, and the lowest in 2009. In 2011, in comparison with 2010, price variation of livestock products was less than that of crop products. Price index of inputs was lowest in 2009. In 2011, as compared to 2010, prices for inputs increased by 22% (Table 3.2).

Table 3.2. Price indices of agricultural products and inputs in 2007–2011 (compared to the previous year), per cent

Indicators	2007	2008	2009	2010	2011
Price scissors	108,8	85,3	104,0	116,5	97,0
Purchase price indices of agricultural products					
total	117,3	110,0	77,8	116,3	118,4
crop products	130,9	105,8	69,1	125,6	127,4
livestock products	109,9	112,6	83,1	111,7	113,3
Price index of inputs	107,8	129,0	74,8	99,8	122,0

Source: Data of Statistics Lithuania.

The indicated variations in price indexes during the period of 2007–2011 predetermined the disproportion (price scissors) between the purchase price on agricultural products and the price on inputs.

The most unfavourable year for agricultural producers was the year 2008: prices on crop and livestock production in comparison with 2007 increased by 5.8% and 12.6%, respectively, whereas prices on inputs were increasing much more rapidly – by 29.0%. In 2011 variations in purchase prices on agricultural production and inputs were again unfavourable for agricultural producers, but less than in 2008. The most favourable for farmers were the years 2007, 2009 and 2010 when prices on agricultural products exceeded prices on inputs.

It should be noted that price scissors had a different impact on crop and livestock production producers. The year 2011 was more favourable for crop production producers, when production purchase price index was by 5.4 percentage point higher than that of inputs. In the livestock sector on the contrary – the price index of inputs was by 8.7 percentage points higher than production purchase price index. This was due to the relatively higher price increase of crop products.

The unfavourable impact of agricultural production price scissors, after Lithuania's membership in the EU, was compensated to the producers by direct payments.

2. Structure of entities in agriculture and food industry

Agricultural entities. Agricultural entities are analyzed according to the data submitted by the Agricultural Information and Rural Business Centre (AIRBC) which are collected at the Agricultural and Rural Business Register of the Republic of Lithuania (Register of Holdings), Register of Farmers' Farms of the Republic of Lithuania, Information System of the Simplified Direct Payments.

The number of agricultural entities by categories during the period of 2007–2011 varied unevenly. In. 2011, as compared to 2007, the number of registered farmers' farms increased by 10.0% and in comparison with 2010 by 2.2%. Within the referred five years the number of agricultural companies and other agricultural enterprises, which declared UAA, increased by 25.3%, whereas the number of households decreased by 25.0% (Table 3.3).

Table 3.3. Number of agricultural entities in 2007–2011

Agricultural entities	2007	2008	2009	2010	2011
Registered farmer farms, thou.	101,0	108,0	107,0	108,7	111,1
Agricultural companies and enterprises	586	602	632	662	734
Households, thou.	125,3	108,7	103,2	99,2	94,0

Source: AIRBC data.

According to the AIRBC data, the average size of a holding by UAA and crop areas declared in 2011 by all agricultural entities amounted to 16.3 ha, i.e. by 4.5% larger than in 2010 and by 21.6% larger than in 2007. In total, in 2011 the number of farms which declared UAA decreased by 8.3% than in 2010, but their declared area increased by 1.8%. Even though in 2011, like in 2010, farms covering up to 5 ha accounted for 53.1% of all the farms which declared UAA, their number in 2011 decreased by 8.5%. As compared to 2007, the number of such farms decreased by 17.9 thousand, or 16.8%. Every year the group of farms with 5.1–10 ha is also reducing. Within the reference period the number of farms in this group decreased by 21.1%, but their share in the structure changed insignificantly. Within the period of five years, the number of farms in the groups with 50.1–100 ha and 100.1–500 ha increased by 24.4% and 31%, respectively. The number of farms in the group of largest holdings—covering over 500 ha—during the period of 2007–2011 changed slightly (Table 3.4).

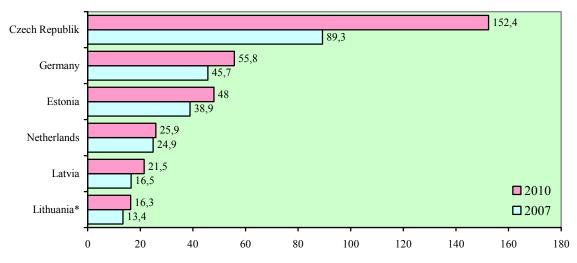
Table 3.4. Structure of farms by declared agricultural area in 2007–2011

Farm	200	07	200	08	200	09	20	10	20	11	
size, ha	number, thou.	share, %	number, thou.	share, %							
< 5	106,7	54,0	97,1	53,3	94,6	53,6	92,1	53,6	88,8	53,1	
5,1-10	46,0	23,2	42,0	23	39,3	22,3	37,4	21,7	36,3	21,7	
10,1–20	24,3	12,3	22,7	12,4	21,7	12,3	20,9	12,2	20,6	12,3	
20,1-50	13,3	6,7	12,9	7,1	12,8	7,2	12,6	7,4	12,2	7,3	
50,1-100	4,1	2,1	4,4	2,4	4,6	2,6	4,9	2,9	5,1	3,0	
100,1–500	2,9	1,4	3	1,6	3,2	1,8	3,4	2,0	3,8	2,3	
> 500	0,4	0,2	0,4	0,2	0,4	0,2	0,4	0,3	0,4	0,3	
All farms	197,7	100	182,5	100	176,6	100	171,8	100	167,3	100	
Average	13	,4	14	,4	15	,0	15	,6	16	16,3	

Source: LR Agricultural and Rural Business Register (Register of Holdings), Information System of the Simplified Direct Payments data.

Decrease in the number of farms was influenced by several factors. Due to the processes of restructuring, farms are becoming larger. Part of the senior farmers, receiving the EU support, is giving up the commercial agricultural production. In addition, some farmers refuse to declare their areas due to the strict requirements of the good agrarian and environmental condition.

Even though the average size of a farm in Lithuania has been increasing during the recent five years, their farms are smaller than in the neighbouring countries. In 2010 in Latvia farms are on the average larger by 1.3 times, and in Estonia by 2.9 times (Fig. 3.3). In 2007 and in 2010 the average farms were largest in the Czech Republic.



* 2007, 2011 m.

Fig. 3.3. Average farm size in some EU countries in 2007 and 2010, hectares

Sources: Eurostat, AIRBC data.

Analysis of farm structure by area and number in Lithuania and some EU countries reveals that the structure of farms in Lithuania is irrational. 87% of the farms are small-scale farms, up to 20 ha; they account for 28% of the area of all farms in the country. The relatively worse situation is in Portugal (by number -93%, by area -2%). The situation in Latvia is similar as in Lithuania - small-scale farms by number -82%, by area -32%. Large farms (over 100 ha) are mostly in the Czech Republic (by number -19%, by area -89%), Germany (by number -11%, by area -55%). In Lithuania the farms larger than 100 ha account for 3% and comprise 58% of all UAA (Table 3.5).

Table 3.5. Farm structure by area and number in some EU countries in 2010, per cent

Country	<5 ha		5,1–20 ha		20,1–50 ha		50,1-	-100 ha	>100 ha	
Country	area	number	area	number	area	number	area	number	area	number
Czech Republic	0	15	2	36	4	19	5	11	89	19
Germany	0	9	8	38	15	25	22	17	55	11
Estonia	4	34	11	37	14	14	16	6	55	9
Spain	4	53	23	26	16	11	10	5	47	5
Latvia	11	34	21	48	14	12	12	3	42	3
Lithuania*	9	53	19	34	14	7	13	3	45	3
Netherlands	11	29	13	28	10	27	8	13	58	3
Portugal	0	76	2	17	4	4	5	1	89	2

* 2011 m.

Sources: Eurostat, AIRBC data.

According to the AIRBC data, by the end of 2011, the Lithuanian Register of Holdings recorded 210.0 thousand of natural persons – owners of the holdings. As compared to 2010, the number of registered holdings decreased by 39%. Such significant decrease in holdings resulted from the simplified procedure for withdrawal of the holdings from registration after the death of the owner, if the agricultural activity was not carried out for three years, or the data was not updated for the same period. Due to these amendments, 103.9 thousand of holdings were removed from registration or their removal from registration was initiated as in those holdings agricultural activities were not carried out and their data did not comply with the actual situation. Even though the number of holdings decreased substantially, the area of land managed by the owners decreased just by 5.7%, to 2.8 mill. ha of the total land area, where their managed UAA area did not change (reached 2.4 mill. ha). This evidences that in the holdings removed from registration no agricultural or alternative activities were carried out. The average size of a holding in 2011 by total holding area was 13.5 ha, by UAA – 11.2 ha. UAA in the holdings up to 5 ha accounted for 65.5% of all holdings (13.5% of all UAA) (Fig. 3.4.). In 2011, as compared to 2010, the number of holdings of such size decreased even by 48%, since the absolute majority of holdings removed from registration was small-scale holdings. The number of holdings covering 5-20 ha increased in the structure by 7.8 percentage points (14.9%), and by the part of UAA decreased by 2.0 percentage points. In 2011, UAA greatly increased in the group of 100-300 ha. The total UAA area in this group and the number of holdings increased by more than 23%. In the group of over 300 ha the total number of holdings and the total UAA area also increased substantially –by 17.2 and 7.6%, respectively.

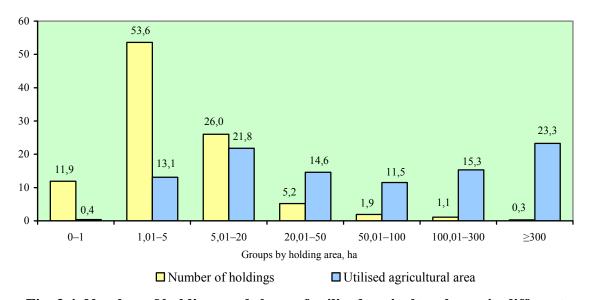


Fig. 3.4. Number of holdings and share of utilized agricultural area in different size holding groups in Lithuania in 2011, per cent

Source: LR Agricultural and Rural Business Register.

Some 65.8% of UAA of the total registered holdings are registered in the areas favourable for farming. In 2011, 44.0% of the owners of all holdings were over 60. This tendency also remains in the analysis of holding owners by regions, where their share in highly disadvantages areas exceeds 51.5% of the holding owners of the corresponding region. Young farmers under 40 accounted for 13.5% of all the holdings in the country, their largest share in the favourable for farming areas accounting for 14.1% (Table 3.6).

Table 3.6. Distribution of holdings by type of farming area and owners' age in 2011

Indicators			Areas	
malcators		highly disadvantaged	less disadvantaged	normal
Number of holdings, %		11,0	40,4	48,6
Area of holdings, %		8,6	36,6	54,8
Average size of holding, ha	ì	10,5	12,2	15,2
27 1 21 11	< 40 y.	11,2	13,5	14,0
Number of holding owners by age, %	40–60 y.	37,3	41,8	44,0
	> 60 y.	51,5	44,7	42,0

Source: LR Agricultural and Rural Business Register.

Almost half of UAA is managed by 111.1 thousand of registered owners of farmers' farms – 52.9% of the owners of all holdings. The number of registered farmers' farms in 2011 increased by 2.2%, as compared to 2010. Over the period of 2008–2011, the number of registered small farmers, managing up to 3 ha, increased mostly – by 1.1%, and farms covering over 50 ha – by 19.2%. The number of registered farmers' farms in 2011, as compared to the previous year, increased only in the group of the smallest and largest farms and decreased only in the group of 3–10 ha. This reveals that an insignificant process of farm expansion is going on (Fig. 3.5).

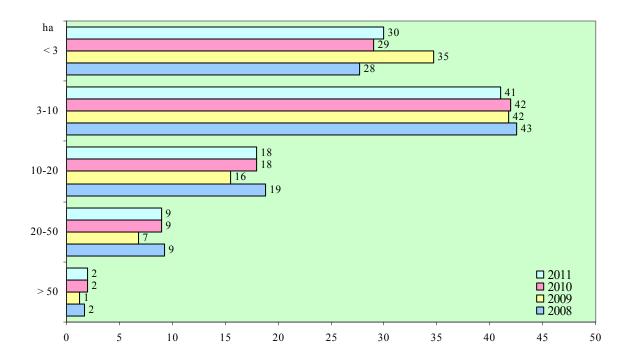


Fig. 3.5. Number of registered family farms by size in 2008–2011, per cent

Source: LR Register of Farmers' Farms.

The structure of registered farmers and holding owners by age is similar, since the number of the registered farmers at the age of retirement (over 62) accounts for 40% and persons under 40, i.e. young farmers, account for 18% (Fig. 3.6).

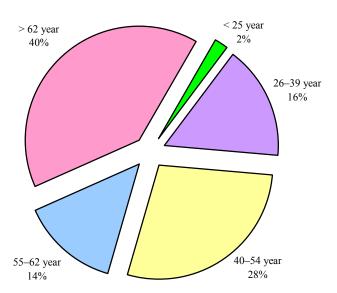


Fig. 3.6. Structure of registered farmers by age in 2011

Source: LR Register of Farmers' Farms.

The EU CAP measures have an effect on the process of farm restructuring. According to the Rural Development Programme for 2007–2013, as during the previous period, senior farmers are entitled to give up commercial agricultural production and transfer land holdings to younger farmers. Aiming at accelerating the process of farm restructuring, support is granted to semi-subsistence farms by reorganizing them into commercial farms. Moreover, support is granted to agricultural entities implementing the EU veterinary, sanitary and environmental requirements. In 2011 the National Paying Agency received 113.7 thousand applications for the EU support under the rural development measures. The requested amount was by 8.8% lower than in the previous year – LTL 1.96 billion. Rural people found two measures under Axis I most attractive – "Modernization of Agricultural Holdings" and "Use of Advisory Services".

In 2011 the certified organic area in Lithuania amounted to 158 thou. ha. During the reference period of 2007–2011, the certified area increased by 25.9%, and the number of farmers since 2007 has decreased by 9.0%. In 2011, as compared to 2010, the area increased by 6.0%, the number of farms reduced slightly – by 2.6% (Fig. 3.7). The average size of the certified farm (including fisheries farms) in 2011 increased from 55.9 to 60.8 ha, as compared to 2010.

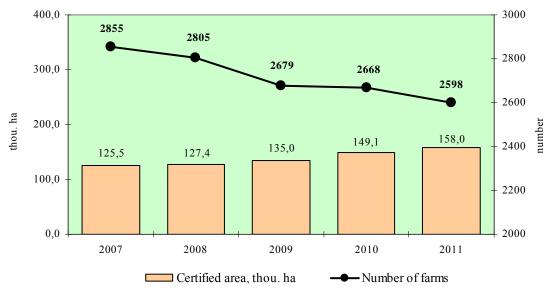


Fig. 3.7. Number of organic farms and certified area in Lithuania in 2007–2011 Source: Data of PE "Ekoagros".

Food industry enterprises. In 2011, 844 food and beverage production companies were operating in Lithuania, including 24.3% of individual enterprises. During the period of 2007–2011 the total number of companies decreased by 8.8%, and of individual companies – by more than 41.8%. (Fig. 3.8).

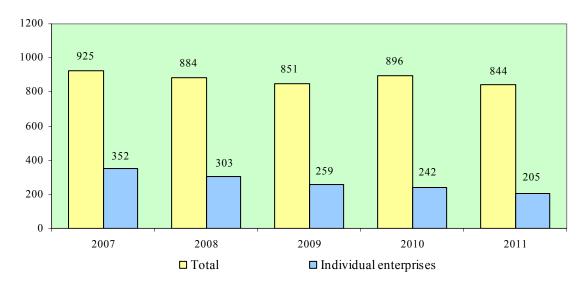


Fig. 3.8. Number of enterprises of manufacture of food products and beverages in 2007–2011

Source: Data of the Department of Statistics.

According to the data of the Department of Statistics, most of food production companies are located close to the major cities. 25.1% of all food and beverage production enterprises are in the Kaunas county and 18.0% in the Vilnius County (Fig. 3.9). The least number of food industry enterprises are in the counties of Utena and Alytus, accounting for 2.8 and 4.0, respectively. In 2011, as compared to 2010, the

number of enterprises was decreasing in all the counties. The number of food and beverage production enterprises decreased mostly in the counties of Utena, Panevėžys and Tauragė – by 17.2%, 8.8% and 8.3%, respectively.

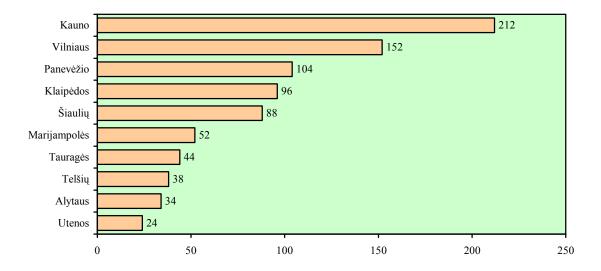


Fig. 3.9. Number of enterprises of manufacture of food and beverages by county in 2011 (at the end of the year)

Source: Data of Statistics Lithuania.

During the reference period of 2007–2011, the number of companies in almost all food production sectors – fish and fish product preparation and processing, production of meat and meat products, production of milk and dairy products decreased by 15.4%, 12.6 and 12.1%, respectively. The number of enterprises for preparing, processing and canning of fruit, berries and vegetables decreased by 11% (Table 3.7).

The total number of employees in the manufacture of food products and beverages in 2011, as compared to 2010, decreased by 4.6% and in comparison with 2007 by 12.0%. During the reference period of 2007–2011, the most significant reduction was fixed in 2010. Tendencies in various sectors were different. In 2011, as compared to 2010, the decrease of employees was most substantial in the sector of fish and fish product preservation and processing – by 8.8%, production of milk and dairy products by 5.5%, preparation, processing and canning of fruit, berries and vegetables by 5.2%. In comparison with 2010, the number of employees increased in the enterprises of the manufacture of grain milling products, starch and its products (1.3%). In 2011 by sector the majority of enterprises operated in the sectors of bakery products (341 enterprise), production of meat and meat products, but by the number of employees they were relatively smaller than the enterprises in other sectors.

Process of production concentration in the Lithuanian industry of food products and beverages even though slowly but still persists. In 2007–2011, with the total number of enterprises decreased, the average number of employees per enterprise increased slightly – by 2.1%. The average number of employees greatly varied in separate sectors: the smallest number was in the sector of preparing, processing and canning of animal and vegetable fats and oils and the sector of preparing, processing and canning of fruit, berries and vegetables (21 and 29, respectively), and the biggest number in the sector of the production of milk and dairy products and the sector of fish and fish product preservation and processing –191 and 95 employees, respectively.

Table 3.7. Entities of the food industry in 2007–2011

Indicators	2007	2008	2009	2010	2011
Production of food products and beverages					
Number of enterprises	925	884	851	896	844
Number of employees	46613	47183	49465	42957	41000
Sales in domestic market, LTL mill.	5750,0	6405,5	5552,6	6337,6	7341,5
Export value, LTL mill.	3234,4	3359,0	3099,5	4247,5	4971,7
Production of grain milling products and starch					
Number of enterprises	39	34	30	31	28
Number of employees	1142	1091	1134	1229	1245
Sales in domestic market, LTL mill.	190	180,9	118,8	176,6	298,2
Export value, LTL mill.	110	167,2	154,0	214,1	353,2
Production of meat and meat products					
Number of enterprises	193	182	170	182	159
Number of employees	10512	10421	10355	9103	8726
Sales in domestic market, LTL mill.	1341	1571,1	1221,8	1151,6	1306,4
Export value, LTL mill.	382,0	420,1	351,0	407,9	522,7
Production of milk and dairy products					
Number of enterprises	32	27	30	33	29
Number of employees	6054	6346	8899	5848	5526
Sales in domestic market, LTL mill.	1411	1662,9	1227,0	1525,8	1903,2
Export value, LTL mill.	1399	1330,2	903,9	1288,1	1608,1
Preservation and processing of fish and fish products					
Number of enterprises	50	48	46	52	44
Number of employees	4616	4601	4529	4582	4181
Sales in domestic market, LTL mill.	211	234,1	205,1	234,5	256,1
Export value, LTL mill.	568,1	659,0	701,9	898,0	989,2
Preparation, processing and conservation of fruit, berries and vegetables					
Number of enterprises	34	34	34	36	32
Number of employees	979	1033	972	985	934
Sales in domestic market, LTL mill.	101	131,3	104,5	89,3	100,1
Export value, LTL mill.	43	56,8	50,0	52,1	74,8

^{*} VAT and excise duty incl.

Source: Data of Statistics Lithuania.

The biggest number of employees in 2011 was engaged in the enterprises producing food products and beverages in the counties of Telšiai, Utena and Marijampolė. This tendency has persisted for a number of years. By average number of employees per enterprise the counties of Telšiai, Utena and Marijampolė are in the lead, being ahead of the average in Lithuania by 2.4, 1.6 and 1.3 times, respectively (Fig. 3.10).

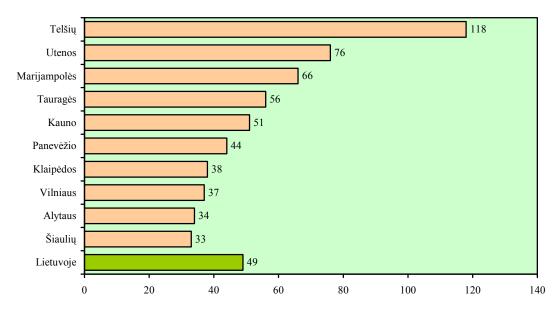


Fig. 3.10. Average number of employees per enterprise of manufacture of food and beverages by county in 2011 (at the end of the year)

Source: Data of Statistics Lithuania.

41.2% of the total number of the enterprises of the manufacture of food products and beverages by employee number are attributed to very small (less than 10 employees) enterprises, 37.0% to small (10–49 employees) and over 18.0% to the medium-sized companies (50–249 employees) (Fig. 3.11). Enterprises with more than 250 employees accounted for 3.8% in 2010, whereas the number of employees working here comprised 40.6% of the total number of employees engaged in the manufacture of food products and beverages.

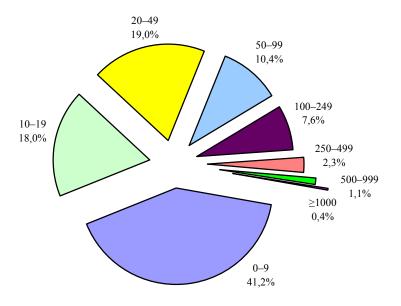


Fig. 3.11. Structure of enterprises of manufacture of food and beverages by number of employees in 2011

Source: Data of Statistics Lithuania.

Product sales volumes of the enterprises demonstrate the changes and the level of production concentration. In 2011, as compared to 2007, the sales per enterprise of manufacture of food and beverages increased on the average by 50.5%, and if compared to 2010 by 23.5%.

The most rapid production concentration increased in the sector of production of grain milling products, starch and starch products, where the average production volumes per enterprise in the sector increased within five years by 1.9 times, in the sectors of milk and dairy products and of preparation, processing and canning of fruit, berries and vegetables by 1.4 times in each sector.

The highest concentration of production is fixed in the sector of milk and dairy production where average revenues from the sales per enterprise in 2011 amounted to LTL 121.1 million. Three biggest companies manufactured about 63% of the total production of the sector. Revenues from the sales in the industry of preservation and processing of fish and fish products were by 1.9 times higher than the average revenues from the sales per food production enterprise.

If assessed by counties, in 2011 the average revenues gained from the sales per food production company were highest in the counties of Telšiai, Utena, Kaunas and Panevėžys. One food production company in the Telšiai County gained by 2.1 times more revenues than one company on the average in the country and by over 5.8 times more than one company in the Šiauliai County. Relatively high revenues were gained by the companies in the branch under analysis operating in the Utena County. They exceeded the national average by 1.8 times (Fig. 3.12.). Such high level of revenues gained on the average per company was conditioned by the fact the largest food production companies like AB "Rokiškio sūris", AB "Pieno žvaigždės", AB "Žemaitijos pienas" were operating in the above-mentioned counties.

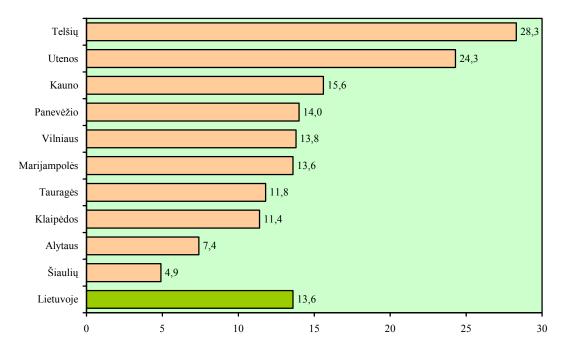


Fig. 3.12. Average annual income from sales per enterprise of manufacture of food and beverages in Lithuania by county in 2011, LTL million

Source: Data of Statistics Lithuania.

Average revenues gained by companies of the manufacture of food products and beverages in 2011 were higher than in the previous years – this was predetermined by the increased consumption on the domestic and foreign markets. It is forecast that demand in food products will increase and prices will go up. These are important preconditions for food industry development.

SUMMARY

The agricultural and food sector account s for 7.4% of the gross added value created in Lithuania's economy and over 14% of the total foreign trade turnover of the country. Jobs have been ensured for almost one-tenth of the employed population.

With an aim to increase the competitiveness of agriculture, to m aintain the income of agricultural producers, to reduce social disjuncture between the rura 1 and urban population, and to sustain the environment, the economic entities are provided with the E U and national budget support. In 2011 part of the funds, assigned for agriculture, amounted to LTL 2728 million, this making by 5% more than in 2010.

In 2011 the export of agricultural and food products totalled LTL 11 565 million (by 19.1% more than in 2010) and the im ported products am ounted to LTL 9 568 million (by 19.9% more). The balance of foreign trade in agricultural and food products since 2004, when Lithuania became a member of the EU, has been positive. In 2011, as compared to 2010, it increased by LTL 264 million and reached LTL 1 997 million.

The number of agricultural entities by categories over the period of 2007–2011 fluctuated unevenly. In 2011, as compared to 2007, the number of registered farmers' farms increased by 10.0%, and in comparison with 2010 – by 2.2%. Within the abovementioned five years the number of agricultural companies and other agricultural enterprises that declared UAA increased by 25.3%, and the number of holdings decreased by 20.0%. The average farm size of agricultural entities which declared UAA was 16.3 ha, i.e. by 4.5% higher than in 2010 and by 21.6% higher than in 2007.

In 2011 the certified organic area in L ithuania covered 158 thou. ha, or 5.6% of all declared UAA. The average certified farm size (including fishery farm s) increased from 55.9 ha in 2010 to 60.8 ha in 2011.

The composition of the total land area according to the targeted purpose has not almost changed. Its major part consisted of the land for agricult ural purpose (60.5%) and for forestry purpose (30.2%).

In the recent years the most im portant event in Lithuania's rural life should be considered the variation in the rural population employment structure. Prior to 2006, the major part of the rural population was engage d in the agricultural, hunting, forestry and fisheries sectors, and from 2006 in the sector of services (except 2008 when the m ajor part was employed in the sectors of industry and construction).

Importance and necessity of rural econom ic activity diversification in the past years have been predetermined by the job reduction in agriculture. Farming is no longer the predominant economic activity even in the rural areas. In 2011 only 28.6% of the employed rural population was employed in the sectors of agriculture, hunting, forestry and fisheries.

During the period of 2007–2010 the number of SMEs increased in rural areas, but in 2011, as compared to 2010, their number decreased by 5% and reverted to the 2008 level. In 2011 the number of SMEs amounted to over 9.6 thousand, of which 78% were small enterprises.

Further prospects in the development of the agricultural and food sector are favourable. With the global demand and prices for agricultural and food products increasing, interest in the expansion of production volumes also becomes greater. Preconditions for this would cover higher investments in the modernization of farms, raising of labour productivity, optimization of the activity and product supply to the consumer.