LITHUANIAN INSTITUTE OF AGRARIAN ECONOMICS

## AGRICULTURE AND FOOD SECTOR IN LITHUANIA

# 2007

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Analytical review of the Lithuanian agriculture and food sector in the previous year. This publication is aimed at providing information to the representatives of governmental and self-governing authorities, scientific research and study institutions, and all interested in the development of agriculture and food sector, pisciculture and rural areas.

### **ABBREVIATIONS**

- AB Joint Stock Company
- AWU Annual Work Unit
- CAP EU Common Agricultural Policy
- CN combined nomenclature
- EU European Union
- EU-2 Member States since 2007
- EU-10 Member States since 2004
- EU-15 the old Member States
- EU-27 All EU Member States in 2007
- FADN Farm Accountancy Data Network
- GDP Gross Domestic Product
- GovRL the Government of the Republic of Lithuania
- LAG Local action group
- LFA Less Favoured Areas
- LIAE Lithuanian Institute of Agrarian Economics
- LTL Lithuanian Litas
- MoA Ministry of Agriculture of the Republic of Lithuania
- SAPARD Special Accession Programme for Agriculture and Rural Development
- SPD Single Programming Document
- UAA- Utilised Agricultural Area
- USA The United States of America

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### FOREWORD

This publication is the ninth of the annual editions published by the Lithuanian Institute of Agrarian Economics (LIAE) on the developments in the Lithuanian agriculture and food sector. It presents an analytical economic review of the Lithuanian agriculture, processing industry, fisheries and forestry, prepared on the basis of statistic information referring to the statistical data of agriculture, processing industry, fisheries and forestry, and the findings of surveys completed by the LIAE staff.

The year 2007 was rather successful for the Lithuanian agriculture and food sector. Favourable natural conditions, possibilities to operate on a larger and more active single market of the European Union (EU), the increased purchase prices for the majority of agricultural products, the EU and the national budget support measures, including the state aid created preconditions for the companies of the sector to achieve good results.

The increased volume of foreign trade in agricultural and food products resulted in a positive trade balance amounting to 1,3 billion litas. Structural support measures created preconditions for upgrading and streamlining of farms and enterprises leading to favourable structural changes, the increase of income of the rural population, in particular of farmers, activating community movements in rural areas.

The publication presents the dynamics of indicators in the developments of agriculture and food sector during the period of five previous years, emphasising the events, documents and outcomes of 2007.

As every year before, some preliminary statistic data of 2007 were used in the publication. Final indicators and economic and financial results of 2007 will be reflected in the publications of the Department of Statistics to the Government of the Republic of Lithuania and the LIAE annual review of the following year.

The publication is meant for everybody interested in the achievements and problems of the agrarian and food sector. Information provided here might be useful as for agricultural specialists and scientists, farmers and entrepreneurs, as for teachers and students.

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

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

### I. LITHUANIAN AGRARIAN SECTOR IN THE EU CAP CONTEXT

### **1.** Agricultural and food sector in the national economy

The year 2007 was marked as the year of further arrangements for future reforms, the assessment of achievements and new possibilities opening for the Lithuanian agriculture and food sector. In assessing the outcomes of the first three years of membership in the EU, it might be stated that Lithuanian farmers and food production companies have successfully absorbed the support provided by the Community. Moreover, such support was a strong impulse for developing the competitiveness of the sector. Means of the support were used for streamlining and improving farmers' farms and food processing establishments, for training and counselling of farmers, for the development of alternative activities, leading to the increased income of rural population, employment and improved living conditions in the countryside. Through this support the sector of agriculture and food production retained a sustainable growth rate making use of the new possibilities opened on the common market, and has become the most important sector in the national economy exporting agricultural and food products abroad, whereas farming became a modern and attractive business for young people.

**Agricultural and food production.** The gross value added created in 2007 in the sector of agriculture and the related spheres providing services to agriculture reached the amount of LTL 4019,4 million, and in comparison to 2003, increased by 37%, in comparison to 2006 – by 18%. Good harvest of agricultural crops and the increase of purchase prices, in particular on cereals and milk, influenced by the situation on the global market, resulted in successful outcomes of the sector. Prices of agricultural products in 2007, as compared to 2006, have increased on the average by 20%, and in the sector of crop production – by 25%, in the sector of animal production – by 12%. The overall output of the agricultural sector including additional activities (according to the data of national accounts) at basic current prices in 2007 increased by 15% in comparison to 2006, and as compared with 2003, by 61%.

Analysis of structural changes in the national economy of Lithuania indicates that in 2007 the value added proportion of agriculture, which has been continuously reducing during the period of 2003–2006, has retained the level of 2006 within the structure of the gross value added and accounted for 4.6%. In 2003 this indicator was 5.8%. However, this does not mean that the sector produced less value added. On the contrary, the gross value added created by the sector of agriculture and agricultural services increased from LTL 2937,7 million in 2003 to LTL 4019,4 million in 2007. The gross value added created by the food, beverages and tobacco industry was rapidly growing, amounting to LTL 3479,9 million in 2007, and accounting for the increase of 26% in comparison to 2006, and as compared with 2003 – by 76%. The proportion within the structure of the gross value added was also increasing and reached 4% in 2007 (in 2006 - 3.7%; in 2003 - 3.9%).

Indicators	2003	2004	2005	2006	2007*
Gross domestic product, at current prices, mill. Litas	56804,0	62586,7	71380,4	81905,2	96739,7
Gross agricultural production, at current prices, mill. Litas	4618,8	4947,4	6072,6	6495,7	7450,1
Gross value added created in agriculture and services for agriculture, mill. Litas	2937,7	2950,1	3259,5	3395,8	4019,4
Share of agriculture in gross value added**, %	5.8	5.2	5.,1	4.6	4.6
Gross value added created in the sector of food, beverages and tobacco industry, mill. Litas	1982,2	2178,6	2453,5	2761,1	3479,9
Share of food, beverages and to bacco industry in the gross value added, $\%$	3.9	3.9	3.8	3.7	4.0
Exports of agricultural and food products, mill. Litas	2355,2	2956,5	4208,8	5416,6	7352,4
Share of agricultural and food products in total exports, $\%$	10.6	11.5	12.8	13.9	17.0
Imports of agricultural and food products, mill. Litas	2381,2	2954,6	3699,1	4952,8	6071,8
Share of agricultural and food products in total imports, %	7.9	8.6	8.6	9.3	10.0
Foreign trade balance of agricultural and food products, mill. Litas	-26.0	1,9	509,7	463,8	1280,6

Table 1.1. Macroeconomic indicators of the agricultural and food sector in 2003–2007

\* Preliminary data.

\*\* Including agricultural services and hunting.

Source: Data of the Department of Statistics to the GovRL.

**Export structure and the developments.** Export is among the most significant criteria indicating the potential and the competitiveness of the sector. Even before the EU membership the Lithuanian agricultural and food sector accounted for a considerable proportion in the export of Lithuania. According to the data of the Department of Statistics to the Government of the Republic of Lithuania (GovRL), the export value of agricultural and food products accounted for 10.6% of the total national export in 2003. During the four years of membership in the EU export of agricultural and food products increased by 3.1 times and reached 17.0% in 2007 within the total value of national export. In 2007 the exports of agricultural and food products amounted to LTL 7352,4 million.

The imports of agricultural and food products have also increased. In 2007 the import value amounted to LTL 6071,7 million, and in comparison to 2006 increased by 1.2 times, and as compared with 2003 - by 2.5 times.

Foreign trade turnover in 2007 increased by 1.3 times in comparison to 2006 – up to LTL 13,4 billion, and in 2004 the foreign trade balance in food products became positive, while in 2007 it reached LTL 1,28 billion already.

The growing potential of the agricultural and food sector indicates that Lithuanian agricultural entities and food production enterprises mastered the advantages of the free movement of goods on the newly opened EU market, and through the EU support implemented projects on improving, streamlining and upgrading marketing and strengthening their competitive capacities, which helped them to create preconditions not only for retaining the previous export markets, but also for further intensification of trade with the EU member states.

In 2007 exports to the EU-27 amounted to LTL 4924,3 million. As in 2006 the larger part of agricultural and food products were exported to the EU-15 (about 40% of the total Lithuanian export).

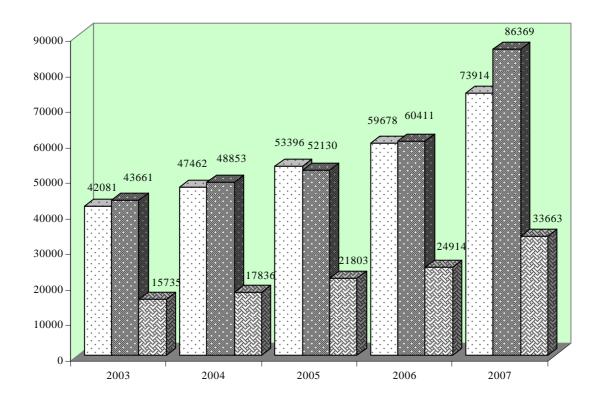
At the same time Lithuanian producers managed to retain their positions on the traditional markets of Eastern countries, where Lithuanian trade marks are well known. In 2007, as compared to 2006, export to third countries increased by 1.3 times and accounted for 33% of the total export.

Lithuania most exported prepared food products, beverages and tobacco articles, the total value of which in 2007 accounted for 36% within the total export of agricultural and food products. Products of animal origin ranked the second (32%). The biggest comparative weight in the export structure of agricultural and food products traditionally fell for milk and dairy products (19%), the export of which increased by 36% in comparison to 2006. The growth of the export value of the above products was greatly influenced by the increase of world prices on dairy products. As a result of a considerable price increase on cereals, the export of cereals in 2007 increased by 1.7 times accordingly. Major partners in foreign trade of agricultural and food products in 2007 were Russia, Germany, Latvia, Poland, the Netherlands and Estonia.

**Employment, labour efficiency and income.** The value added created in agriculture and exports in food products have been rapidly increasing, while the number of employed people in the sector was decreasing due to the increased labour efficiency. The proportion of employed people in agriculture on the national level (including the activities of hunting and the related services) was gradually decreasing since 2003: in 2003 it accounted for 15.2%, in 2006 – for 11.5%, and in 2007 (according to the preliminary data) – for 9.5% of the total number of the employed population. The proportion of employees in agriculture in the total number of the employed population in 2007 decreased by 2.0 percentage points in comparison to 2006, and as compared with 2003 - by 7.8 percentage points.

Due to the increased value added created in agriculture and the reduced number of employees, the gross value added created in agriculture per annual work unit (AWU) at current prices in 2007 increased by 35% in comparison to 2006, and by more than 2.1 times as compared with 2003. Such rate of growth was considerably ahead of many other economic sectors.

The AWU in food industry remained stable during the period of 2003–2007, where about 40,3 thousand AWU were employed in 2007, i.e. 3.8% of the average national AWU number. Labour efficiency was at the same time rapidly increasing: from LTL 43,7 thousand of value added per AWU per year in 2003 to LTL 86,4 thousand in 2007, i.e. almost twice.



□ Total ■ Manufacture of food products, beverages and tobacco ■ Agriculture, hunting

### Fig. 1.1. Annual value added per AWU in 2003–2007, in Litas

Source: Data of the Department of Statistics to the GovRL.

Investments through the EU support means and own funding of economic entities created preconditions for increasing labour efficiency in the agricultural and food sector. According to the data of the Department of Statistics to the GovRL, material investments of legal entities alone into agriculture, hunting and the related services amounted in 2007 to LTL 353,7 billion, and increased since 2003 by 1.8 times. Material investments into food production increased by 51% during the period of 2003–2007.

Favourable tendencies in the development of agriculture resulted in rapid increase of farmers' income. In 2007 the average disposable monthly income of farmers' households per one household member amounted to LTL 969,6, and slightly exceeded the average income of the urban population and were significantly higher than the national average income of the rural population. During the period of 2003–2007 the disposable household income increased by 2.9 times, and of the rural population by 1.9 times.

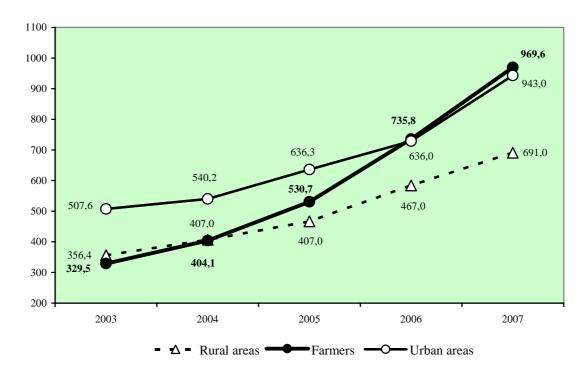


Fig. 1.2. Average monthly disposable household income per capita in 2003–2007, in Litas

Source: Data of the Department of Statistics to the GovRL.

The gap between the average national monthly income and the wage in agriculture, hunting and the related services (except for farmers) has decreased in 2007. The wage in this economic activity was increasing more rapidly than the national average, and increased in 2007 by 28% as compared with 2006, and in comparison to 2003 - by 85%. The average gross monthly wage in agriculture, hunting and the related services (according to the preliminary data) amounted to LTL 1355 in 2007, accounting for 75% of the national average wage level. In 2003 the average monthly gross wage accounted for 68% of the national average, and in 2004 and 2005 – for 70%, in 2006 – for 71%.

Rapid growth rates of gross production created in the agricultural and food sector, the increasing volume of export and the income of farmers indicate the huge possibilities opened for the Lithuanian agricultural and food sector by the membership in the EU and the significance of the EU support to Lithuanian farmers. The financial period of 2007–2013 should give a new impetus to further development of the sector. In the autumn 2007 the Rural Development Programme for Lithuania 2007–2013 was approved, through which farmers will receive LTL 7,8 billion of support. This support is intended for increasing the competitiveness of agriculture, food and forestry sectors, for the diversification of economic activities and for the improvement of living conditions in rural areas, for the implementation of environmental measures, and for reducing disparities between urban and rural areas and individual regions. The Programme provides for more measures and possibilities aimed at small and medium farmers and rural young persons. This new stage of absorbing the support is greatly significant in addressing new challenges and problems under the growing

competitiveness on the internal and foreign markets, and meeting the new decisions of the EU Common Agricultural Policy (CAP).

Discussions concerning the CAP will guideline future perspectives of the EU agricultural and food sector following the year 2013. Directions of the reforms in agriculture are discussed in the context of wider debates concerning the EU budget. It is anticipated that the EU budget reform will cover new priorities aimed at achieving the defined goals of the Lisbon strategy of becoming a more dynamic and competitive economy, search and revision of the budget formation principles. Subsequently, the future CAP will be assessed taking into account all possibilities available for increasing the competitiveness of the EU economy.

Whatever political decisions were taken, it is obvious that the EU is gradually moving towards the liberalization of the market, therefore, it is of great importance for Lithuania to use the currently provided EU support efficiently and effectively, exploring all factors of success available in the economy of knowledge. The support shall be used for creating preconditions for the introduction of innovations, for increasing human capacities, for developing entrepreneurship, leadership and sociality.

# **2.** EU and national support and its impact on the development of agriculture in Lithuania

Lithuania implements active policy for the development of agriculture and rural areas through intensive state regulation of these sectors. In 2007 a quarter of state budgetary assignments (24.5%) was allocated for the funding of state regulation of the economic sector, including less than half of it for the implementation of programmes by the Ministry of Agriculture (MoA). About 10% of the state budget is allocated to the agricultural sector, where about 5% of the total national gross domestic product (GDP) is created, where about 10% of the population is employed, and which takes care of the quality of life of one third of the population in rural areas.

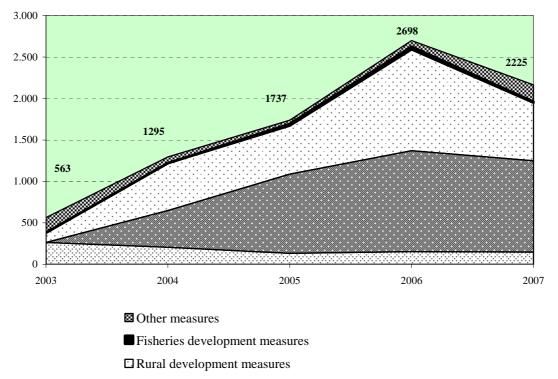
The function of state regulation is performed by the MoA, which allocates the support for the development of agriculture and rural areas on the basis of four basic axis of regulation and support measures:

- Direct payments and market regulation measures co-financed from the state budget funds;
- Rural development measures covering the streamlining of farms, training of farmers, environment and diversification of activities in rural areas, co-financed from the state budget funds;
- State aid funded solely from the state budget funds;
- Measures for promoting the development of pisciculture, co-financed from the state budget means.

In 2007 the total amount of LTL 2542 million from the EU and the national budget means was allocated for the implementation of measures aimed at the development of the Lithuanian agricultural sector and rural areas. However, by the end of the year only 74.4% of the allocated means was absorbed. Most of the funds were allocated for direct payments and market regulation measures (intervention and export subsidies). 49% of the total amount of means allocated from the state budget for the

development of agriculture and rural areas in 2007 were assigned for the implementation of measures defined for direct payments and market regulation, including 85% of them for direct payments alone.

During the period of 2003–2007 the agricultural and rural development policy and the implementation measures thereof were markedly changing. Before joining the EU the support to the Lithuanian agriculture has slightly exceeded LTL 0,5 billion (Fig. 1.3), and in 2006–2007 it amounted to LTL 2 billion. Before the membership in the EU the policy of rural development has hardly existed in Lithuania, and since 2004 it has become an equivalent part of the agricultural development policy. In 2007 as compared to 2006 less funding was absorbed for the implementation of agricultural and rural development policy measures due to the commencement of the new EU funding period in 2007. The Lithuanian Rural Development Programme for 2007–2013 was approved only in the fall of 2007, subsequently the first call for submitting applications for support were announced by the end of 2007.



Direct payments & market regulation measures

Special rural support programme (state support incl.)

# Fig. 1.3. Structure of public support in agriculture, rural development and fisheries in 2003–2007, in million Litas

Source: Calculations by LIAE based on the data of the MoA..

**Direct payments.** Direct payments are among the basic agricultural and rural development policy measures in Lithuania implementing the EU CAP. Before the membership in the EU direct payments in Lithuania were related to production. In 2003 the amount of direct payments was LTL 100 million, and in 2004 the package of direct payments (including the EU and the state budget funds) reached the amount of LTL 437

million, and in 2007 – LTL 938 million. A scheme of one-time direct payments was introduced in 2004 through the implementation of the EU CAP, and additional national direct payments were paid. Subsequently, a certain part of funds (the EU) defined for direct payments were fully decoupled from production and were disbursed for the declared utilised agricultural area (UAA) of good agrarian condition. Meanwhile, the additional national direct payments allocated from the state budget were further coupled with the production of a certain type. Following the observations of the European Commission, some additional national direct payments were decoupled from production and were disbursed with regards to the historic volume of production in an individual farm. Since 2007 the additional national direct payments were decoupled for sucker cows, slaughtered adult cattle, and quota milk per ton. However, payments for the EU supported crops, bulls and ewes remained partly coupled with production. Additional national direct payments (Table 1.2) were paid for cereals, rape, fibre flax, leguminous, protein and energetic crops, bulls, sucker cows, slaughtered adult cattle, ewes and quota milk and sugar (since 2006).

Kind of payment	2004	2005	2006	2007
Basic payment:				
for UAA, Lt/ha	110.94	139.95	168.69	198.00
Additional payments for production:				
EU supported crops, Lt/ha	196	195	195	176
protein crops, Lt/ha	196	274	275	276
fibre flax, Lt/ha	463	446	415	389
sucker cows, Lt/head	500	559	559	559
bulls, Lt/head	510	552	552	574
slaughtered adult cattle, Lt/head	89	193	193	193
ewes, Lt/head	30	42	42	48
quota milk, Lt/t	110	48	48	53
quota sugar, Lt/t	_	_	219.4	268.6

#### Table 1.2. Direct payments in Lithuania in 2004–2007

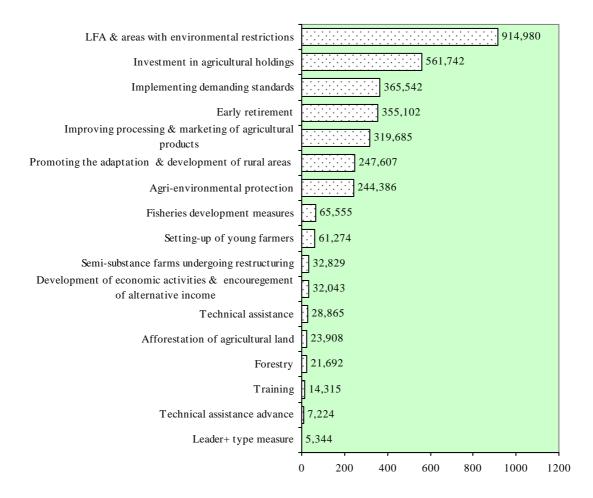
Source: Data of the National Paying Agency and the MoA.

The level of direct payments is regularly increasing. In 2004 direct payments accounted for 51% of the EU direct payments, in 2005 – for 57%, in 2006 – for 62%, and in 2007 (according to the preliminary data) – for 62%, too. Introduction of the EU scheme of direct payments (including payments for farming in less favoured areas (LFA) and the increase of prices on agricultural production) made a substantial impact on the increase of income of farmers, which was reported the highest in the EU. In 2007 income of Lithuanian farmers in comparison to 2006 jumped up by 39.3%, and it was the highest rise within one year in the entire European Union.

**Rural development measures.** The entire package of rural development measures has been allocated by the EU for the implementation of the rural development policy in Lithuania for seven years already through particular programmes: Special Accession Programme for Agriculture and Rural Development (SAPARD), 2004–2006

Single Programming Document (SPD), 2004–2006 Rural Development Plan, and the Rural Development Programme for Lithuania 2007–2013. The total amount of this expenditure until 2007 amounted to LTL 3295 million, including payments of LTL 803 million disbursed in 2007. Over one third of the support (LTL 1222 million) was granted in 2006, during the final stage of the implementation of the 2004–2006 Programme. In 2007 a new programming period started and only some measures were launched, therefore the volume of funding for the implementation of rural development measures reduced.

Most attention in the rural development policy is given to the equation of uneven income as a result of unequal farming conditions (Fig. 1.4). Since 2004 farmers involved in land farming on LFA were annually granted over LTL 200 million, approximately 28% of the total support used for the implementation of rural development policy. Every year about one half of Lithuanian farmers make use of this support.



**Fig. 1.4. Funds for rural development measures in 2003–2007, in million Litas** *Source: Data of the MoA.* 

No lees important for Lithuania are measures aimed at streamlining agricultural holdings and the closely related standard implementation programme. 28% of the total support was allocated for the implementation of these measures until the end of 2007. Promotion of streamlining agricultural holdings is implemented through supporting

early retirement of senior farmers and setting-up of young farmers. About 13% of the entire financial package for the implementation of rural development policy was allocated for the implementation of these particular measures. Measures implemented through the SAPARD programme neglected agrarian environmental issues, while in the 2004–2006 programme its importance was recognised, and since 2007 agricultural environment has become an equivalent goal in improving agricultural competitiveness. About 37% of the total amount of the 2007–2013 rural development support for Lithuania are defined for environmental measures.

**State aid measures.** For the implementation of the state aid measures in 2007 the national budget allocated almost LTL 104 million. Major part (17%) were assigned for the development of pedigree livestock breeding system (Fig. 1.5). However, since 1 July 2007, following the EU regulation concerning the implementation of legal state aid measures, state aid is no longer extended for the acquisition of pedigree livestock and the certified multiplicative material.

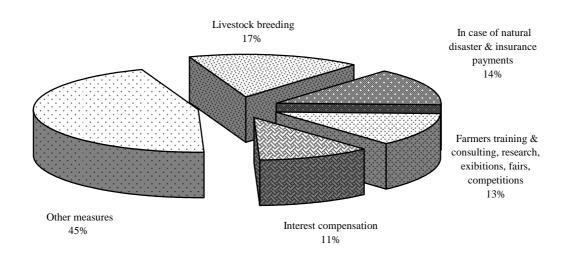


Fig. 1.5. Structure of state aid measures in 2007

Source: Data of the MoA.

A considerable amount of funding (approximately 13% of the total amount for the state aid measures) was granted for organising education and counselling of farmers, scientific research, agricultural exhibitions, etc.

The increasing financial capacities and activeness of farmers in making use of the EU investment support encourages more farmers to take loans for the implementation of investment projects. The number of farmers willing to take the advantage of the state aid for the reimbursement of loan interests is increasing. In 2003 only LTL 1,8 million was allocated for the implementation of this measure, and in 2007 it reached 11,0 million Litas.

For partial compensation of damage caused by the 2006 drought a separate programme was introduced through which the amount of LTL 127 million was disbursed to farmers. In 2007 about 14% of the total state aid means were assigned for the reimbursement of insurance contributions and support in the case of a disaster.

In 2007 a new risk management system of farmers in relation to natural phenomena was introduced in Lithuania. The previous state funded damage indemnification system was substituted by the private crop insurance system. Since 2007 farmers who have insured their crops are entitled to 50% compensations of the insured amount, provided all declared crops on the farm were insured (winter and summer wheat, winter and summer barley, winter and summer rape, winter and summer triticale, rye, oats, maze, sugar beet and potatoes) from four risk factors at least: hail, rainfall, winterkill and drought.

In joining the EU and other global initiatives related to climatic changes and the reduction of mineral energy resources Lithuania is promoting the development of the production of alternative types of fuel, in particular, biofuel. A set proportion of price for rapeseed oil aimed at producing methyl (ethyl) ester, including rapeseed and grain purchased for the production of dehydrated ethanol is compensated. In 2004, when this measure was introduced, the funding of it amounted just to LTL 1 million, and in 2007 over LTL 24 million were disbursed to the producers of the biofuel.

**Measures aimed at promoting the development of the fisheries sector.** Since 2004 the EU support measures, co-financed from the national budget funds, reached the sector of fisheries. During the period of 2004–2006 support to the Lithuanian fisheries sector was extended through the SPD for 2004–2006, and since 2007 through the measures defined in the 2007–2013 Programme for the Lithuanian fisheries sector. The sector of fisheries, as the sector of agriculture, undergoes similar problems of restructuring and streamlining. As fishing quotas are reduced every year, funding was allocated for measures aimed at compensating the reduction of fleet overcapacity, i. e. for covering losses suffered through discontinued activities of fishing vessels and reimbursements to fishermen, who lost jobs on fishing vessels. Support is extended for increasing the competitiveness of companies involved in fisheries, for the development of regions related to fisheries, for training of specialists and other significant activities. These are the guidelines for further support policy of fisheries at the beginning of the new EU programming period of 2007–2013.

In total the support granted to the fisheries sector within the period of three years (payments started in 2005) amounted to LTL 65 million, including approximately 17% paid in 2007.

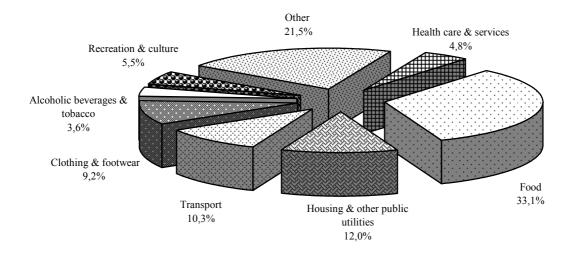
The implementation of measures of agricultural and rural development policy in Lithuania has a positive impact on the agrarian sector, the entire economy of the country, and the life quality of the rural population. The balance of foreign trade in agricultural products has become positive. Income of farmers equalled with the income of urban population. Processes of active restructuring of farms are observed in the sector of agriculture, which are subsequently supported and promoted by the state aid for investments in holdings, by measures for setting-up of young farmers and early retirement from active farming. Addressing the environmental issues assists the sustainable development of the agrarian sector as part of the national economy of Lithuania.

### II. LITHUANIAN AGRICULTURAL AND FOOD SECTOR IN THE SINGLE MARKET

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

The increasing costs for energetic resources and the growing demand in cereals for food and biofuel boost prices on agricultural and food products on the global market, inevitably influencing price changes in our country as well. The rise of prices was basically influenced not by the increasing costs, but the by the new market prices developed as a result of the changed relationship between the demand and the supply. Grain and milk production sectors were the first to feel this influence, as almost half of the production made by the companies of this sector is exported.

Price variations as announced by the Department of Statistics to the GovRL indicate that in 2007 the highest rise of prices was reached for food products (15.5%) and for housing, water, electricity, gas and fuel (14.1%). Over the year an average wage per capita increased approximately by 18%, therefore, the structure of consumption has not been influenced much. Expenditure on food products remains among the essential lines in the household budget of Lithuanian residents. According to the data of the Department of Statistics to GovRL, more than one third of all expenditure in 2007 was spent on purchasing food products (Fig. 2.1).

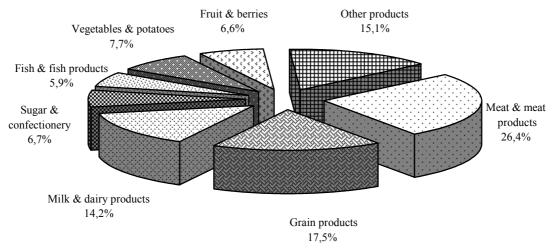


#### Fig. 2.1. Structure of consumption expenditure in 2006

Source: Household budget 2007. – V.: Department of Statistics to the GovRL, 2008.

The disposable income of Lithuanian residents increased in 2007 by 73% in comparison to 2004, and the consumption expenditure – by 46%. Per capita the average expenditure on food increased by 25% per month, while in 2007 it amounted to LTL 248. Most of expenditure accounts for meat, bread and other cereals, dairy products (Fig. 2.2). The structure of the internal market and the population consumption is

undergoing changes. The gradually decreasing comparative weight of food expenditure did not change in 2007. So far, expenditure on food products remains the dominant line in the family budget of Lithuanian residents.





Source: Household budget 2007. – V.: Department of Statistics to the GovRL, 2008.

The level of consumption reflects the purchasing power of the population, which according to the EUROSTAT data of 2007 was by 1.7 times lower in Lithuania than the EU average. Subsequently, it is natural that Lithuanian residents consume more of cheaper products, such as potatoes, flour, groats and other cereals, and less meat, milk and dairy products, fish, vegetables, fruit and sugar.

Products	2003	2004	2005	2006	2007	EU average
Cereal & cereal products	124	125	120	112	120	89
Potatoes	118	122	116	101	100	89
Vegetables, watermelons, melons	95	97	104	99	100	120
Fruit & berries	61	71	77	79	79	102
Meat & meat products	59	70	73	72	78	98
Milk & dairy products	287	296	283	273	277	146
Eggs, pieces	211	212	191	186	180	233
Sugar	26	27	27	29	29	38
Fish & fish products	14	14	14	14	15	22

<b>Table 2.1.</b>	Per capita	a consump	otion of main	ı agricultural	products in	2003–2007, in kg
		r			<b>r</b>	

Source: Agriculture in Lithuania 2006. – V.: Department of Statistics to the GovRL, 2007.

During the period of 2003-2007 the consumption of meat increased by 32%, vegetables and fruit – by 15%, and the consumption of potatoes and eggs decreased by 15%. Sales in food products on the internal market increased by 7.7% over the year 2007, and by 46% during the entire period of 2003-2007.

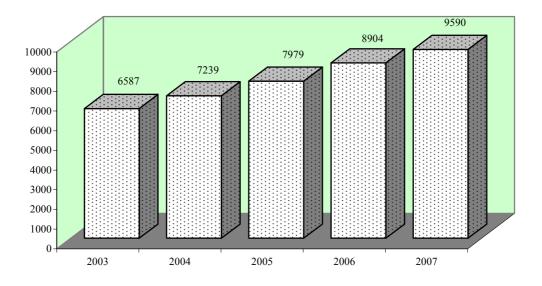


Fig. 2.3. Sales of food products in 2003–2007, in million Litas

Source: Data of the Department of Statistics to the GovRL

The increasing demand on the internal market and the expanding export possibilities promoted the production and purchases of agricultural products (Table 2.2). Only fruit and vegetable purchases were less than expected.

Indicators	2003	2004	2005	2006	2007	2007 compared to 2003, %
Production						
Livestock & poultry, slaughtered (live weight)	265	303	323	335	350	132
Milk yield	1796	1849	1862	1891	2004	112
Egg production, mill. pieces	811	863	864	929	920	113
Purchase						
Cereals	1129	1403	1760	1149	1774	157
Rapeseed	110	173	215	137	330	300
Sugar beet for processing	881	905	798	716	800	91
Potatoes	32	21	11	12	17	53
Vegetables	36	34	28	31	42	117
Fruit & berries	76	14	72	80	57	75
Livestock & poultry (live weight)	191	200	211	252	271	142
Natural milk	1026	1140	1200	1281	1389	135
Milk (equivalent of base fatness)	1226	1371	1432	1539	1630	133
Eggs, mill. pieces	466	486	487	482	461	99

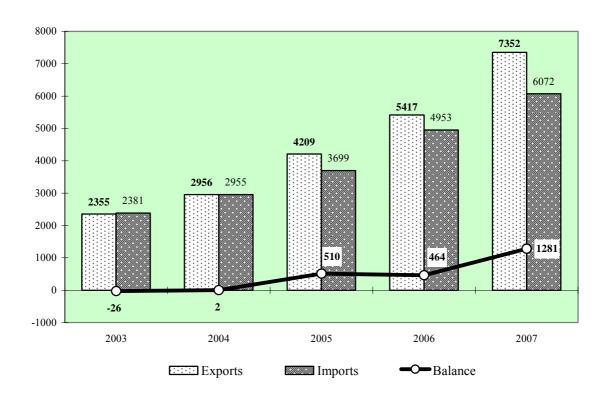
Table 2.2. Production and purchase of agricultural products in 2003–2007, in thou. tons

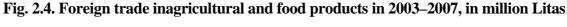
Source: Data of the Department of Statistics to the GovRL..

A certain proportion (approximately 6%) of agricultural and food products are sold on agricultural market places. In 2007 the proportion of food products in the total value of trade on market places accounted for 44%. Within the year of 2007, according to the Department of Statistics to the GovRL, the sales of food products on market places amounted to LTL 557,9 million, by 2% less than in 2003.

### 2. Tendencies in the foreign trade in agricultural and food products

According to the preliminary data of 1 June 2008 provided by the Department of Statistics to the GovRL, Lithuania has exported agricultural and food products in 2007 for LTL 7352 million, which accounted for 1.36 times more in comparison to 2006, and imported for LTL 6072 million, by 1.23 times more, correspondingly. The foreign trade turnover increased almost by 30%. The trade balance remains positive for several years already, however, in 2007 it was by 2.8 times higher than in 2006, and reached the amount of LTL 1281 million.





Source: Data of the Department of Statistics to the GovRL.

In recent years trade in agricultural and food products in the structure of the Lithuanian foreign trade is substantially increasing. In 2004, in the year of joining the EU, the value of agricultural and food products accounted for 11.5%, and in 2007 - for 17.0% already.

The proportion of import is less than of export, however it continued increasing, too: in 2004 it accounted for 8.6%, and in 2007 -for 10.0%.

	trade of	Litnuania	In 2004–200	/			
Year	Foreign trade of Lithuania, mill. Lt		0	cultural and food ts, mill. Lt	Share of trade in agricultural and food products, %		
	exports	imports	exports	imports	exports	imports	
2004	25819,2	34383,6	2956,5	2954,6	11.5	8.6	
2005	32767,3	43151,9	4208,8	3699,1	12.8	8.6	
2006	38888,3	53274,6	5416,6	4952,8	13.9	9.3	
2007	43234,3	60987,4	7352,4	6071.8	17.0	10.0	

Table 2.3. The share of trade in agricultural and food products in the total foreign	l
trade of Lithuania in 2004–2007	

Source: Data of the Department of Statistics to the GovRL.

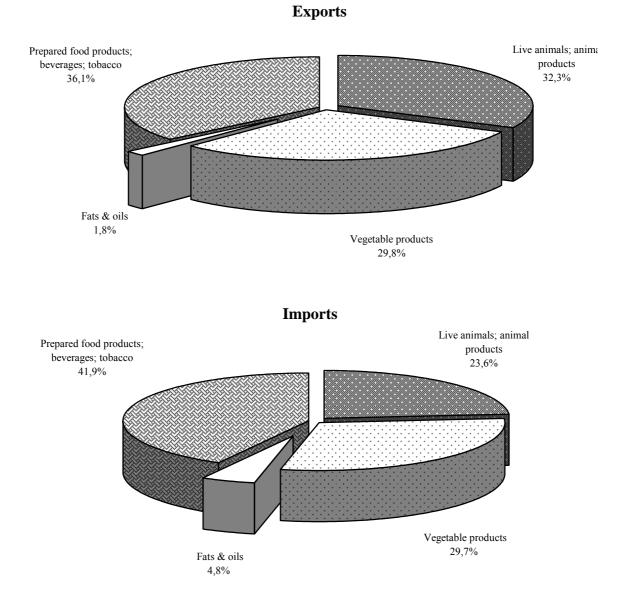
In 2007 as in 2006 the largest proportion of export consisted of prepared food products, beverages and tobacco articles (group IV), export of which amounted to LTL 2,7 billion. Though, in comparison to 2006, the value increased by 19%, the share in the total export decreased by 5 percentage points. Live animals and products of animal production (group I) rank the second (about LTL 2,4 billion), and the third were products of vegetable origin (group II), export of which reached LTL 2,2 billion. The share of fat and oil products (group III) remained the same, however, due to the increased prices the value increased by 32%. In comparison to 2006, export of group II products increased most of all – up to LTL 880 billion.

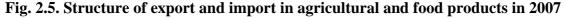
The structure of import has changed less than of export. As in 2006, most of imported products made up group IV – for LTL 2,5 billion. But the proportion of this group of goods in the total volume of import decreased by 1.3 percentage points, though the value increased to LTL 403 million. Most of imported products were of vegetable origin not grown in Lithuania. The import value of this group of products increased by 24%. In 2007 export of live animals and products of animal origin increased by 30%, accounting for 1.4 per cent point increase in the total volume of import (Fig. 2.5).

In 2007 most of the export traditionally consisted of milk and dairy products – for LTL 1334 million, and the export value increased by 36% as compared to 2006. The export in dairy products accounted for 18% of the total export in agricultural food products of 2007. Cheese and curds accounted for 48% of the export in dairy products (in 2006 – for 58%), milk and cream – for 21%, powder milk and condensed milk – for 17%. The global rise of prices on dairy products has greatly influenced the growth of the export value of these products. 29% of dairy products was exported to Russia, 18% – to Germany, 13% – to Italy, 8.9% – to Poland, and 8.6% – to the Netherlands. Over 78% of all exported dairy products from Lithuania in 2007 were exported to the abovementioned countries.

The second place according to the export volume (including marked re-export) belongs to fruit and berries (10% of the total export), amounting to LTL 741 million, by 1.5 times more than in 2006. In this group mostly apples were exported (41% of the total fruit export, 229 thousand tons), and frozen berries (24%). 63% of fruit and berries were exported to Russia (mostly apples), 9.6% – to Germany (mostly frozen blueberries).

Prepared animal feed ranks the third, amounting to LTL 571 million of the export, by 19% more than in 2006. Major countries of export are the United Kingdom, Germany, Russia and Belarus.





Source: Data of the Department of Statistics to the GovRL.

The year of 2007 is distinguished for the high quality crops of grain. Despite the smaller total volume of export, 719 thousand tons, in comparison to 2006, the value increased by 1.7 times and amounted to LTL 532 million. 62% of grain, mostly wheat (435 thousand tons) and barley (228 thousand tons), were exported to Saudi Arabia, Germany, Marocco, and Denmark.

Export of tobacco products amounted to LTL 529 million, the value of which increased by 12% (LTL 58 million) in comparison to 2006, and accounted for 7.2% of the total value of export in agricultural and food products in 2007.

The export in live animals, meat, malt, wheat gluten, processed grain (shelled, crushed, flaked, etc.), rapeseed, bread, cake and dough products, prepared and canned

vegetables, baby food, ice-cream, dressings and ready-to-cook food products has also increased.

In 2007 Lithuania imported agricultural and food products for LTL 6072 million, by 23% more than in 2006. Only import of sugar from all 24 product groups (analyzing group on the level of CN two-figures) has decreased by 3.9 times than in 2006, reducing the value by 1.7 times. In 2006 the imported sugarcane sugar accounted for 74% of the total sugar import (94 thousand tons), and the price was by 4.4 times lower than for the white sugar. In 2007 no sugarcane sugar was imported. The imported amount and the price of white sugar was similar to that in 2006.

In 2007, as in 2006, mostly fruit and nuts were imported (for LTL 844 million, with the value increased in the total import of agricultural and food products by 28%), soft and strong drinks (for LTL 566 million, 9.3%, 1.3 times), fish and crustacean (for LTL 499 million, 8.2%, 1.2 times). Also more meat (for LTL 472 million, 7.8%, almost 1.5 times), and various other food products (of CN group 21, LTL 416 million, 6.9%, 17%).

The import of apples accounted for 31% (for LTL 259 million, 183 thousand tons, including almost 85% from Poland) in the group of import of fruit and nuts, citrus fruit – for 15%, accordingly. A substantial part of apples imported to Lithuania were reexported. 30% of imported fruit and nuts were from Poland (for LTL 253 million), 13% – from the Netherlands (for LTL 107 million), 10% – from Italy (for LTL 86 million), 8.3% – from Spain (for LTL 70 million), and 6.5% – from Germany (for LTL 55 million). Import from the above countries accounted for 68% of the total import of fruit and nuts.

Most of beverages were imported from Latvia (18% of the total beverage import value), Estonia (15%), Poland (12%), France (8.1%), and Italy (7.1%); most of soft drinks were imported from Poland, Estonia, and Latvia; malt liquor – from Estonia, Latvia, Germany, Poland, and Denmark; strong drinks – from Latvia, France, Italy, Estonia, Spain and Germany.

Major part in the structure of fish and crustacean import consisted of fish fillet and other types of fish meat (49% of the import value), frozen fish (25%), and fresh or chilled fish (21%). Most of fish fillet was imported from Kazakhstan, the USA, Iceland, and China; frozen fish – from Russia, the Netherlands, Norway, and Spain; fresh and chilled fish – from Sweden, Latvia, Germany and Denmark.

The value of imported meat was by 1.5 times higher than in 2006. Mostly pork meat was imported (48 thousand tons for LTL 257 million, accounting for 55% of the total value in the meat import) and poultry (34 thousand tons for LTL 137 million, 30%). Part of pork meat was re-exported. Import of poultry was similar to imports in 2006, though at 1.4 times higher average price.

Since 2005 imports in raw milk for processing and cream is increasing. In 2005 imports amounted to 0.7 thousand tons for LTL 0.5 million, in 2006 – to 1.0 thousand tons for LTL 1.5 million, in 2007 – to 2.7 thousand tons for LTL 5.1 million.

Though the import of vegetable oil decreased by 6%, the value increased by 11% due to the rise of prices (the average price for the imported oil increased by 18%). In comparison to 2006, the value of imported in 2007 products of meat and fish, including preserves, increased by 23%, cacao and cacao products – by 34%. Import of bread and pastry products in 2007 amounted to 25 thousand tons for LTL 106 million, i.e. by 1.3 times more than last year.

Since 1 January 2007, when Bulgaria and Romania joined the EU, the grouping of the EU member states has changed. The new member states in this publication are attributed to group EU-2. Analysis of export of agricultural and food products in 2007 into the four groups of countries (three of them are the EU member states: EU-15, EU-10 and EU-2, while the fourth group covers other countries) indicated that in comparison to 2006 the share of export into the old EU member states (EU-15) increased by 0.4 percentage point, into the new member states (EU-10) by 1.3 percentage point, and into the recently joined countries (EU-2) – by 0.2 percentage point. Export into third countries at the same time decreased by 2 percentage points. Export into the EU-15 increased by 1.4 times, amounting to LTL 2937 million, into the EU-10 – by 1.4 times, up to LTL 1950 million, and into third countries – by 1.3 times, to LTL 2428 million. Though export to Romania and Bulgaria accounted only for 0.5% of the total export in comparison to 2006, the value of the export increased by 2.6 times after the accession to the EU.

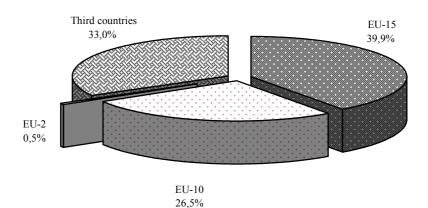


Fig. 2.6. Structure of exports of agricultural and food products by country group in 2007

Source: Data of the Department of Statistics to the GovRL.

Export to the EU-15 member states consisted mostly of milk and dairy products, tobacco articles and various food products of group 21 of the CN, including 62% of icecream. Export to the EU-10 member states consisted of milk and dairy products, prepared animal feed, and tobacco articles, while to the EU-2 countries – dairy products, cacao, meat and fish products. In total export deliveries to the EU markets covered milk and dairy products, tobacco articles, prepared animal feed, meat, fish and ready-made products of meat and fish.

Most of export into third countries consisted of fruit and berries, dairy products, vegetables (mushrooms and tomatoes), and cereals. In 2007 export refund payments in the amount of LTL 97,3 million were disbursed for the export into third countries, including 73% to the exporters of dairy products.

Import from the old EU member states increased by 0.7 percentage point and accounted for 39.6% of the total import, while the value increased by 1.2 times, amounting to LTL 2403 million. The highest increase, by 2.4 percentage points, was noted of the import from the EU-10, which accounted for the largest share of 42.2% in the total import. Import from this group of countries amounted to LTL 2563 million, while the value increased by 1.3 times. The share of import from third countries decreased by 3.4 percentage point, however, import of products increased by LTL 30

million and amounted to LTL 1075 million. Import from the recently joined EU countries increased by 2.7 times with the value of LTL 30 million.

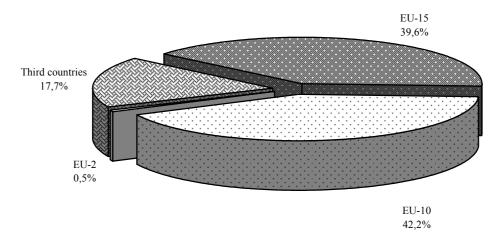
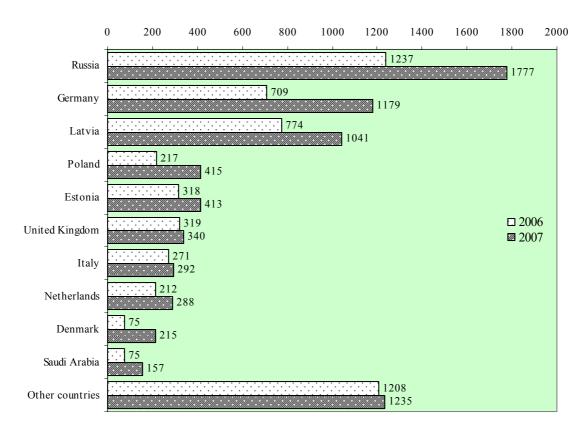


Fig. 2.7. Structure of imports of agricultural and food products by country group in 2007

Most of agricultural and food products in 2007 were exported to Russia (24% of total export of products), Germany (14%), Latvia (12%), Poland and Estonia (4.8% each), the United Kingdom (4.0%), Italy and the Netherlands (3.4% each). The highest noted increase of export was to Russia, Germany and Latvia.



### Fig. 2.8. Exports of agricultural and food products by country in 2006 and 2007, in million Litas

Source: Data of the Department of Statistics to the GovRL.

In comparison to 2006, export deliveries to Russia increased by 1.4 times with the value amounting to LTL 540 million, including cheese (for LTL 341 million, accounting for 19% of the total agricultural and food export into this country), apples and berries (for LTL 270 million, 15%), champignons, paprikas and other vegetables (for LTL 133 million, 7.5%), wine (for LTL 112 million, 6.3%), beef (for LTL 101 million, 5.7%), and tomatoes (for LTL 71 million, 4.0%). The value of the exported products accounted for 58% of the total export into Russia in 2007. Export of live pigs into Russia increased by 3.4 times in comparison with 2006 (149 thousand heads, while the value increased by 2.9 times and amounted to LTL 62 million), of tomatoes – by 2.2 times more (23.6 thousand tons, 2.8 times), of apples – by 1.2 times more (195 thousand tons, 1.4 times). The value of the exported wine increased by 2.4 times.

Export to Germany was more by 1.7 times than in 2006. 25% of the export into this country accounted for cigarettes (for LTL 288 million, with the value by 1.8 times more than in 2006), 12% – for cream (for LTL 146 million, 1.5 times more), 7.7% – for cat and dog food (for LTL 90 million, 1.6 times more), 7.0% – for fish fillet and other fish meat (for LTL 82 million, 1.3 times more), 6.4% – for ready-made fish products and preserves (for LTL 75 million, 1.1 times more), 4.6% – for skimmed milk powder and sugar-free condensed milk (for LTL 54 million, 1.7 times more), and 4.0% – for rapeseed (for LTL 47 million, 9.5 times more). 60 thousand tons of wheat and 13 thousand tons of barley were exported to Germany in 2007. No wheat and barley were supplied to this country in 2006.

Export of agricultural and food products to Latvia increased by 1.3 times as compared with 2006. Export of cigarettes increased by 2.1 times (for LTL 186 million with the value of 18% in the total export value of agricultural and food products to Latvia), by 1.5 times of various food products (CN code 2106, including the largest proportion of baby food, for LTL 51 million, 5.1%). By 1.7 times more sugar was exported to Latvia – 23 thousand tons for LTL 24 million (5.0%). 5.2% of export to Latvia accounted for coffee extracts (LTL 44 million), 3.8% – for poultry (6.6 thousand tons for LTL 38 million), 3.6% – for chocolate, 3.5% – for cheese, the value of which was by 1.2 times higher than in 2006.

Export to Russia, Germany and Latvia accounted for almost 47% of the total export of agricultural and food products.

In 2007 most of products were imported from Poland, Latvia, Germany, the Netherlands and Estonia. Import from these five countries accounted for almost 58% of the total agricultural and food import (Fig. 2.9).

Import from Poland in 2007 amounted to LTL 1319 million (by 1.3 times more than in 2006), and accounted for 22% of the total agricultural and food import. In the main, the following products were imported from Poland: apples – for LTL 199 million (155 thousand tons, 16% more), pork – for LTL 165 million (32 thousand tons, 1.7 times more), poultry - for LTL 58 million (12 thousand tons, 1.5 times more), sausages and similar meat products – for LTL 47 million (10 thousand tons, 1.3 times more), mineral and gassy water – for LTL 45 million (1.4 times more).

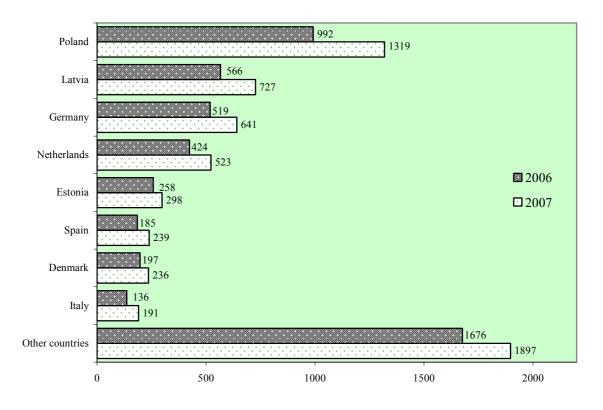


Fig. 2.9. Imports of agricultural and food products by country in 2006 and 2007, in million Litas

Source: Data of the Department of Statistics to the GovRL.

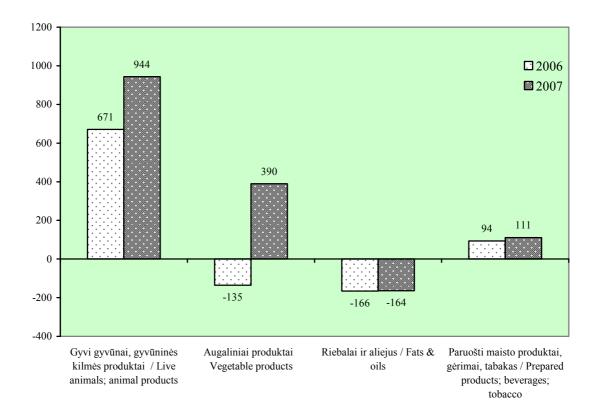
Import from Latvia reached LTL 727 million, and accounted for 12% of the total agricultural and food import (by 1.3 times more than in 2006). Import of non-concentrated milk and cream is rapidly increasing (imported 147 thousand tons for LTL 152 million, by 24% more). Import of these products accounted for 21% of the total agricultural and food import from Latvia. Import of cigarettes, which accounted for 9.4% (for LTL 67 million) increased by 1.6 times. Bread and pastry products were imported for LTL 34 million (by 1.2 times more), mineral and gassy water – for LTL 27 million (by 1.7 times more), non-denaturised ethyl alcohol – for LTL 25 million (by 16% more), fresh and chilled fish – for LTL 23 million (by 11% more).

Import from Germany reached LTL 641 million – 11% of the total agricultural and food import into Lithuania. In comparison to 2006 import from Germany increased by 1.2 times through importing mostly coffee (4.4 thousand tons for LTL 45 million), however, the value was by 9% less than in 2006. Next by the import value were products of animal origin not suitable for food (for LTL 39 million, increased by 1.2 times). A variety of food products from the CN group 2106 were imported into Lithuania, including a large proportion of baby food (for LTL 39 million, by 1.2 times more), cigarettes (for LTL 35 million, by 11% more), bananas (12,5 thousand tons for LTL 31 million, by 1.3 times more, with the value increase by 1.5 times), pork (5.5 thousand tons for LTL 29 million, by 2 times more with value increase by 1.9 times).

The balance of foreign trade in agricultural and food products was positive in 2007 amounting to LTL 1281 million, exceeding the 2006 balance almost by 2.8 times. A positive balance was also in the trade of milk and dairy products, cereals, food

industry waste and animal feed, tobacco articles, meat and fish products, live animals, oil plant seeds, vegetables, and grounding production. The biggest negative balance was in the trade of beverages, oil, various products of the CN group 21, fish and crustacean, coffee.

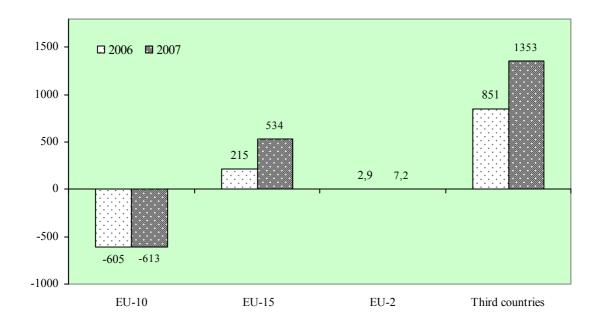
Analysis of the trade by major product groups indicated that in 2007 balance in all product groups was improving. A positive balance was reached in the trade of live animals and products of animal origin (group I), vegetable products (group II), prepared food products, beverages and tobacco articles (group IV) (Fig. 2.10). In comparison to 2006 the positive trade balance in group I products increased by 1.4 times, in group II – the previous negative balance of 2006 has become clearly positive in 2007, in group IV – increased by 18%, and in group III – the negative balance has slightly decreased.



## Fig. 2.10. Balance of foreign trade in agricultural and food products (by product group) in 2006 and 2007, in million Litas

Source: Data of the Department of Statistics to the GovRL.

The analysis of the trade by groups of countries revealed that in comparison to 2006 the positive balance increased by 2.5 times in the trade with the EU-15 member states, by 2.4 times – in the trade with the EU-2 member states. Trade balance with the EU-10 countries remained negative and exceeded the 2006 results by 1.4%. Trade balance on the entire EU-27 market was negative and amounted to LTL 72 million. The biggest positive balance was reached in the trade with third countries, and in comparison to 2006 increased by 1.6 times leading to the total positive foreign trade balance in 2007.



# Fig. 2.11. Balance of foreign trade in agricultural and food products (by country group) in 2006 and 2007, in million Litas

Source: Data of the Department of Statistics to the GovRL.

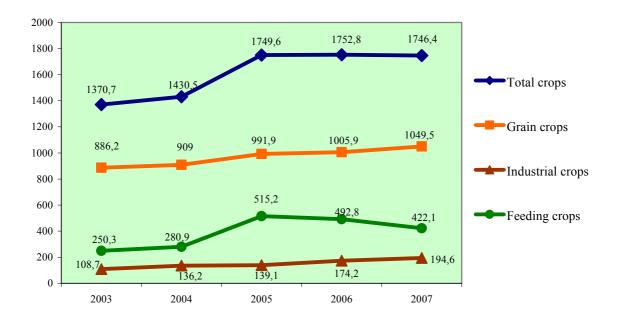
Analysis of the 2007 foreign trade turnover by groups of countries indicated that the highest turnover was reached in trading with the EU-15 member states (LTL 5340 million, increased by 1.3 times as compared with 2006). The second by the turnover indicators was the trade with the EU-10 member states (correspondingly, LTL 4514 million, by 1.35 times). Although the trade with Bulgaria and Romania makes only a rather small part in the total foreign trade, it is rapidly developing: the turnover has increased by 2.6 times within the year of 2007. In total the turnover of trade with the EU member states increased by 34%. The turnover of foreign trade with third countries reached LTL 3503 million, and increased by 1.2 times. The largest proportion of the turnover -74% - accounted for the EU-27 member states.

The key partners in 2007 in the foreign trade of agricultural and food products were Russia (the turnover reached LTL 1936 million, and 14.4% of the total turnover in the trade of agricultural and food products), Germany (LTL 1821 million, 13.6%.), Latvia (LTL 1768 million, 13.2%), Poland (LTL 1734 million, 12.9%), the Netherlands (LTL 811 million, 6.0%), and Estonia (LTL 712 million, 5.3%). The biggest positive balance was reached in trading with Russia (LTL 1618 million), Germany (LTL 538 million), Latvia (LTL 314 million), the United Kingdom (LTL 279 million), Saudi Arabia (LTL 157 million); the biggest deficit was noted in trading with Poland (LTL 905 million), the Netherlands (LTL 236 million), Spain (LTL 142 million), the Ukraine (LTL 111 million), and Hungary (LTL 102 million).

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

### 3.1. Cereals

Lithuania has rather favourable conditions for the development of grain sector: yielding soil, favourable climate, industrial potential and grain cultivating experience. Lack of grain on global and the EU markets encouraged Lithuanian farmers to increase grain production. In 2007 crop area under grain accounted for 57.7% of the total crop area (in 2006 - 55.7%). Crop area under grain in Lithuania is increasing, and under feeding crops – decreasing.



**Fig. 2.12. Structure of crop area in Lithuania in 2003–2007, in thousand hectares** *Source: Data of the Department of Statistics to the GovRL.* 

**Cultivation.** During the period of previous five years crop area under grain and the structure thereof was changing with regards to the demand on the global, the EU and Lithuanian markets, purchasing prices, foreign trade conditions, and direct payments.

The period of 2005–2007 was rather unfavourable for most of grain producers. Since 2005 the global consumption of grain was exceeding the production by almost 2.0% every year, leading to the reduction of grain resources in the world by 21.2%, and in the EU member states – even by 53.3%.

All importing countries were trying to restock grain resources, subsequently the global demand in grain increased to almost 220 million tons per year, and the key grain exporters, including Russia, the Ukraine, and Kazakhstan, could supply to the market only about 170 million tons annually. The increased demand in grain and the limited supply determined the rise of prices on grain. Boosting grain prices on the global

markets influenced the prices on grain in Lithuania, too, encouraging at the same time national grain producers to develop this branch of crop production.

Since 2003 crop areas under grain started increasing in Lithuania (Fig. 1.13), and in 2007, as compared to 2006, increased by 18.5%.

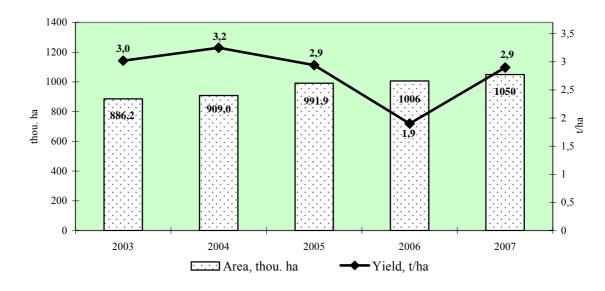


Fig. 2.13. Crop area and yield of grain crops in 2003–2007

Sources: Statistical Yearbook of Lithuania 2006. – V.: Department of Statistics to the GovRL, 2007; Agriculture in Lithuania 2006. – V.: Department of Statistics to the GovRL, 2007; Crops in 2007. – V.: Department of Statistics to the GovRL, 2007.

Major grain crops in 2007 were under barley and wheat (Fig. 2.14).

Climatic conditions in 2007 were rather favourable for agricultural crops to survive winter, grow and ripen. Subsequently, the area of crops under winter grain in 2007, in comparison to 2006, was by 17.6% larger (64.4 thousand ha): under winter wheat – by 10.6%, under winter triticale – by 16.7%, under winter barley – by 103.3%, and under rye – by 43.1%. In total, the crop area under winter grain in Lithuania in 2007 amounted to 430,4 thousand ha: 279,3 thousand ha under winter wheat, 65,6 thousand ha under winter triticale, 73,1 thousand ha under rye, and 12,4 thousand ha under winter barley.

Spring grain in 2007 accounted for 55.0% of the total crop area under grain. Major part of the crop area in 2007 was under barley – 366,9 thousand ha. Spring wheat covered the area of 77,9 thousand ha. In 2007 the area of 59,8 thousand ha was under oats, 25,9 thousand ha under mixed cereals, 41,9 thousand ha under pulse crops, 26,1 thousand ha under buckwheat, and 7,3 thousand ha under maize grain.

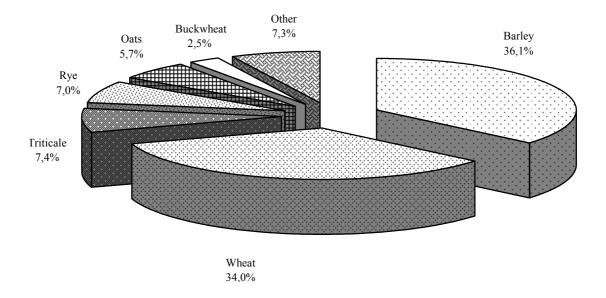


Fig. 2.14. Structure of cereal crop area in 2007

Source: Data of the Department of Statistics to the GovRL.

In 2007 as much as 81.6% of all grain crops were cultivated in farmers' farms, and the remaining part – at agricultural partnerships and enterprises (193,5 thousand ha). In comparison to 2006, the crop area under grain at farmers' farms increased by 4.8%, and at agricultural partnerships and enterprises – by 2.5%.

Favourable climatic conditions contributed to the survival of grain through the winter and at the time of harvest as well. Accordingly, crop yield of grain in 2007 as compared to 2006 was much richer (Table 2.4), amounting to a higher total yield of grain. According to the data of the Department of Statistics to the GovRL, the grain yield of Lithuania in 2007, as compared to the unfavourable year of 2006, increased by 1.6 times, and in comparison with the favourable year for grain crops of 2005 – by 7.1%.

The increase of grain yield in 2007, in comparison to 2006, was influenced by 3.8% larger crop areas and by the increased yielding capacity of 56.4% (in comparison to 2005, the crop area increased by 5.0%, and the yielding capacity – by 2.0%).

Grain crop yield, as compared with 2006, increased by 62.4% due to enlarged crop areas by 4.2%, and higher yielding capacity – 51.3%. Winter grain crops were enlarged by 16.4%, and the yielding capacity increased by 62.2% (as compared with 2005, crop area increased almost by 2.0%, and the yielding capacity – by 5.5%). Summer grain crop area decreased by 3.3%, and the yielding capacity increased almost by 1.5 times (as compared with 2005, the crop area increased almost by 8.0%, and the yielding capacity – remained the same).

Crop area under pulses decreased by 5.3%, and the yielding capacity increased by 1.7 times (in comparison with 2005 the crop area increased by 13.7%, and the yielding capacity decreased by 15.2%).

Kind of grain crops	2003	2004	2005	2006	2007				
Grain crops	3,02	3,21	2,89	1,88	2,94				
cereals	3,04	3,25	2,94	1,99	3,01				
winter cereals	3,28	3,76	3,46	2,25	3,65				
wheat	3,61	4,12	3,85	2,42	4,16				
triticale	2,75	3,18	2,73	1,88	2,82				
rye	2,46	2,54	2,12	1,81	2,37				
barley	2,67	3,78	3,24	2,17	3,15				
spring cereals	2,81	2,75	2,53	1,74	2,53				
wheat	3,40	3,45	3,24	2,13	3,08				
barley	2,93	2,93	2,70	2,06	2,64				
triticale	2,64	2,72	2,33	1,47	2,82				
oat	2,38	2,23	1,92	1,30	1,94				
buckwheat	0,90	0,59	0,55	0,20	0,90				
mixed cereals	2,0	2,08	1,83	1,10	1,93				
grain maize	3,17	2,20	3,08	1,57	4,82				
other cereals	0,99	0,91	1,44	1,24	1,91				
dried pulses grain	2,24	1,18	1,64	0,81	1,39				

Table 2.4. Average yield of grain crops in 2003–2007, in tons per hectare

Source: data of the Department of Statistics to the GovRL.

In 2007 the highest yielding capacity of grain crops in Lithuania was reached in the counties of Šiauliai -3,6 t/ha, Marijampolė -3,4 t/ha, Kaunas and Panevėžys -3,1 t/ha.

Despite the increase of the yielding capacity of grain crops in Lithuania by 56.4% in 2007, as compared with 2006, the level of 2003 has not been reached, when the yielding capacity of grain crops was by 2.6%, and of cereals – by 1.0% higher. In 2007, as compared with 2003, the highest increase in the yielding capacity was achieved in cultivating grain maize – by 52.1%, and winter wheat – by 15.2%. In 2007 the yielding capacity of some grain crops even decreased in comparison to 2003: pulses – by 37.9%, oats – by 18.5%, and summer barley – by 9.9%.

National producers of cereals at large specialised farms apply new technologies in cultivating and harvesting of cereals increasing subsequently the efficiency of grain production. Lithuanian farmers managed to reduce the difference of 33.3% in the average yielding capacity of grain crops between the EU-27 and Lithuania (Table 2.5).

in tons per hec	tare							
		200	)6		2007			
Grain crops	EU	Lithuania	EU compared to Lithuania, times	EU		EU compared to Lithuania, time		
Common wheat	5,35	2,33	2,3	5,10	3,92	1,3		
Rye	2,80	1,81	1,6	3,00	2,37	1,3		
Barley	4,07	1,88	2,2	4,20	2,66	1,6		
Oats & mixes	2,51	1,3	1,9	2,69	1,93	1,4		
Maize (for grain)	6,54	1,57	4,2	6,00	4,82	1,3		
Triticale	3,61	1,81	2,0	3,84	2,82	1,4		
Average	4,68	1,99	2,4	4,60	2,94	1,6		

# Table 2.5. Average yield of grain crops in EU-27 and Lithuania in 2006 and 2007,in tons per hectare

Sources: Data of Eurostat &, the Department of Statistics to the GovRL.

In 2007 the harvest of grain amounted to 3073,4 thousand tons, or by 1180,7 thousand tons (62.4%.) more than in 2006 (Table 2.6).

Kind of grain crops	2003	2004	2005	2006	2007
Grain crops	2680,3	2916,9	2870,0	1892,7	3073,%4
cereals	2631,8	2859,4	2811,1	1857,8	3017,0
winter cereals	1386,4	1663,0	1458,1	822,0	1553,3
wheat	1023,1	1263,4	1148,7	620,4	1151,2
triticale	181,5	241,7	175,5	97,5	199,1
rye	147,1	140,6	108,3	90,0	165,2
barley	34,7	17,3	25,6	14,1	37,8
spring cereals	1245,4	1196,4	1353,0	1035,8	1463,7
wheat	181,0	166,8	230,7	189,4	239,5
barley	865,1	842,5	922,7	729,7	975,9
triticale	32,7	21,7	25,6	12,9	28,5
oat	114,6	117,7	114,1	62,8	119,5
buckwheat	14,7	13,0	15,7	8,9	24,2
mixed cereals	28,6	31,6	39,0	27,0	52,6
grain maize	8,7	3,0	4,9	4,7	26,0
other cereals	0,0	0,1	0,3	0,4	23,5
dried pulses grain	48,5	57,5	58,9	34,9	56,4

### Table 2.6. Average harvest of grain crops in 2003–2007, in thousand tons

Source: Data of the Department of Statistics to the GovRL.

The harvest of winter grain in 2007 was by 12% higher than in 2003, of spring grain – by 17.5%, and of pulses – by 16.3%. The total increase of the grain crop harvest by 18.2% was reached due the enlarged crop areas under grain and the higher yielding capacity of major agricultural cultures.

**Grain purchase.** In 2007, as compared with 2006, grain purchases from producers increased by 50.5% (578,5 thousand tons) (Table 2.7). Purchases of class II food wheat, maize grain and food barley has increased mostly. Less was purchased of class I food wheat and class I food rye.

Grain	Amounts purchased, thou. t			Average purchase price, Lt/t		
	2006	2007	change, %	2006	2007	change, %
Total	1144,7	1723,2	50,5	386	631	63,5
wheat	608,6	988,9	62,5	402	642	59,7
food wheat, class I	200,8	144,1	-28,2	460	657	42,8
food wheat, class II	67,0	436,0	6,5 k.	412	691	67,7
rye	53,5	94,4	76,4	350	530	51,4
food rye, class I	23,7	19,6	-17,3	388	577	48,7
barley	377,2	525,7	39,4	369	643	74,3
food barley	9,3	40,1	4,3 k.	349	643	84,2
malt barley	35,5	61,0	71,8	416	809	94,5
oat	5,0	13,9	2,8 k.	297	501	68,7
buckwheat	3,6	7,8	2,2 k.	832	901	8,3
triticale	33,4	84,5	2,5 k.	331	538	62,5
maize	0,61	7,1	11,6 k.	492	749	52,2

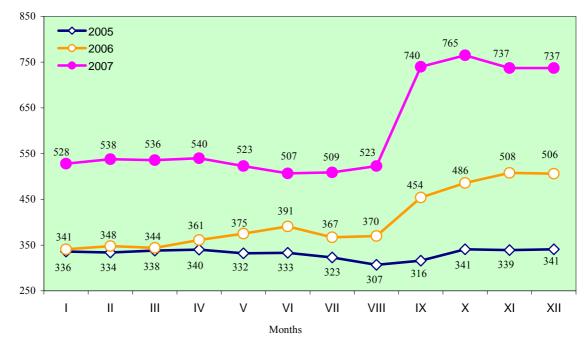
Table 2.7. Purchase of grain (except pulses) in 2006 and 2007

Source: Data of the Agricultural and Food Market Information System

In 2007, as during several previous years, the largest proportion of purchased grain crops consisted of wheat -57.4%, barley -30.5%, rye - only 5.5\%, and triticale -4.9%.

The increased supply of grain crops on the Lithuanian market created realistic preconditions, through increased purchases, not only to restore grain resources, reduced by 3.5 times within the period of previous three years, but also to increase them with the purpose of developing the processing of grain or increasing the export in the case of favourable economic conditions.

Boosting prices on grain in the global and the EU markets influenced the level of prices on grain in the Lithuanian market as well. Subsequently, in 2007 grain crops in Lithuania were purchased at 63.5% higher prices than in 2006. In December of 2007 the average purchasing price on food wheat was by 45.7% higher than in December 2006, on fodder wheat – by 39.4%, on food rye – by 31.4%, on fodder barley – by 34.2% (Fig. 2.15 and 2.16).





Sources: Data of the Statistics Department to the GovRL, data of Agriculture and Food Market Information System.

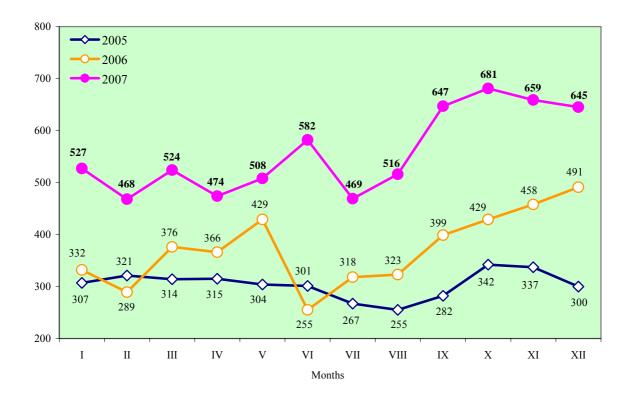


Fig. 2.16. Food rye purchase prices in 2005–2007, in Litas per ton

Sources: Data of the Statistics Department to the GovRL, Data of Agriculture and Food Market Information System.

**Processing.** In 2007 national grain processing companies processed 885,4 thousand tons of grain: 267,6 thousand tons of food wheat, 52,5 thousand tons of rye, 31,2 thousand tons of triticale, 228,0 thousand tons of barley, 4,0 thousand tons of oats, and 5,5 thousand tons of buckwheat. In comparison to 2006, the amount of processed grain accounted for 15.3% more. Processing of food wheat and barley increased, and processing of triticale, rye and oats – decreased.

Grain resources by the end of 2007 were the following: wheat -403,9 thousand tons, barley -154,7 thousand tons, rye -66,2 thousand tons, triticale -38,7 thousand tons, oats -12,7 thousand tons, and buckwheat -7,8 thousand tons. In comparison to the data of the end of 2006, the resources of wheat increased by 32.9%, of barley - by 83.5%, and of rye - by 116.3%. Resources of oats (7.9 times), triticale (4.7 times) and buckwheat (2 times) increased mostly.

In 2007 national grain processing companies have increased the production of flour by 3.0% in comparison to 2006, and the production of pastry and confectionary products remained on the same level as in 2006. Production of other grain product groups decreased (Table 2.8).

Product group	2003	2004	2005	2006	2007
Flour	205,5	230,0	220,2	245,0	252,3
Cereal groats	14,9	19,4	32,3	21,1	20,1
Fresh bread:	145,2	152,0	158,7	152,5	141,4
rye bread	71,9	75,2	72,1	68,5	62,7
other white bread	73,3	76,8	86,6	84,0	78,7
Pastry and confectionery	20,7	22,8	31,9	32,0	32,2

Source: Data of the Department of Statistics to the GovRL.

The decreased production volume of grain products had a direct impact on the trade thereof (Table 2.9). Within the year of 2007 sales of rye flour decreased mostly, half-sifted by 45% and sifted – by 42%, also wheat groats - by 32%; and only sales of first quality wheat flour increased by 9.5%, and buckwheat groats – by 8.6%.

Grain products	Amounts sold, thou. t			Average sale price, Lt/t		
	2006	2007	change, %	2006	2007	change, %
Wheat flour:						
best quality	122,1	101,5	-16,9	713	974	36,6
first quality	28,3	31,0	+9,5	631	863	36,8
second quality	9,6	7,4	-22,9	594	792	33,3
Rye flour:						
sifted flour	25,7	14,9	-42,0	711	916	28,8
half-sifted flour	17,6	9,7	-44,9	588	825	40,3

Grain products	Am	ounts sol	d, thou. t	Average sale price, Lt/t			
	2006	2007	change, %	2006	2007	change, %	
Groats:							
wheat	2,5	1,7	-32,0	611	947	55,0	
semolina	4,1	3,6	-12,2	815	1079	32,4	
barley	4,9	4,1	-16,3	602	907	50,7	
pearl-barley	2,9	2,9	0,0	601	887	47,6	
buckwheat	3,5	3,8	+8,6	2044	2317	13,4	

Source: Data of Agriculture and Food Market Information System

Wholesale prices on grain products were increasing almost adequately to the rising prices on grain. Wholesale prices on barley, pearl-barley and wheat goats increased mostly, also on rye half-sifted flour and the best quality wheat flour.

In 2007 along with the significantly increased wholesale prices on grain products retail prices on the related bread products have also increased (Fig. 2.17 and 2.18).



#### **Fig. 2.17. Retail prices of rye bread in 2005–2007, in Litas per kilogram** *Source: Data of the Department of Statistics to the GovRL.*



## Fig. 2.18. Retail prices of a loaf of white bread made of the best quality wheat flour in 2005–2007, in Litas per kilogram

Source: Data of the Department of Statistics to the GovRL.

Retail price of rye bread in December 2007 increased by 22% in comparison to December 2006, and of a loaf of white bread of the best quality wheat flour – by 18.7%. The dynamic of prices on rye bread and white bread indicate that the price on rye bread increased by 61.9%, and on white bread – by 44.0% within the period of three years. The rise of prices on these products within the period of 2005–2007 may be justified only partly by the rise of prices on grain. It is true, that the price on food rye increased even by 110%, and on food wheat – by 119%, however, in the structure of retail prices on these products grain makes up only a small part – about 17.0% for rye bread, and about 14.0% for white bread.

**Balance.** Grain harvest in 2003–2007 satisfied the national needs (Table 2.10). Most of grain is used in animal production. Half of grain harvested in 2003 - 2007 on national farms were allocated for fodder.

Consumption of bread and grain in Lithuania is gradually decreasing. In 2007, as compared with 2003, per capita consumption was by 3.2% less, and the total population consumption fund decreased within the mentioned period by 4.5%. It is related to financial possibilities of consumers, diversity in the supply of food products, and changes in the assortment of consumption.

Consumption in the country over 2007 increased in comparison to 2005 only in flaked cereals, but decreased in rye flour and grain groats.

	8 8 .	L		, ,	
Indicators	2003	2004	2005	2006	2007*
Beginning stocks	1418,9	1465,9	1507,6	1027,1	755,7
Production	2680,3	2916,9	2870,0	1892,7	3073,4
Import	271,7	206,5	187,2	271,3	187,8
Total resources	4370,9	4589,3	4564,8	3191,1	4016,9
Export	608,9	582,8	1181,3	838,1	719,5
Domestic use	2296,1	2498,9	2356,4	1596,7	2284,9
seeds	240,6	257,7	215,8	219,9	228,2
animal fodder	1429,3	1570,5	1503,7	823,2	1420,3
losses	79,8	93,0	71,4	38,1	75,7
industrial use	119,7	148,2	155,4	134,2	153,4
human consumption	426,7	429,5	410,1	381,3	407,3
Per capita consumption, kg	124	125	120	112	120
Ending stocks	1465,9	1507,6	1027,1	755,7	1012,5
Self-sufficiency level, %	117	117	122	118,5	134,5

Table 2.10. Balance of stocks in grain and grain products in 2003–2007, in thou. tons

\* LIAE calculations.

Source: Agriculture in Lithuania 2006. - V.: Department of Statistics to the GovRL, 2007.

**Foreign trade.** Export of grain crops in 2007 amounted to 719,5 thousand tons, and import – to 187,8 thousand tons, export exceeded import by 3.8 times. In comparison to 2006, export of grain crops decreased by 2.5% (18,4 thousand tons), and import increased by 7.4% (13,0 thousand tons). Export of rye over the said period increased mostly – by 2.3 times, and export of barley decreased by 24.7%. In 2007, as compared with 2006, import of barley increased by 3.7 times, and import of wheat decreased by 53.5% (Fig. 2.19 and 2.20). In 2007 Lithuania mostly exported wheat – 60.5% of the total export in grain crops, and imported barley – 30.6% of the total import in grain crops. In 2007 Lithuania exported 23.4% of the total harvest of grain crops.

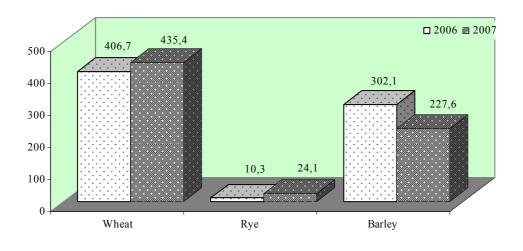


Fig. 2.19. Cereal export in 2006 and 2007, in thousand tons

Source: MoA Foreign trade data base (Data of the Department of Statistics to the GovRL).

Last year Lithuanian wheat was exported to Marocco (20.5%), Denmark (14.1%), Germany (13.8%), and Algeria (11.2%), and rye – to Germany (68.0%), barley – to Saudi Arabia (71.2%). Most of wheat was imported from Latvia (82.7%) and Russia (12.8%). Rye was imported from Russia (76.7%) and Germany (17.8&), barley – from Finland (33.9%) and Germany (29.1%).

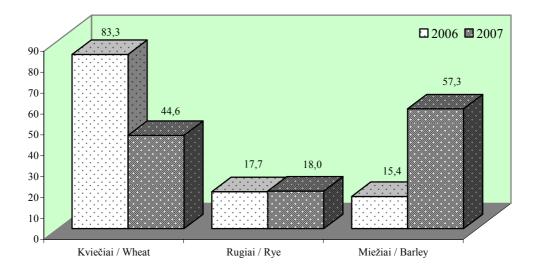


Fig. 2.20. Cereal imports in 2006 and 2007, in thousand tons

Source: MoA Foreign trade data base (Data of the Department of Statistics to the GovRL).

Average prices of exported grain crops in 2007 were by 2.2% higher than of imported. Prices on exported wheat, rye and barley were correspondingly higher by 16.6%, 15.5%. and 18.6% than of imported (Table 2.11). In comparison to 2006, prices of export and import in grain crops increased almost equally with the increased purchase prices on grain crops.

		Cereals		Wheat			Rye			Barley		
Indicators	2006	2007	change, %	2006	2007	change, %	2006	2007	change, %	2006	2007	change, %
Export	426	739	73,5	407	683	67,8	373	702	88,2	438	810	84,9
Import	598	723	20,9	488	586	20,1	453	608	34,2	482	683	41,7

Source: MoA Foreign trade data base (Data of the Department of Statistics to the GovRL).

Global export prices on grain crops in December 2007 increased approx. by 60% in comparison to December 2006, except the reduction of price on maize grain from Argentina by 0.2%.

**Market regulation measures and support.** After the accession to the EU similar grain market regulation measures are applied for Lithuania as for other EU member states: interventive purchase system, direct payments and export regulation measures.

The intervention purchase system gives the possibility to farmers to sell grain crops to intervention warehouses in the case of unfavourable situation on the market. In 2007 the situation on the market was advantageous for grain crop producers. Grains were sold at higher than intervention prices, therefore no supply for intervention purchase was offered.

Through the implementation of the EU CAP, where the decoupling of support from production outputs is among the key goals of the programme, principles of the disbursement of direct payments were changed starting 2007. The amount of support for applicants involved in farming and in the production of agricultural products in 2007 consisted of three parts: basic payment paid from the EU budget, additional national coupled with and decoupled from production direct payments.

10 November 2007 the Minister of Agriculture of the Republic of Lithuania approved the order No 3D-498 on the payment scheme for the declared in 2007 crop areas and energetic plants by way of one-time direct payments for crop areas (paid from the EU budget), and additional national payments (paid from the national budget).

In 2007 the number of registered applications for direct payments reached 197,9 thousands, and the declared crop area eligible for the support was 2,62 million ha. In 2007 the EU budget allocated for Lithuania amounted to LTL 509,8 millions for direct payments, and the additional national payments from the state budget reached LTL 411 million.

The basic, or the so called one-time payment, paid for the declared UAA and crop areas meeting the set requirements, was LTL/ha 198,23 in 2007, irrespective of the kinds of cultivated crops, and accounted for 40% of direct payments paid by the EU to the old member states. The total amount of direct payments for grain crops was calculated by adding the basic payment from the EU budget, the additional decoupled from production payments (LTL/ha 36,00) and the coupled to production payments (LTL/ha 140,50) from the state budget.

The EU grain import is regulated by applying import duties and import licences, and export - by applying export refund payments, i.e. by covering the difference between the production and global market price.

**Economic indicators.** Expenditure of agricultural companies for the production of one ton of grain in 2004 decreased by 9.3% in comparison to 2003, and since 2004 it started increasing (Fig. 2.21), and increased by 3.7% in 2005, and even by 60.3% in 2006. Such dramatic increase of expenditure per production unit was influenced by two major reasons: first, in 2006 expenditure increased by 4.9% as a result of the increasing prices on material-energetic resources and the rise in wages (expenditure on fertilizers increased by 10.5%, for seeds – by 10.9%, oil products and gas – by 5.8%, and wages – by 2.1%); second, the decreased yield of grain crops and the total harvest of cereals.



### Fig. 2.21. Average grain sale price and cost price in agricultural companies in 2003–2007, in Litas per ton

Sources: Data of the Department of Statistics to the GovRL; Bulletin of annual official statistic forms of agricultural companies and enterprises.

In 2005–2006 income from the sales of grain, payments excluded, did not cover the expenditure on production both in agricultural companies and in farmer farms. In 2007 grain was sold at a 63% higher price, and due to the reduced cost price per one ton of grain (according to the LIAE calculations) the production of grain became very profitable again. LIAE calculations indicate that the profitability of grain production, payments excluded, accounts for approx. 70%, and with payments – approx. 140%. Such rapid increase of the profitability in grain production in 2007 was influenced by the increased purchase price (63%) on grain, and the enlarged yield of grain crops by 1.5 times and the total grain harvest.

#### 32. Milk

Changes in prices on milk and dairy products in Lithuania, as in other EU member states, were influenced by global tendencies. In Lithuania such changes were to some extent delayed. Global prices on dairy products, due to the increased demand, started rapidly rising in spring 2007 and reached the peak by the end of summer, while at the end of the year decreased. In Lithuania prices started rising in summer and by the end of the year have reached the highest level.

Since July 2007 the EU refund payments for the export to third countries were withdrawn because of the increased global prices on dairy products. However, the profitability of Lithuanian dairy companies in 2007 has not decreased, on the contrary – went up.

Prices on milk and dairy products were gradually increasing over the period of 2003–2006, and since the middle of 2007 have sharply jumped up (Fig. 2.22). In December 2007 producer prices increased by 37%, as compared with the same month of 2006, including 23% on the domestic market, and 49% on the markets of export. Milk purchase price during the same period increased by 53%.

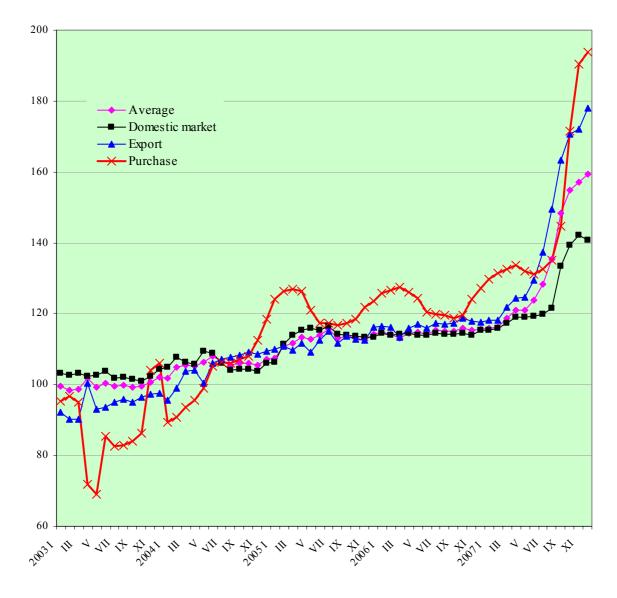


Fig. 2.22. Changes in producer prices of dairy products and milk purchase prices in 2003–2007 (2002 December = 100 %), in per cent

**Milk production and purchase.** Milk yield in 2007 amounted to 2004 thousand tons, including 67% of purchases for processing (Table 2.12). Milk production in 2007, as compared with 2006, was increasing more rapidly than the purchasing capacity for milk processing: production increased by 6%, and purchase – only by 4%. This tendency was contrary to the situation of 2003–2006 and emerged only in the second half of 2007. It was influenced by the boosted prices on dairy products since August, while purchase prices on raw milk had sharply increased only in October. Milk producers, in particular the small scale farmers, while waiting for the increase of prices, reduced the proportion of milk sold for processing and increased the share of directly sold milk, using more milk for own consumption.

Sources: Information about changes in producer prices for industrial production 2003–2007. – V.: Department of Statistics to the GovRL Purchases of agricultural production 2003–2007 – V.: Department of Statistics to the GovRL.

Major part of milk is purchased from farmers' and family farms, however, the comparative level of agricultural companies and enterprises is slightly increasing. In 2003 purchase of milk from the latter accounted for 15.4% (calculated into basic fatness) and in 2007 - for 17.9%.

		_				
Indicators	2003	2004	2005	2006	2007	2007, compared to 2003, %
Milk yield	1796,1	1848,7	1861,6	1891,3	2004,0	112
Milk purchase:						
natural fatness	1026,1	1140,0	1200,7	1296,1	1348,5*	131
basic fatness**	1226,0	1370,8	1432,8	1555,2	1629,8	133

Table 2.12. Milk production and purchase in 2003–2007, in thousand tons

\* 4,14% milk fat, 3,29% protein.

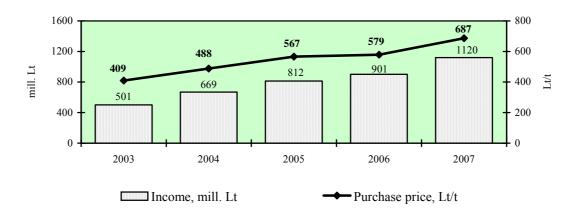
\*\* 3,4% milk fat, 3,0% protein.

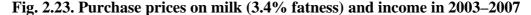
Sources: Economic and social development in Lithuania 2007, 1–12. – V.: Department of Statistics to the GovRL, 2008; Agriculture in Lithuania 2006. – V.: Department of Statistics to the GovRL, 2007.

In 2007 Lithuania imported 121,1 thousand tons of raw milk; 99% was imported from Latvia. It makes by 1.3% more than in 2006 and 3 times more than in 2005. The average price on the imported raw milk was LTL/t 1021, while the main flow of export in raw milk in 2007, as in 2006, was directed towards Poland, where 6,2 thousand tons of raw milk was exported at the average price LTL/t 1086.

The quality of purchased milk is constantly increasing. In 2003 only 79% of purchased milk was of the highest quality corresponding to the EU requirements of veterinary hygiene. In 2007 this percentage increased to 96%. Indicators of milk composition have not changed since 2003. The average fatness of purchased milk in 2007, as in previous years, was 4.1%, protein content – 3.3%.

The lowest purchase prices within the reference period were in 2003, when the Lithuanian raw milk market was still closed (Fig. 2.23).





Sources: Agriculture in Lithuania 2006. – V.: Department of Statistics to the GovRL, 2007; Purchases of agricultural production by 1 Jan 2008. – V.: Department of Statistics to the GovRL, 2008. After the accession to the EU, the competitive pressure of milk purchasers in neighbour countries forced Lithuanian milk processors to increase milk purchase prices, too. In 2004–2005, when Lithuania became a participant on the common market, the process of equalising prices started. In 2006 purchase prices increased as a result of structural changes in dairy industry. A bigger number of large dairy farms developed, to which milk processing companies paid a considerably higher purchase price. In September–December 2007 impact on the rise of purchase price on raw milk was made by the increased demand in dairy products and the corresponding demand in raw milk. In 2007 the average purchase price on milk increased by 19% in comparison to 2006, however, remained almost the lowest in the EU (except Romania) (Figure 2.24). One of the key reasons of this was the prevailing small-scale milk producers, who were paid a considerably lower price than the large-scale producers.

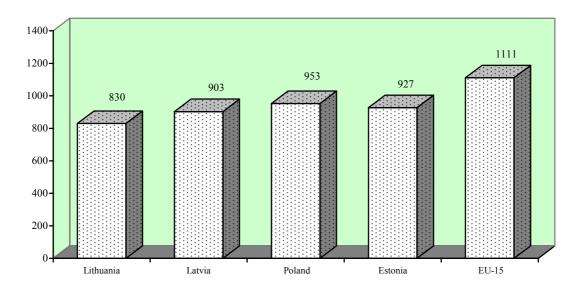


Fig. 2.24. Purchase price on milk (natural fatness) in Lithuania and some EU countries in 2007, in Litas per ton

Sources: Purchases of agricultural production by 1 Jan 2008. – V.: Department of Statistics to the GovRL, 2008; Internet access: www.csb.lv; www.milkprices.nl; www.stat.ee; www.stat.gov.pl

In 2003 the average milk farm in Lithuania was the smallest among the EU-25 member states and amounted to 2,3 cows, or 18% of the EU average. Before the end of 2007 the average milk farm increased by 43%, to 3,3 cows (Table 2.13). In 2003–2007 the number of milk farms keeping 10–19 cows has increased, reaching the number of 1314 within the reference period. The most rapid development was observed in farms keeping 30–49 cows (the number increased by 3.6 times), and the number of small farms keeping 1–2 cows has substantially decreased (by 38%). However, milk farms in Lithuania are rather small. Farms keeping more than 10 cows account only for 4.8% of milk producers in the country.

Marchana	2003-	-06-01	2004-	12-31*	2007-12-31*		
Number of cows per farm	number of farms			number of cows, thou.	number of farms	number of cows, thou.	
1–2	150904	200,8	138591	180,2	92932	114,9	
3–9	39521	162,5	38505	162,9	22219	100,5	
10–19	2210	27,8	2918	37,4	3524	46,3	
20–29	334	7,7	589	13,8	1036	24,6	
30–49	197	7,3	332	12,2	700	26,1	
50–99	110	7,3	166	11,1	361	24,1	
>=100	137	37,7	151	45,2	210	59,4	
Average		2,3		2,6		3,3	
Total	193413	451,1	181252	462,9	120982	395,9	

Table 2.13. Dairy farms by number of dairy cows in 2003–2007

\* All cows (beef cows excl.).

Sources: Numbers of livestock 2004. - V.: Department of Statistics to the GovRL, 2005; internet access: www.vic.lt

Average yielding capacity of cows in comparison to some other EU member states is considerably lower, as a result of prevailing small farms in the country still using old milk production technologies, and reaches about 70% of the EU average. However, the enlargement of farms allows feeding of cows in a more rational way and improving the selective work leading to the continuously increasing yielding capacity. In 2007 milk yield per cow reached 4708 tons, and in comparison to 2003 milk yield increased by 17% (Fig. 2.25). The average milk yield per cow under control during the 2006–2007 control period amounted to 5863 kg. About 50% of cows kept in Lithuania are under control.

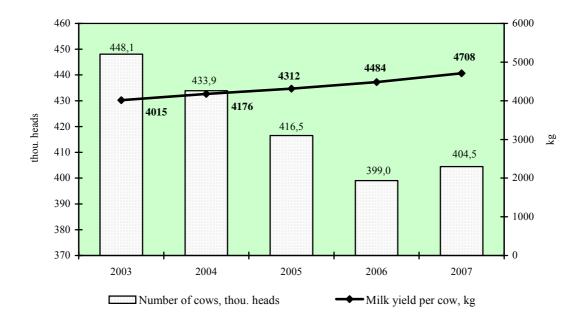


Fig. 2.25. Number of cows and milk yield per cow in 2003–2007 (at the end of the year)

Sources: Agriculture in Lithuania 2006. - V.: Department of Statistics to the GovRL, 2007; internet access: vvv.stat.gov.lt

Within the period of 2003–2006 the number of cows was decreasing on the average by 3.7% each year. In total, the number of cows decreased by 49,1 thousand heads during the abovementioned period, however, milk yield was higher due to the increasing yielding capacity of cows. In 2007 the situation has changed, in comparison to 2006, and the number of cows increased by 1.4%. The increase of the number of cows was stimulated by the profitable milk production at large specialised farms, the number of which continued to grow.

**Industry of dairy products.** Dominating position in the Lithuanian sector of milk processing is taken by the three milk processing groups of companies: AB "Rokiškio sūris", AB "Pieno žvaigždės", and AB "Žemaitijos pienas". In 2007 the income of these groups of companies made up approx. 83% of the total income from the sales in the milk processing sector. The said groups of companies are the major exporters of dairy products. Other 19 dairy companies are much smaller, however, some of them are also exporting a considerable proportion of their output.

All Lithuanian dairy companies and their subsidiaries have implemented the EU requirements on sanitary hygiene in food production and are entitled to export their production to the EU member states. 17 dairy companies have acquired licences for exporting their production to Russia. The greatest impact on the growth of production and trade in dairy products during the period of 2003–2007 was made by the accession of Lithuania to the EU in 2004, and the increasing global demand in dairy products and prices in 2007.

In 2004, the year of accession to the EU, sales in dairy products increased by 25%, and export – even by 41%; in 2007, as compared with 2006, – by 20% and 36% accordingly. The increasing global demand in dairy products conditioned that the share of export in the total income increased by 8 percentage points in 2007 – up to 65%. The rate of the growth of sales in the following year have slightly slowdowned. In total, sales increased by 82% in 2007, and in comparison to 2003 amounted to LTL 2158,7 million (Table 2.14).

	-				
Indicators	2003	2004	2005	2006	2007
Number of dairy enterprises and subsidiaries	36	37	37	35	34
Sales, mill. Lt	1188,8	1486,3	1616,9	1806,1	2158,7
share in total sales of food industry, %	22,9	26,3	25,6	25,3	24,0
Export revenue, mill. Lt	564,5	797,6	888,6	1027,5	1394,4
share in total export revenue, %	47	54	55	57	65

#### Table 2.14. Key indicators of the dairy industry in 2003–2007

Sources: Production of commodities 2003–2007. – V.: Department of Statistics to the GovRL; Industrial activity results 2008, 01. – V.: Department of Statistics to the GovRL, 2008;

MoA Foreign trade data base (Data of the Department of Statistics to the GovRL); internet access www.vet.lt

The main course in the specialization of milk industry in Lithuania is the production of cheese. These products prevail in the structure of export, too. However, the continuously increasing production of processed cheese consuming the largest proportion of raw milk, has decreased by 16% within the year of 2007. It was influenced by the

changing situation on the market: the considerably increased prices on dry dairy products and dairy preserves were more attractive for producers and sellers of these products. However, this tendency is not long-lasting, therefore Lithuanian milk processing companies are not in a hurry to change their specialisation.

In 2007, as compared with 2003, the production of all dairy products has increased, except for butter. Butter production indicator decreased because of the changes in the methodology of defining products to milk fats, introduced in 2006. Moreover, more and more milk fat is exported in the shape of sweet cream, subsequently the production of sweet cream increased 5 times. The production of fresh cheese and milk preserves has been also rapidly developing (Table 2.15).

Dairy products	2003	2004	2005	2006	2007	2007, compared to 2003, %
Drinking milk*	74,1	72,6	77,0	83,6	97,8	132
Cream	8,7	26,0*	37,5*	40,5	43,4	499
Kefir, sour milk	29,7	27,4	29,1	33,9	35,3	119
Yoghurt	15,5	15,2	14,6	18,1	17,3	112
Sour cream and mixes	21,2	26,8	27,2	25,1	26,6	125
Curd	11,1	12,1	13,4	17,7	21,5	194
Butter and other milk fats	17,6	15,6	16,1	11,8	12,3	70
Fresh cheese	6,4	7,6	7,7	20,8	22,6	353
Fat cheese	50,4	56,3	58,9	62,6	52,3	104
Dried milk and whey products	24,3	28,9	27,0	33,8	35,7	147
Ice cream	14,4	20,7*	19,0*	22,8*	24,3*	169
Lactose	5,1	4,9	6,4	7,4	7,5	147
Canned dairy products	7,7	9,6	11,7	14,8	22,0	286

#### Table 2.15. Production of main dairy products in 2003–2007, in thousand tons

\* Million litres.

Sources: Production of commodities 2005–2007. – V.: Department of Statistics to the GovRL;

Economic and social development in Lithuania 2003. - V.: Department of Statistics to the GovRL, 2003;

Statistical Yearbook of Lithuania 2004. – V.: Department of Statistics to the GovRL, 2004.

**Domestic market in dairy products.** Per capita consumption of milk and dairy products in milk equivalent during the period of 2003–2006 in Lithuania followed the tendency of reduction. In 2006 milk consumption was by 4.9% less than in 2003. Consumption is decreasing due to less consumption of milk produced in the farms for own needs. In 2006, as compared with 2005, the slightly increased prices on dairy products (by 1–5%) did not influence the consumption much, as the population income was rising quicker than the prices on dairy products. The disposable income in cash per household member in 2006 allowed purchasing by 44% more of butter or by 47% of milk than in 2005. The consumption of dairy products sold through the commercial system was increasing (table 2.16). The decreased indicator of butter consumption by 39% has developed as a result of the above mentioned new methodology on defining products to milk fats, introduced in 2006. In the second half of 2007 retail prices on

dairy products have dramatically jumped up. In December of 2007, as compared with December of 2006, the consumption price index of scalded milk increased by 28.5%, of canned milk – by 28.3%, of cheese and curds – by 30%, of butter – by 44%, and of other dairy products - by 29.1%.

Products	2003	2004	2005	2006	2006, compared to 2003, %						
Per capita consumption of milk and dairy products, kg											
Milk and dairy products (in milk equivalent)	287	296	283	273	95						
Cheese*	9,2	9,4	9,6	11,7	127						
Butter*	2,8	2,8	3,0	1,7	61						
Sour milk products*	18,9	19,5	20,9	24,0	127						
Milk*	22,2	21,5	21,9	24,0	108						
Per capita purchasing power of ave	erage cas	h disposa	ble incom	e per mo	nth						
Butter, kg	34	35	27	39	115						
Milk (2,5% fat content), l	237	265	249	366	154						
Average retail price of r	nilk and	dairy proc	lucts, Lt/l	ĸg							
Butter	11,45	12,14	15,67	15,70	137						
Milk (2,5% fat content), Lt/l	1,62	1,61	1,71	1,68	104						
Sour cream (20–30 % fat content)	6,10	6,66	5,87	6,14	101						
Curd 5–9% fat content)	9,60	10,13	10,51	9,86	103						

#### Table 2.16. Changes in consumption of milk and dairy products and factors influencing the consumption in 2003–2006

\* Own-produced and consumed products and direct sales excluded.

Sources: Production of commodities 2003–2006. – V.: Department of Statistics to the GovRL;

Agriculture in Lithuania 2006. – V.: Department of Statistics to the GovRL, 2007;

Household income and expenditure in 2003–2005. - V.: Department of Statistics to the GovRL;

Household budget 2006. - V .: Department of Statistics to the GovRL, 2007; Consumer and producer price indices 2003–2007, I-IV. - V.: Department of Statistics to the GovRL;

MoA Foreign trade data base (Data of the Department of Statistics to the GovRL).

The total volume of milk consumption in Lithuania was influenced by the reduction of milk consumption per capita and by the decreasing number of population. In 2006 milk consumption decreased by 6.8% in comparison to 2006, while 6.9% less milk was consumed by the population, and 6.3% less for other purposes.

Major part of dairy products sold on the domestic market are produced in Lithuania. However, the proportion of import is increasing, in particular after the accession to the EU. In 2003 the imported dairy products accounted for 0.01% of all sold dairy products, and in 2007 – about 16%. Cheese and yoghurts dominate in the structure of import. Common market promoted raw milk import, too. In 2007 milk import accounted for 7.7% of the total milk resources in kind, by 6.3 per cent points more than in 2003. In total import of milk and dairy products in 2007 amounted to LTL 304,7 million, including 48% of import value from raw milk.

Producer prices on dairy products on the domestic market in December 2007 increased by 41% in comparison to December 2002. Producer prices were continuously increasing during the entire period of 2003–2007, but have mostly increased in 2005 and 2007. The first strong impetus for the increase of prices on dairy products was the accession of Lithuania to the EU. During the period of accession Lithuanian production prices on dairy products were lower than in the EU-15, subsequently, a rapid equalization of prices took place in the common economic area in 2005, leading to the rise of prices on the domestic market by 8.2%. The second jump of prices on milk and dairy products took place in 2007 and was influenced by the global boost of prices. In December 2007 production prices on dairy products increased by 23% on the domestic market in comparison to December 2006.

**Export of dairy products.** Balance of the Lithuanian foreign trade in milk and dairy products during the entire period of 2003–2007 was positive. In 2007 the proportions of export and import remained unchanged in comparison to 2006: export exceeded import 4.6 times. However, the growth rate of import exceeded that of export: import increased by 68% within the year 2007, and export – by 16%, while during the entire period of 2003–2007 by 7.2 and 2.5 times correspondingly.

In 2007 export of dairy products amounted to LTL 1394,4 million. Export was mostly increasing in 2004 and 2007: by 41% and 36% correspondingly, as compared with the previous years. Such processes were influenced by the common EU market opened for Lithuania in 2004 and the growth of the global demand, including the related increase of export prices. Almost half of the value of the exported dairy products were created by cheese and curds. In 2007 the proportion of these products has slightly decreased due to the changes in demand: in 2006 cheese and curds accounted for 56% of export, and in 2007 – only for 46%. A considerable part in the structure of dairy products in 2007 was taken by non-concentrated milk and cream (20%), and milk powder (12.5%). In 2007 export of non-concentrated milk, cream and whey products has increased mostly in comparison to 2003.

CN code	Products	2003	2004	2005	2006	2007	2007, compared to 2003, %
0401	Milk & cream, non-concentrated	30,7	105,2	137,0	146,9	275,3	9 k.
0402	Milk & cream, concentrated	94,0	110,3	105,3	110,3	233,1	248
040210	Skimmed milk powder	50,6	65,1	71,4	79,2	170,8	338
040221	Whole milk powder	23,4	28,8	2,6	1,3	3,5	15
040291	Sugar free condensed milk	1,1	2,5	9,9	6,6	28,5	26 k.
040299	Condensed milk with sugar	18,9	13,9	21,2	23,2	30,0	159
0403	Fermented or acidified milk & cream	6,2	11,0	8,0	9,9	13,8	223
040310	Yogurt	1,0	1,9	1,2	1,8	2,3	230
0404	Whey & products consisting of natural milk constituents	17,5	40,7	53,9	58,1	90,6	5 k.
0405	Butter & other milk fats & oils, dairy spreads	34,6	50,9	66,4	86,1	75,8	219
0406	Curd & cheese	342,5	441,5	477,7	570,9	645,8	189

Table 2.17. Net export of dairy products in 2003–2007, in million Litas

CN code	Products	2003	2004	2005	2006	2007	2007, compared to 2003, %
040610	Fresh cheese & curd	26,9	101,6	120,7	136,8	199,3	7,4 k.
040690	Fat cheese	312,1	336,8	354,0	431,2	443,9	142
210500	Ice cream	25,1	19,5	22,9	26,2	30,1	120
350110	Casein	6,8	12,3	8,3	3,3	0,9	13
170211-19	9 Milk sugar	7,2	6,3	9,0	15,8	29,1	4 k.

Sources: MoA Foreign trade data base (Data of the Department of Statistics to the GovRL).

In recent years major countries to which Lithuanian dairy products were exported are the EU member states (Germany, Italy, Poland and Latvia), and Russia. The opening of the EU single market increased the proportion of export into the EU member states from 40% in 2003 to 65% in 2007. Due to the fall of the rate of the US dollar and the fact that the EU did not support the export to this country, Lithuania reduced the proportion of dairy products exported to the USA from 29% to 1%. Support of the export in dairy products to Russia, on the contrary, has increased export to Russia from 20% to 29% (Fig. 2.26). Subsequently, the main tendency in export was the increasing supply of dairy products to Russia and the correspondingly increasing proportion in the total structure of export in dairy products.

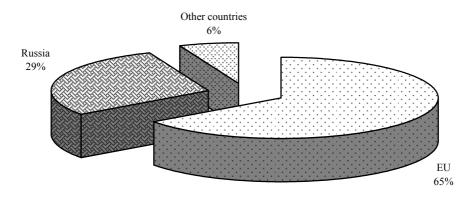


Fig. 2.26. Structure of dairy products export by country groups in 2007

Source: MoA Foreign trade data base (Data of the Department of Statistics to the GovRL).

In 2007 the global boost of the demand in dairy products and the withdrawal of export refund payments had influenced the changes in the geographical structure of export in dairy products, however, the EU member states remained among the major partners for export. In 2007, as compared with 2006, export to the EU member states increased by 5.3 per cent point, and decreased by 5.9 per cent point to Russia. Actually this is an opposite development tendency of the structure of export than in 2005–2006, when an increasing proportion of dairy products was exported to Russia. Most of dairy products exported to the EU member states were delivered to Germany – 28%, Italy – 20%, Poland – 14%, and Latvia – 7%. Most of cheese production was exported to Italy, Latvia and Russia, and cream, skimmed milk and skimmed milk powder – to Germany and Poland.

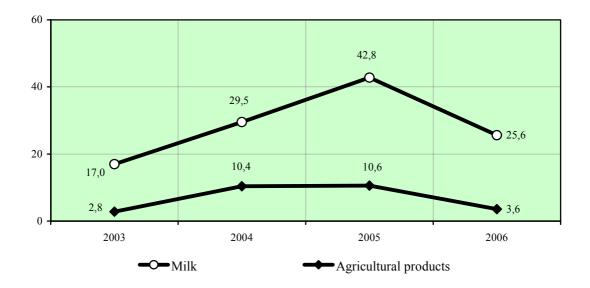
**Market regulation measures.** Before the accession to the EU, support to milk producers was allocated from the national budget through direct payments for cows (in 2003 – LTL 52 million, and in 2004 until 30 April – LTL 48.3 million). Dairy companies were awarded the amount of LTL 56 million in 2003 for maintaining prices on raw milk. After the accession to the EU single market organisational measures on milk and dairy products and milk quota system is applied in Lithuania as well.

In 2004 the national milk production quota was approved for Lithuania, in total, 1647 thousand tons: 1280 thousand tons on sales for processing, and 367 thousand tons for direct consumption. Since the quota period of 2006–2007 (quota year starts on 1 April and continues until 31 March of the following year) it has been increased by 57,9 thousand tons. Quota on sales for processing of 2004–2005 was fulfilled by 86.6%, of 2005–2006 by 82.2%, of 2006–2007 by 85.5%, and of 2007–2008 by 85.4%. Quota on direct consumption of 2004–2005 was fulfilled by 19.1%, of 2005–2006 by 44.25, and of 2006–2007 by 34%. Direct payments for the quota of 2004–2005 amounted to LTL 50,7 million (for the sold quota milk), of 2005–2006 to LTL 55,9 million (LTL 48 per ton of quota milk).

Export refund compensations were the most popular among measures on common market regulation organisation. In 2004 milk processing companies received LTL 1,4 million of export refund payments for the export of dairy products to third countries, in 2005 – LTL 47,3 million, in 2006 – LTL 73,9 million, in 2007 – LTL 71,6 million. Following the increased global prices on dairy products the EU export refund payments for the export of dairy products to third countries were withdrawn since July 2007. Other common market organisational measures on milk and dairy products were hardly used, and intervention purchases of butter and skimmed milk powder were not administered at all, as there were no dairy companies willing to sell their production to intervention warehouses.

**Economic indicators of the dairy industry.** In 2003–2006 milk production at specialized dairy farms was profitable. According to the data of farm accountancy data network (FADN) on respondent farmer farms, main income of which was income from milk production, the average profitability in 2003 accounted for 38.7%, including subsidies, and 22% without subsidies. In 2006 the profitability has increased up to 72.2% with subsidies and 26.4% without subsidies. Milk production was profitable also for agricultural companies and enterprises: in 2003–2006 the profitability fluctuated from 17% to 43% (subsidies excluded). Milk production in agricultural companies and enterprises was among the most profitable branches of the economy (Fig. 2.27).

In 2003 the average cost price of sold dairy production in agricultural partnerships and enterprises was LTL/t 455, calculated by the reckoned weight, and in 2006 increased up to LTL/t 553, i.e. by 21.5%. The cost price of liquid milk increased by 24.2%.



# Fig. 2.27. Profitability of milk and all agricultural products in agricultural companies and enterprises in 2003–2006, in per cent

Sources: Bulletin of annual official statistic forms of agricultural companies and enterprises.2003–2006.

Activities of the four major dairy companies of Lithuania enrolled in the list of the Vilnius exchange of securities is referred as profitable. The profitability of the companies fluctuated from 3.1% to 5.3% during the period of 2003–2007.

Indicator	2003	2004	2005	2006	2007
Net profitability	3,3	4,9	3,6	3,1	5,3

Source: internet access: www.lt.omxgroup.com

In 2004–2007 the profitability was greatly influenced by the possibility to sell dairy products on the EU single market and by the EU export refund payments for the export of dairy products to third countries. In 2007 the profitability increased through the rise of global prices on dairy products. A positive impact was made by the EU export refund payments yet. Although the EU export refund payments for the export of dairy products to third countries were withdrawn from July of 2007, companies still continued receiving payments for the production exported during previous periods.

#### **3.3. Meat**

In the structure of food production and consumption meat sector remains rather important. In the structure of the total agricultural production meat production accounts for 29%, and in the population consumption basket – approx. 7%. Pork is among the most popular meat products on the domestic market (51%), and less poultry (25%). In the second half of 2007 the sharp rise of food prices influenced prices on meat as well, though animal purchase prices during the entire year 2007 were less than in 2006. Rise

of prices on poultry may be justified by the dramatically increased prices on feedstuffs, while the rise of prices (wholesale and retail) on beef and pork is related to the growth of costs of processing and trade. Nevertheless the domestic consumption of meat did not decrease. Within the year 2007 meat export increased by 36%. Balance of foreign trade in meat products and animals was positive.

**Livestock breeding.** Pigs, cattle and poultry are mostly raised in Lithuania. Within the period of 2003–2007 the number of poultry and sheep has increased, and the number of cows and pigs – decreased.

Kind of animals	2003	2004	2005	2006	2007
Cattle	812,1	792,0	800,3	838,8	787,9
of which dairy cows	448,1	433,9	416,5	399,0	404,5
Pigs	1057,4	1073,3	1114,7	1127,1	923,2
Poultry	8066,7	8419,4	9397,1	9439,9	9874,8
Sheep	16,9	22,1	29,2	36,6	43,3

Table 2.19. Number of livestock and poultry in 2003–2007 (at the end of the year)

Sources: Numner of livestock 2008. - V.: Department of Statistics to the GovRL, 2008;

Agriculture in Lithuania 2006. – V.: Department of Statistics to the GovRL, 2007.

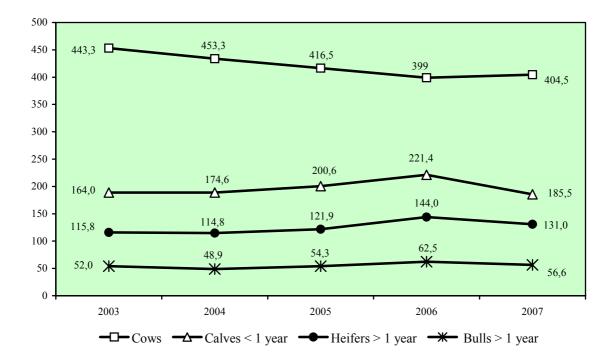
Farmers' and family farms raise 87% of cattle, while 80% of poultry and 61% of pigs are raised at agricultural companies and enterprises. Most of cattle, cows and pigs are raised in the county of Šiauliai, sheep – in the Utena county, cows – in the districts of Šakiai, Kelmė and Raseiniai, pigs – in the farms of Panevėžys, Jonava and Joniškis districts.

Breeding of sheep, goats, rabbits and other exotic animals is not popular in Lithuania. Farmers' and family farms keep 97% of sheep and goats, including all rabbits raised in the country.

**Cattle.** According to the data of the Department of Statistics to the GovRL, 404,5 thousand of dairy cows were kept in Lithuania by the end of 2007 - 51% of the total cattle herd (Fig. 2.28). The most popular breeds of cattle currently raised in Lithuania are the Lithuanian black-and-white (73%) and the Lithuanian red (23%). Beef and cross-bread cattle account only for 3% in Lithuania.

By the end of 2007 the number of pedigree heifers and calves was 213,1 thousand, and 19,7 thousand of bulls. Young cattle for meat (calves, bulls and heifers for slaughter) by the end of the year accounted only for 18% of the total cattle herd (decreased by 18% in a year). The largest proportion among young cattle consisted of calves under 1 year – 51%, and bulls from 1 to 2 years – 35%. The number of calves and heifers under 1 year decreased most – 16% in a year.

The number of beef and cross-bread cattle within the three previous years (2004–2007) has increased. The number of sucker cows increased within this period almost by 2.8 times, up to 13,3 thousand heads, however, cows of beef breeds account only for 3% of the total cattle herd.





Sources: Number of livestock 2004–2008. – V.: Department of Statistics to the GovRL.

By the end of 2007 cattle was raised in 139 thousand farms, i.e. by 15% less than a year ago. On the average 5.5 heads of cattle were raised per farm (in the EU-25 – approx. 30 heads). More than half of farms (61%) kept 1–2 heads of cattle (Table 2.20); on slightly larger farms (3–10 heads) 16% of the total number of cattle was raised. Farms raising 51 and more heads of cattle accounted only for 1.1%, however, almost one third of the total number of cattle was raised there. Farms raising beef cattle are even smaller – only 3 heads of cattle per farm.

Number of cattle per farm	Ca	ttle	Beef	cattle
	number of farms	number of cattle	number of farms	number of cattle
1–2	85173	115379	23118	29222
3–5	29548	109018	5673	20758
6–10	12676	95007	1807	13329
11–20	6705	96196	652	9240
21–30	1994	49367	164	4044
31–50	1521	58854	138	5284
51-100	987	68343	74	5117
101-150	240	28861	26	3116
>=151	337	150237	16	6321
Iš viso	139181	771262	31668	96431
Average		5,5		3,0

 Table 2.20. Farms by number of cattle and beef cattle in 2007 (at the end of the year)

Source: Ddata of the Agricultural Information and Rural business centre..

In 2007 even 43% of calves were exported. This was the main reason for the decreasing number of heifers and bulls.

Little numbers of beef cattle breeds are raised in Lithuania, and the quality of young dairy cattle carcass is worse. It is indicated in the findings of the carcass assessment carried out in 2007: class E, U and R – 8%, class O – 47%, and class P – 45%. In the group of young bulls most of cattle purchase (56%) was in class O, in the group of cows (72%) – in class P, heifers (63%) – in class O, while in the EU carcass in class U and R are prevailing. For example, in 2005 in Germany carcass of bulls in class U and R accounted for 62% (in Lithuania in 2007 – 13%), and of cows in class U and R – 24% (in Lithuania in 2007 – 1.1%). Poor meat quality had a negative impact on the prices in the domestic market and reduced the possibilities for export. For the improvement of carcass meat quality it is necessary to increase the herd of beef cattle.

**Pigs.** According to the data of the Department of Statistics to GovRL, by the end of 2007 about 923,2 thousand of pigs were raised on the farms of Lithuania. This accounts for 18% less than in 2006 (Table 2.21). During the period of 2003–2007 the number of pigs in farmers' farms decreased by 40%, and in agricultural companies and enterprises increased by 23%. The year 2007 was loss-making for pig producers, subsequently pig herds started decreasing.

Groups of pigs	2003	2004	2005	2006	2007
Piglets	443,6	462	494,6	510,5	396,9
Pigs for fattening	517,4	513,6	519,4	517,1	443,4
Breeding pigs	96,4	97,7	100,1	99,5	82,9
of which mated sows	64,0	65,5	64,4	66,6	49,1
Total	1057,4	1073,3	1114,1	1127,1	923,2
In agricultural companies and enterprises, %	43,3	45,2	49,2	54,1	61,2

Table 2.21. The number of pigs in 2003–2007 (at the end of the year), in thousands

Source: Data of the Department of Statistics to the GovRL.

The quality of pig carcass is annually increasing (Table 2.22). In 2007, as compared with 2004, the comparative weight of the quality of class S and E carcass muscularity increased by 14 per cent point. According to the quality of purchased carcass Lithuania is not behind other EU member states.

-				-
Class	2004	2005	2006	2007
S	15	20	22	30
Е	47	46	47	46
U	27	25	23	19
R	9	8	7	4
0	2	1	1	1
Р	0	0	0	0
Total	100	100	100	100

Table 2.22. Pig carcass quality by SEUROP conformation classes in 2004–2007, in per cent

Source: Data of the state enerprise "Livestock productivity control".

**Sheep and goats.** According to the data of the Agricultural Information and Rural Business Centre, by the end of 2007 about 20,3 thousand heads of sheep and 6,8 thousand of goats were raised in 3,5 thousand farms, including 22,2 thousand of ewes and 3,3 thousand of yeanling goats. Within the period of 2004–2007 the number of sheep increased by 44%, and the number of goats has not changed. Sheep breeding is not a very popular branch of agriculture in Lithuania.

Most of sheep and goat meat is produced and consumed by the EU member states and the New Zealand. The EU member states themselves produce only small quantities of mutton, therefore one fifth is imported. Per capita consumption of this kind of meat per year is on the average 2.8 kg, and in Lithuania 14 times less. It was expected that after the accession to the EU sheep breeding will expand in Lithuania. The EU grants direct payments for raising ewes, and the state budget provides support to acquire pedigree sheep. However, the expected changes have not happened. Financial support to farms for the acquisition of new sheep breeds is insufficient, and most of sheep is kept in small farms (Fig. 2.23), where slaughtering equipment is not available, moreover, and the limited demand in mutton hinders the development of this sector. Besides, farmers themselves lack the initiative and activeness for promoting their production and making use of other marketing measures.

		Sheep	farms			Goat	farms	
Number per farm	20	004	20	007	2004		2007	
	farms	sheep	farms	sheep	farms	goats	farms	goats
1–2	1087	1533	1533	2187	3183	4034	2972	3787
3–5	597	2247	814	3052	410	1413	429	1507
6–10	393	3073	452	3409	46	336	75	550
11–20	290	4206	318	4744	14	192	11	176
21–30	151	3749	157	3903	3	70	1	24
31–50	95	3587	144	5584	2	75	2	70
51-100	58	3946	93	6482	1	65	1	72
101-150	15	1751	26	3161	2	263	0	0
>=151	23	10774	36	17808	1	362	3	654
Total	2709	34866	3573	50330	3662	6810	3494	6840
Average		13		14		2		2

Table 2.23. Farms by number of sheep and goat in 2004 and 2007 (at the end of the year)

Source: Data of the Agricultural Information and Rural Business Centre.

In 2007 the number of slaughtered sheep reached 29,2 thousand and of goats - 20 thousand, producing 0,5 thousand tons of mutton and 0,3 thousand tons of goat meat. Mutton and goat meat account only for 0.4% of the total meat amount produced in the country.

**Poultry.** By the end of 2007 the number of various kinds of poultry raised in the country amounted to 9,9 million, including chicken -98%, turkey -1.1%, geese -0.4%, and ducks -0.3%. The number of poultry increased by 22% during the period of 2003 -2007, including chicken - by 23%; and the number of geese and ducks has decreased.

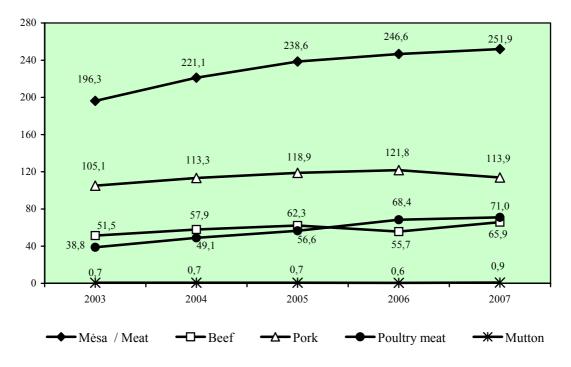
Kind of poultry	2003	2004	2005	2006	2007
Chicken	7867,9	8227,8	9201,3	9233,8	9692,8
layers	3964,8	4219,3	4377,3	4385,6	4309,6
broilers	3903,1	4008,5	3024,8	3636,5	4289,8
Turkey	98,4	93,4	103,0	116,5	104,4
Goose	52,4	51,5	47,9	44,2	36,9
Ducks	46,8	45,5	41,0	35,8	34,3
Other	1,2	1,2	3,9	9,6	6,4
Total	8066,7	8419,4	9397,1	9439,9	9874,8

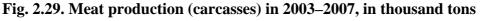
Table 2.24. Number of poultry by kind in 2003–2007 (at the end of the year), in thouand heads

Source: Data of the Department of Statistics to the GovRL.

The largest poultry producers in the world are the USA, China, Brazil and the EU. Among the EU member states France and the United Kingdom slaughter most of the poultry in the region.

**Meat production.** In total, meat production in 2007 amounted to 251,9 thousand tons of animal and poultry carcass and meat offal, accounting for 2.1% more than in 2006 (Fig. 2.29).



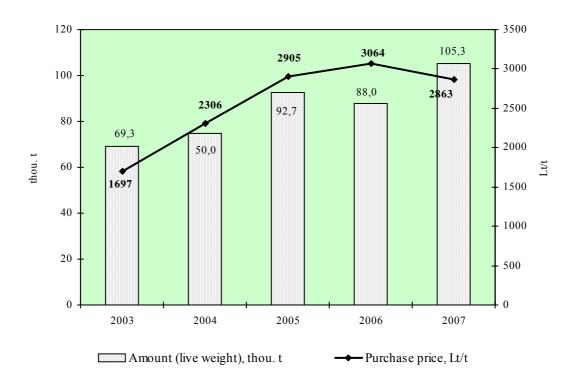


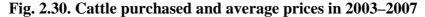
Source: Agriculture in Lithuania 2006. - V.: Department of Statistics to the GovRL, 2007.

The structure of meat produced in 2007 by major types is the following: pork - 45%, poultry - 28%, and beef - 26%. Production volume of beef and poultry have slightly increased, and of pork - decreased.

The volume of purchased livestock and poultry in 2007 amounted to 270,6 thousand tons (live weight), accounting for 6% more than in 2006. Slaughterhouses and meat processing enterprises purchased 216,9 thousand tons of cattle (by 15% more than in 2006), producing 50,9 thousand tons of carcass. Mostly bulls were purchased (42%), the average carcass weight of which (254 kg) increased by 5% per year, however, remained rather low (e.g. in Germany – 366 kg). Purchase of cows accounted for 36% (20% of the total herd of cows), with the average carcass weight 233 kg. Purchase of calves for slaughtering is decreasing every year because of the increasing export of calves. In 2007 only 5,5 thousand heads of calves were purchased, almost by 4 times less than in 2003.

The average purchase price for cattle in 2007 was by 7% lower than in 2006 (Fig. 2.30), for bulls – by 10%, and for cows and heifers – by 1%.





Sources: Agriculture in Lithuania 2006. – V.: Department of Statistics to the GovRL, 2007; Purchase of agricultural production 01-01-2008. – V.: Department of Statistics to the GovRL, 2008.

Purchase prices for cattle in Lithuania are significantly lower than the EU average (Table 2.25). Lithuania is by 10–20% behind Poland purchase prices for cattle, and approx. 30% behind the EU average.

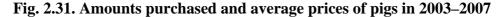
Group of cattle	Pr	ice, Lt/100 l	Lithuania compared to, %		
Group of caule	Lithuania	EU	Poland	EU	Poland
Young bulls (average)	696,8	1071,4	797,6	65	87
Young bulls (O2)	702,3	908,1	771,7	77	91
Cows (average)	526,2	756,9	629,1	70	84
Cows (P2)	521,4	615,6	543,1	85	96
Heifers (average)	572,5	1061,7	714,0	54	80
Heifers (O3)	586,3	860,1	704,3	68	83

Table 2.25. Purchase prices for	cattle in Lithuania, Poland and the EU countries
(in week 47 of 2007)	

Source: Eurostat data.

Slaughterhouses and meat processing enterprises have purchased 62% (788 thousand) of pigs raised in all farms of the country in 2007, at the average purchase price of LTL/t 3602, by 2% lower than in 2006 (Fig. 2.31).





Sources: Agriculture in Lithuania 2006. – V.: Department of Statistics to the GovRL, 2007; Purchase of agricultural production 01-01-2008. – V.: Department of Statistics to the GovRL, 2008.

Purchase price for pigs in Lithuania (class E - 485.8 LTL/100 kg) was by 4% higher than the EU average, and by 9% higher than in Poland (Fig. 2.32). By the end of 2007 prices have mostly increased in Poland, Lithuania, Latvia and Finland.

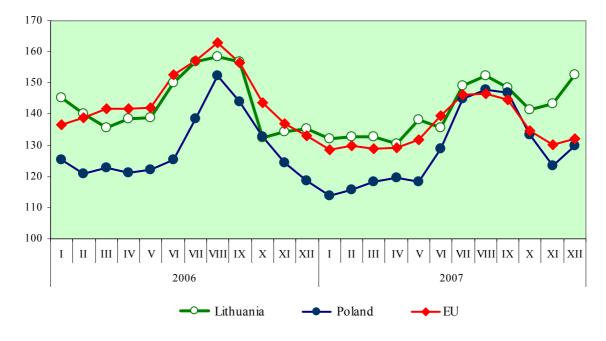
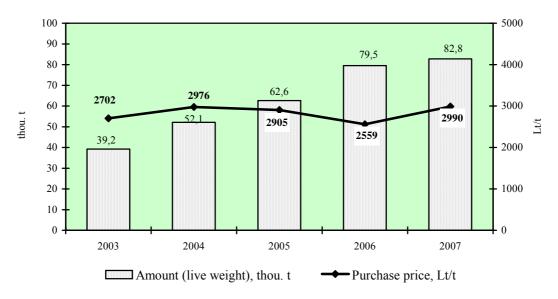


Fig. 2.32. Purchase prices on pigs in Lithuania, Poland and the EU in 2006 and 2007, in Euros per 100 kg

Source: Eurostat data.

About 39,4 million heads of poultry was slaughtered in 2007 (by 14% more than in 2006), including 34,5 million of broiler chicken. The average purchase price for poultry increased by 17% in 2007 in comparison to 2006, and the average purchase price for poultry carcass was the highest within the period of 2003–2007. The increasing price of grain and the growing demand in poultry meat influenced in the main the rise of prices on poultry meat.





Sources: Agriculture in Lithuania 2006. – V.: Department of Statistics to the GovRL, 2007; Purchase of agricultural production 01-01-2008. – V.: Department of Statistics to the GovRL, 2008. The price on chicken meat in Lithuania is among the lowest in the EU. Lithuanian market is greatly influenced by the import of chicken from Poland, the price of which is by one fourth lower.

In 2007 about 29,2 thousand of sheep and 20 thousand of goats were raised and slaughtered in Lithuania. However, only about 5% of animals were purchased by slaughterhouses, as they haven't got the slaughtering equipment meeting the EU requirements. Moreover, they receive only few orders from the trade. The average purchase price for live weight sheep and goats in 2007 was by 5% lower than in 2006.

**Processing.** Purchased livestock and poultry is slaughtered and processed into meat products by 185 meat processing enterprises and 20 specialised companies: 15 of poultry, 4 of game, and 1 of rabbits. 159 meat processing enterprises and slaughterhouses are entitled to export their production to the EU member states, while the right to export to Russia, covering 30% of the total meat export of the country, is granted to 21 company, including 5 of poultry. In 2007 Lithuanian meat processing enterprises produced from the purchased livestock and imported meat approx. 183,1 thousand tons of meat and meat products, by 12% more than in 2006 (Table 2.26). Production of pork and poultry was rapidly increasing, while of beef – decreasing.

Product	2003	2004	2005	2006	2007*
Meat and meat offal	106,3	116,9	155,7	163,8	183,1
Beef and veel	31,7	31,4	44,8	41,8	43,9
Pork	46,1	48,1	64,3	63,4	67,6
Poultry meat	21,2	27,6	35,8	44,4	51,7
Sausages and smoked products	59,3	73,5	76,3	76,7	71,0

Table 2.26. Production of main meat products in 2003–2007, in thousand tons

\* LIAE calculations.

Source: Agriculture in Lithuania 2006. – V.: Department of Statistics to the GovRL, 2007.

**Domestic market.** The dynamics of meat prices in all chains of participants on the market is best reflected by the comparison of price indices (Table 2.27). Price indices demonstrate that the level of purchase prices in 2006 have been only reached in October 2007, while on the commercial market they were higher already at the beginning of the year, and exceeded purchase prices through the entire year 2007 almost by 12%.

-			-									
Price						Mo	nths					
Flice	Ι	II	III	IV	V	VI	VII	VIII	IX	Х	XI	XII
Cattle purchase price	-10,8	-15,3	-15,1	-15,7	-14,4	-14,1	-7,8	-0,9	-8,5	2,6	8,0	17,0
Pigs purchase price	-10,9	-8,1	-3,4	-5,9	-0,7	-9,3	-4,2	-4,4	-4,5	7,2	8,9	14,8
Meat and meat products wholesale price	0,2	0,3	1,6	2,0	2,9	1,7	3,1	5,0	5,1	7,4	8,1	11,5
Meat and meat products retail price	4,8	4,6	4,5	5,8	5,8	6,0	7,9	8,9	9,9	11,7	10,9	11,8

Table 2.27. The indices of purchase prices for cattle and pigs and of wholesale and retail prices on meat products in 2007 (2006 = 100%)

Sources: Dta of the Department of Statistics to the GovRL & of the Agricultural and Food Market Information System.

In 2003 per capita consumption per year in Lithuania amounted to 59 kg of meat and meat products (including category I and II meat offal), and in 2007 - 78 kg (Table 2.28). The EU-15 per capita consumption of meat and meat products was by 20% higher – 98 kg.

Meat by kind	2003	2004	2005	2006	2007*
Meat, total	59	70	73	72	78
of which:					
beef	12,9	10,6	8,0	8	8
pork	27,3	35,9	40,1	40	42
poultry	11,6	17,4	21,8	22	25
meat offal, category I and II		5,7	2,3	2,4	3,0

Table 2.28. Per capita consumption of meat products in 2003–2007, in kilograms

\* LIAE calculations.

Source: Agriculture in Lithuania 2006. - V.: Department of Statistics to the GovRL, 2007.

Most popular kind of meat in Lithuania is pork. In 2007 per capita consumption of pork was 42 kg, quite close to the EU average – 43 kg. Most of pork is consumed in Spain (61 kg), Denmark (57 kg), and Austria (56 kg). The consumption of poultry in Lithuania is almost by half less than of pork. In comparison to the EU member states (the average is 23 kg) the consumption of poultry is quite similar. Most of poultry is consumed in Spain and Ireland (33 kg in each) and in Portugal (29,5 kg). Beef consumption in Lithuania amounts only to 8 kg. In some new EU member states, as Poland, Check Republic, Hungary and Slovakia, beef consumption is decreasing as in Lithuania, due to the rapidly increasing prices on beef under the conditions of the single market. Most of beef is consumed in France (28 kg), Denmark (27 kg) and Italy (25 kg).

According to the preliminary meat balance, Lithuania has beef provisions in stock by 170%, pork – by 79%, and poultry – by 78%.

Country	Beef	Pork	Poultry
France	106	107	125
Germany	124	97	87
United Kingdom	73	43	89
Netherlands	116	234	185
Ireland	701	157	90
Denmark	86	606	150
Sweden	59	82	80
Finland	89	118	106
Poland	229	109	112
Lithuania*	170	79	78
Latvia	64	64	46
EU-25	99	108	103

Table 2.29.The level of stock provisions of meat in the selected EU countries in 2006, in per cent

\* 2007 LIAE calculations.

Source: Vieh und fleisch, ZMP, 2006.

**Foreign trade.** In 2006 some 60% of meat and live animals were exported to the EU member states. Meat foreign trade balance of Lithuania in 2006 has become positive. In 2003 meat import exceeded export almost by 4 times, and in 2007 export exceeded import by 11%. Export of live animals exceeded import by 3 times, and accountsed for almost one third of the total export in the meat sector.

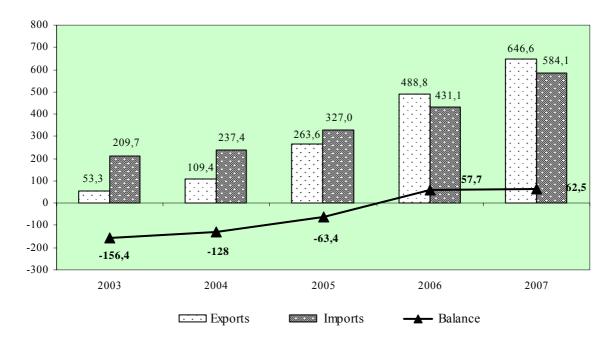


Fig. 2.34. Meat foreign trade balance in 2003–2007, in million Litas

Source: MoA Foreign trade data base (Data of the Department of Statistics to the GovRL).

Mostly beef was exported (Table 2.30). Within the period of 2003–2006 the volume of export increased 5 times, and continued increasing in particular during the two previous years. About 50% of beef slaughtered and processed at meat processing enterprises are exported. Most of beef is supplied to Russia, Germany and the Netherlands. For the export of beef to third countries, accounting for 46% of the total export, export refund payments in the amount of LTL 37,2 million were disbursed in 2006, by 14% more than in 2005.

Kind of meat	2003	2004	2005	2006	2007
Meat, total	10,5	20,6	42,2	56,1	52,6
of which:					
beef	4,9	11,0	24,2	27,0	30,6
pork	2,1	2,5	3,0	6,3	4,8
poultry	3,2	6,4	13,4	17,4	17,2

#### Table 2.30. Meat export by kind in 2003–2007, in thousand tons

Sources: Agriculture in Lithuania 2006. – V.: Department of Statistics to the GovRL, 2007; MoA Foreign trade data base (Data of the Department of Statistics to the GovRL).

Export of calves was rapidly increasing, and in 2007 the number of exported calves amounted to 148,2 thousand heads, approx. 43% of the total number of calves, by one fourth more than in 2006. Almost 75% of calves were supplied to Spain, the Netherlands and Israel. Export value of calves accounted for 16% of the total meat sector export, while export of grown cattle is not large – only about 0.6% of the total number of sold cattle. According to the data of the Department of Statistics to the GovRL, beef export in 2007 increased by 32%, as compared with 2006, and was mostly supplied to Russia (39%), the Netherlands (19%), Germany and Italy (13% each). About 60% of beef is exported to the EU member states.

For the export of beef to third countries, export refund payments in the amount of LTL 23,7 million were disbursed in 2007, by one third less than in 2006. Export to third countries was increasing, however, payments reduced due to lower tariffs on subsidies.

Within the year 2007 import of beef was by 43% higher, however, the volume of import in comparison to the export, was small (5 thousand tons). As much as 73% of beef was imported from Latvia.

Export of pork is rather small – some 4,8 thousand tons, but the supply of live pigs to Russia amounted to LTL 61,8 million, and to Poland – for LTL 12,6 million.

Export of poultry increased by 5.4 times during 200 2007. In 2007 about one third of the total output of poultry was exported. More than one third of the amount was supplied to Latvia, and less by half – to Estonia and Russia.

Within the year 2007 Lithuania imported 87,6 thousand tons of meat (Table 2.31), mostly pork, and slightly less of poultry.

Pork import in 2003 2006 increased by 3.7 times, amounting to 48,2 thousand tons for LTL 250,3 million during the year of 2007, or by 5% more than in 2006. Most of pork was imported from Poland (66%), Germany (12%), and Estonia (8%).

Kind of meat	2003	2004	2005	2006	2007
Total	31,0	60,9	76,3	95,1	87,6
of which:					
beef	0,7	1,4	1,2	4,6	5,0
pork	12,3	30,8	35,5	45,9	48,2
poultry	15,1	21,7	31,1	34,2	34,4

#### Table 2.31. Meat import by kind in 2003–2007, in thousand tons

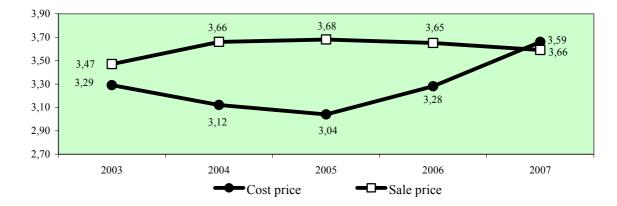
Sources: Agriculture in Lithuania 2006. – V.: Department of Statistics to the GovRL, 2007; MoA Foreign trade data base (Data of the Department of Statistics to the GovRL).

Import of poultry accounted for 44% of the total demand. Most of poultry was imported from Poland, the Netherlands, and Denmark.

**Economic indicators.** A rather complicated situation has developed in the meat sector in 2007. Prices on feedstuffs have greatly increased: for poultry – by 58%, for pigs – by 26%, and for cattle – for 19%. Wages of employees were simultaneously increasing as well. All this influenced the cost price of raising livestock and poultry. Subsequently, purchase prices on livestock and poultry, which did not cover the expenditure of production, were loss-making for producers.

Mostly dairy farms are involved in raising beef cattle, where dairy cows and other cattle are kept, and fodder prepared. Most of such farms are exporting calves. The total profitability of such farms is calculated according the FADN system, however, the efficiency of meat production is not separately identified. Since there are only a few farms involved in beef cattle breeding in Lithuania, indicators of their activities do not get into the FADN system at all.

Pig raising business is concentrated in large farms. Analysis of profitability, made by the LIAE on the FADN data, indicate that pig raising business has been profitable for a long time, but in 2007 it has become a loss-making sector (Fig. 2.35).



**Fig. 2.35.** Cost price and sale price of pigs in 2003–2007, in Litas per kilogram Source: Bulletin of annual official statistic forms of agricultural companies and enterprises.

In 2007 the pig raising cost price increased by 12%, as a result of boosted prices on feedstuffs, as compared with 2006, and by 20% as compared with 2005.

### III. STRUCTURAL CHANGES IN THE AGRICULTURAL AND FOOD SECTOR

#### 1. Structure of agricultural production

#### **1.1. Gross agricultural output**

According to the data of the Department of Statistics to the GovRL, in 2007 the gross agricultural output at current prices amounted to LTL 6513,7 million and increased by 33% in comparison with the year 2006, which was rather unfavourable for agriculture due to weather conditions. The growth of the gross agricultural output was also stimulated by the increasing demand in agricultural and food products on the domestic market and the expanding volume of foreign trade. Positive changes were determined by the increased EU support as well.

In 2007 the gross value added produced in the country by agricultural and food sector accounted for 8.6%, including 4.6% (LTL 4019,4 million) produced by agriculture, and 4.0% (LTL 3480 million) produced by food industry.

There were changes in the tendencies of developing the branches of agricultural production in 2007, as compared to 2006. The gross value of the crop output rose by 49% in 2007 as compared to 2006 (by 32% as compared to 2005). It was caused by the increased production volume and higher purchase prices. The increase of purchase prices on crop products varied: purchase prices for fruits and berries were almost three times higher, prices for grain increased by 63%, for vegetables by 14%, for rapeseed by 8%, for potatoes by 1%.

The grain harvest grew 1.6 times in 2007, as compared to 2006, but only by 7% as compared to 2005. The harvest of rapeseed grew 1.8 times, sugar beet by 12% (remained at the level of 2005). The harvest of potatoes increased by 26%, field vegetables by 38%, but in comparison with 2005, the harvest was poorer by 36% and 26% respectively.

The harvest of rapeseed increased 1.8 times in 2007, as compared to 2006, due to the 16% increase in the crop area and 1.6 times higher crop yield, but was only by 3% poorer than in 2005. The harvest of sugar beet increased by 12% as compared to 2006 (due to the 22% higher yield of crops, though the crop area decreased by 9%). The potato harvest, which was richer by 26%, was due to the growth of the yield of crops 1.4 times, even though the crop area decreased by 9%. Both the yield of potatoes and the area under potato crops, in comparison to 2005, decreased by 10% and 28% respectively. The 38% higher field vegetable harvest was due to the 1.4 times increased yield (as compared to 2005, the yield increased by 3%), even though the planted area by 4% was less.

The gross value of the livestock output rose by 19% in 2007, as compared to 2006 (by 23% as compared to 2005), due to the increased volume of some branches of stockbreeding production, as well as higher purchase prices on milk, poultry and eggs. In 2007, as compared to 2006, the production of beef and veal (carcass weight) increased by 18%, poultry by 4%, and milk yield – by 6%. The production of pork decreased by 6% and the production of eggs by 1%. The changes of purchase prices on

different livestock products varied: purchase prices o milk, poultry and eggs increased by 19%, 17% and 24%, respectively, and prices on cattle and pigs decreased by 7% and 2%, respectively.

Such a situation resulted in structural changes in the branches of agricultural production. In 2006, the livestock output accounted for 53.6%, but in 2007 it decreased by 5.6% and accounted for 48% of the gross agricultural output.

The volume and structural changes of the agricultural production were also affected by the continually changing market conditions. The quantities of agricultural products purchased during the past five years were changing unevenly (Table 3.1).

Products	2003	2004	2005	2006	2007
Grain	1112,8	1390,4	1768,4	1149,4	1728,3
Flax fibre	10,0	4,6	2,0		
Sugar beet	977,4	904,9	798,5	716,4	776,0
Rapeseed	109,9	172,6	215,1	136,5	242,6
Vegetables	26,1	26,1	27,6	31,0	28,1
Fruit and berries	75,4	12,8	72,1	79,8	55,5
Livestock and poultry (live weight)	186,7	196,8	232,6	251,9	270,6
Milk (equivalent of base fatness)	1225,2	1370,3	1432,3	1555,2	1629,8
Eggs, mill.	466,3	485,7	487,4	483,3	460,6

 Table 3.1. Quantities of agricultural products purchased in 2003–2007, in thousand tons

Sources: Purchase of agricultural production by 1 Jan 2003-2007. Vilnius: Department of Statistics to the GovRL.

In 2007, as compared to 2006, the amount of purchased rapeseed increased by 48%, the amount of grain – by 50%, the amount of sugar beet – by 8%, while the amount of purchased vegetables, and fruits and berries decreased (by 9% and 30%, respectively). The quantities of purchased livestock products – livestock and poultry, and milk – increased during 2007 by 7% and 5%, respectively, while the quantities of purchased eggs decreased by 5%.

The trends of price index changes varied during the entire reference period. Price index for crop products was the highest in 2006, as compared to 2005 it increased by 18.2%. In 2007 prices of these products rose by 25.3% as compared to 2006. Purchase price index for livestock products was the highest in 2005, and in 2007 purchase prices rose by 11.7% as compared to 2006. Average purchase prices of agricultural products increased by 19.9% in 2007 as compared to 2006. Price index for inputs was the highest in 2007. The prices of inputs increased by 10.3% as compared to 2006.

Data of the analysis for 2003–2007 show that the disproportion ("price scissors") between purchase prices on agricultural output and the prices of inputs varied in different years (Table 3.2).

	, por our				
Indicators	2003	2004	2005	2006	2007
"Price scissors"	93,3	104,3	104,0	118,0	108,7
Purchase price indices of agricultural outputs:					
total	89,2	101,0	113,1	118,0	119,9
crop products	90,0	93,1	112,8	131,0	125,3
livestock products	88,1	112,7	113,4	102,3	111,7
Price index of inputs	95,6	96,8	108,7	107,4	110,3

Table 3.2. Price indices of agricultural outputs and inputs in 2003–2007(compared to the previous year), in per cent

Sources: Purchase of agricultural production by 1 Jan 2008 – Vilnius: Department of Statistics to the GovRL, 2008; Agriculture in Lithuania 2006. – Vilnius: Department of Statistics to the GovRL, 2007.

The most unfavourable year for agricultural producers was 2003: even though the prices of inputs decreased, the prices of crop and livestock products went down even faster. The year 2004 was favourable only for the producers of livestock outputs. While the prices of their products grew up by 13%, the average price on inputs went down by 3.2%. The prices of crop products fell faster than the average prices on inputs.

The most favourable years for farmers were 2006 and 2007, when they could afford more inputs for the sold agricultural output, because the growth rate of prices on inputs was slower than that of purchase prices on agricultural products. Crop production was more profitable in 2006 and livestock production in 2007, when its price index was much higher than that of inputs. After Lithuania's accession to the EU, the unfavourable effect of "price scissors" for the producers of agricultural outputs was compensated by larger direct payments.

#### 1.2. Gross value added and income in agriculture

For the purposes of agricultural macroeconomic analysis, a system of agricultural economic accounts has been created. The main purpose of these accounts is to analyse the process of agricultural production, the created value added and to calculate the income received by agricultural entities from agricultural activities.

One of the most important indices is gross value added by sectors and in terms of the entire agricultural economy. The main indices showing the trends of changes in the agricultural income, are the following: output of the agricultural industry, including additional activities, intermediate consumption, subsidies for products and production, average number of AWU.

In 2007, the gross value added created in the country accounted for 4.6%, with the employment of 9.5% of workers. In 2006 - 4.6% and 11.5%, in 2005 - 5.1% and 13.2%, in 2004 - 5.2% and 15.2%, in 2003 - 5.8% and 17.2%, respectively. Agriculture ranks the seventh in the economy of the country following the processing industry; wholesale and retail trade; transport, warehousing and communications; real estate, rent and other operating activities; construction; public administration and defence; compulsory social insurance.

The output of the agricultural industry at basic prices (including subsidies and excluding taxes) of the current year increased by 26% in 2007, as compared to 2006,

due to the considerable increase in agricultural output: crop output – by 46%, animal output – by 11%. The growth of value of agricultural output was caused by the 20% increase of prices on agricultural output (on crop output by 25%, on animal output by 12%). Subsidies in 2007 for the output and production decreased by 6.6% as compared to 2006, because of the changes in the support payment scheme, according to which direct payments were decoupled from production as starting 2007.

						2007,	2007,
Indicators	2003	2004	2005	2006	2007	compared	compared
						to 2003, %	to 2006, %
Agricultural output:	4148	4621	5345	5317	6742	162,5	126,8
crop output	2337	2354	2735	2429	3556	152,2	146,4
animal output	1778	2215	2590	2775	3080	173,2	111,0
agricultural services	33	52	70	113	106	321,2	93,8
Non-agricultural activity	74	161	219	251	276	373,0	110,0
Output of the agricultural industry	4222	4782	5614	5568	7018	166,2	126,0
Intermediate consumption	2767	3007	3526	3650	4512	163,1	123,6
Gross value added	1455	1775	2088	1918	2506	172,2	130,7
Consumption of fixed capital	478	454	501	558	687	143,7	123,1
Net value added	982	1410	1710	1360	1819	185,2	133,8
Nominal factor income per AWU, Lt	5257	8521	11444	11296	1695 9	322,6	150,1
Net operating surplus	501	932	1069	904	1266	252,7	140,0
Subsidies (direct payments)	119	621	789	980	915	768,9	93,4

Table 3.3. Agricultural output, intermediate consumption and gross value added,
at current prices, in 2003–2007, in million Litas

Source: LIAE calculations.

The year 2007 was successful for Lithuanian farmers due to favourable weather conditions. The growth of the crop output value was reached through the increased production volume (24%) and purchase prices on agricultural products (25%).

In 2007, grain crops formed the largest part of the gross value in the agricultural output (27%), which increased by 94% as compared to 2006. This was influenced by a higher harvest of grain crops (oats – by 90%, rye – by 84%, wheat – by 72%, barley – by 36%, other cereals – by 2 times) and higher purchase prices (oats – by 62%, rye – by 59%, barley – by 56%, wheat – by 54%).

The value of industrial crop output increased by 61%, with the share accounting for 7.5% of the gross agricultural output. The production volume was growing (56%) as well as purchase prices (18%). The value of oilseeds output grew by 93% due to the increase in production volume (85%) and higher purchase prices (23%), the output of legume crops by 48% (50% and 44% respectively), sugar beet by 3% due to a 12% increase in harvest (purchase prices decreased by 0.1%). The share of forage crops accounted for 6.1% (a 14% decrease) of the gross value of the output. The value of the output of other plants increased: vegetables by 1%, potatoes by 29% (due to a higher harvest by 25% and 26%, respectively). Purchase prices were higher: on vegetables – by

6.4%, on potatoes – by 11%. The value of fruit output decreased by 15%, because the harvest was poorer by 67%, even though the prices increased 2.8 times.

The value of animal output grew by 16% in 2007 as compared to 2006 due to the increased production volume (4.6%) and higher purchase prices (11%). Milk production ranked second (after grain), its share accounted for 22% of the gross value in the agricultural output. The value of milk output grew by 18% in 2007 as compared to 2006 due to the increase of production volume (6%) and higher purchase prices (20%). Stockbreeding accounted for 18% respectively and grew by 2.6% due to the increase of production volume (4.1%) and higher purchase prices (0.3%): the value of cattle output grew by 7%, poultry by 20%, sheep and goats by 41%, but the output of pigs went down by 8.6%.

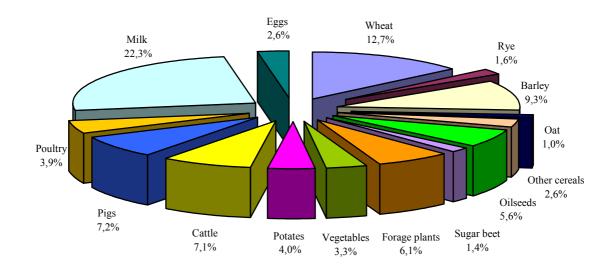


Fig. 3.1. Structure of gross agricultural production in 2007

Source: LIAE calculations.

The value of the agricultural output has been increasing since 2003. In 2007, it grew up by 26%, as compared to 2006 and was higher by as much as 66% in comparison to 2003. The growth of the value of output was influenced by direct payments paid for areas under crops and animals, which stimulated the increase of the volume of production, by the increased demand in agricultural products, by higher purchase prices for agricultural output and the emergence of new markets for grain (production of biofuel).

The production volume of agricultural output was growing in 2003–2007 (except 2006). In 2006, due to unfavourable weather conditions, crop yield was lower by more than a third. The value of agricultural output increased by 46% in 2007 as compared to 2006 (by 52% as compared to 2003). The production of animal output also had a tendency to rise during this period. The growth was stimulated by higher purchase prices and direct payments. The value of animal output grew by 11% in 2007 as compared to 2006, and by 73% as compared to 2003.

The essential influence on the profitability of agricultural activities is exerted by purchase prices on agricultural output and selling prices on means of production. The share of intermediate consumption, or expenditure for the production of agricultural output, accounted for 64% of the gross agricultural output in 2007, and 66% in 2006. The largest part of intermediate consumption consisted of expenditure for feedingstuffs (46.6%), energy (12.8%), and fertilizers & soil improvers (13.1%). The expenditure for intermediate consumption grew by 26% in 2007 as compared to 2006 due to higher input prices. Prices on feedingstuffs went up by 45%, maintenance of agricultural buildings – by 26%, seeds – by 18%, fertilizers and soil improvers – by 14%, energy (electricity, gas, other solid & liquid fuel and combustibles) – by 2%.

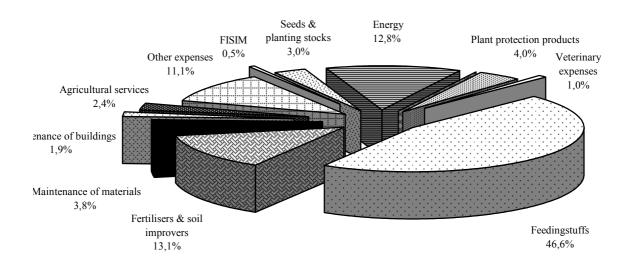


Fig. 3.2. Structure of intermediate consumption in 2007

Source: LIAE calculations.

The gross value added is calculated by subtracting the intermediate consumption from the value of agricultural output at basic prices. In 2007 it amounted to LTL 2505,9 million, i.e. was by 31% higher than in 2006. The net value added is calculated by subtracting the depreciation of the stock and other production taxes from the gross value added and by adding other subsidies for production. In 2007 it amounted to LTL 2024,9 million, increasing by 32% during a year. The net income of agricultural entities is calculated by subtracting from the net value added the wages of employees, the paid rent and interest, and by adding the received interest. In 2007 it amounted to LTL 1266,2 million, which is by 40% more, as compared with 2006.

In 2007 in Lithuania 146,3 thousand people were employed in the sector of agricultural production, where LTL 12433 of net added value was created per worker employed in agriculture in 2007, and 172,4 thousand people and LTL 7870 in 2006, 194 thousand people and LTL 8820 in 2005, 218,2 thousand people and LTL 6462 in 2004, respectively.

The results of agricultural economic accounts of the three Baltic States at current prices in 2006 and 2007 are presented for comparison (Table 3.4). The value of agricultural output increased in all Baltic States in 2007 as compared to 2006: by 26% in Lithuania, by 18% in Estonia, and by 23% in Latvia. The gross value added has also increased by 31%, 22%, and 27%, respectively. The growth of the output value was

influenced by the production volume of agricultural output in all Baltic States (12% in Lithuania, 9.4% in Estonia, 8.8% in Latvia) and higher purchase prices (19%, 7.3%, and 14%, respectively).

	Lithuania				Eston	ia	Latvia				
Indicators	2006	2007	2007, compared to 2006, %	2006	2007	2007, compared to 2006, %	2006	2007	2007, compared to 2006, %		
			Mill. Li	tas							
Output of the agricultural industry	5568	7018	126,0	1873	2214	118,2	2937	3624	123,4		
crop output	2429	3556	146,4	649	978	150,7	1329	1919	144,4		
animal output	2775	3080	111,0	1002	1002	100,0	1209	1278	105,7		
Intermediate consumption	3650	4512	123,6	1111	1284	115,6	1875	2281	121,7		
Gross value added	1918	2506	130,7	762	930	122,0	1062	1343	126,5		
Nominal factor income per AWU, Litas	11296	1695 9	150,1	21597	28739	133,1	10602	13324	125,7		
			Per cer	nt							
Share of intermediate consumption in the output of the agricultural industry	66	64	x	. 59	) 58	х	64	63	x		
Share of gross value added in the output of the agricultural industry	34	36	х	41	42	Х	36	37	x		

Table 3.4. Agricultural output, intermediate consumption and gross value added
in the Baltic States, at current prices, in 2006 and 2007

Sources: LIAE calculations.

The production volume of crop output grew in all Baltic States in 2007 as compared to 2006: by 24% in Lithuania, by 32% in Estonia, and by 18% in Latvia. The purchase prices on crops also went up in all Baltic States: by 11% in Lithuania, by 13% in Estonia, and by 23% in Latvia. The amount of animal output grew in Lithuania and Latvia by 4.6% and 4%, respectively, while in Estonia it decreased by 1.6%. Purchase prices on agricultural output increased in all three countries: by 5.2% in Lithuania, by 1.8% in Estonia, and by 2.1% in Latvia.

The share of intermediate consumption is an index of the level of efficiency and competitiveness of agricultural production. In 2007 the smallest share of intermediate consumption was 58% in Estonia, 63% in Latvia and 64% in Lithuania. In 2007, the gross value added increased by 31% in Lithuania, by 27% in Latvia, and by 22% in Estonia. Net value added created in the sector of agriculture per AWU in Estonia was LTL 28739, in Lithuania LTL 16959, and in Latvia LTL 13324.

In 2007 subsidies (direct payments) allocated for Lithuanian farmers amounted to LTL 915 million, to LTL 863 million in Latvia, and to LTL 432 million in Estonia.

According to preliminary calculations by Eurostat, due to increased purchase prices on agricultural output, income in agriculture increased by 5.4% in the EU countries in 2007 as compared to 2006. However, calculations of income per AWU show that in some EU countries the income grew up considerably, while in others it has even decreased. The largest growth was in Lithuania, Estonia, Czech Republic and Sweden, and the most noticeable decrease in Rumania, Bulgaria, Portugal, and Italy.

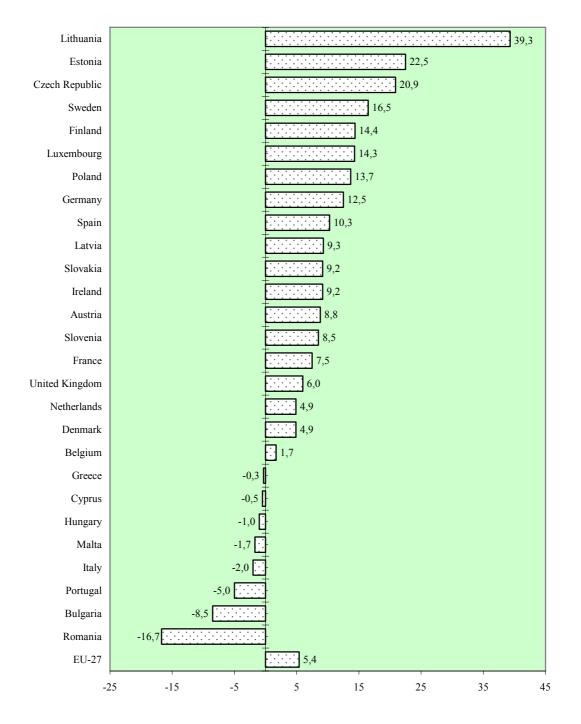


Fig. 3.3. Change in agricultural income per AWU in 2007, in per cent

Source: Information "Statistics in focus" of the statistical organisation of the European Community. - 2007.

In 2007 the output of agricultural industry in the EU countries increased by 4.3%, and intermediate consumption – by 5.8%, while subsidies (direct payments) for the output and production decreased by 2.8%.

In 2007 value of the agricultural industry output in the EU member states increased due to the growth of the value of animal output. The production of crop output decreased by 1.7%, while purchase prices rose by 10.4%. There was a considerable decrease in the volume of production of legume crops output by 16%, tobacco by 8.1%, fruit by 5.7%, grain of cereals by 2.9%. Grain production decreased the most in Rumania (52%), Bulgaria (40%), Cyprus (34%), Hungary and Slovenia (33% in each). The decrease in production and the quantities of the output for sale resulted in the increase of purchase prices on all grain crops by 44%, on oilseeds by 21%, on legume crops by 18%, on forage plants by 10%.

The volume of animal output production increased slightly – by 1.8%, and purchase prices decreased by 1.2% in 2007 as compared with 2006. The volume of pig products increased by 4.9%, poultry by 3.8%, cattle by 2%, sheep and goats by 1.4%. Purchase prices decreased: for cattle by 5.5%, pigs by 12.4%, sheep and goats 6.1%, while prices for poultry increased by 7.9%. The quantity of animal output decreased slightly (by 0.5%), and purchase prices increased by 7.1% (the quantity of milk output decreased by 0.3%, eggs by 1%, purchase prices on milk increased by 6.8%, on eggs by 11.4%).

More than half of the EU member states (16) reduced the volume of animal production in 2007 as compared to 2006: Latvia and Romania by 12%, Denmark by 8.1% and Hungary by 7.7%. The production of animal output was mostly increasing in Ireland – by 6.1%, in Luxembourg – by 4.5%, and in Poland – by 3.8%.

(2007 compared to 2000), in per cent										
Indicators	Ireland	Austria	Belgium	Czech Republic	Denmark	Estonia	Greece	Spain	Italy	Latvia
Output of the agricultural industry	5,7	9,4	5,2	15,6	4,8	8,8	-0,3	4,5	-0,9	7,3
crop output	7,9	22,5	13,4	30,6	25,2	38,7	0,9	8,7	-2,0	25,6
animal output	5,3	-0,4	-1,2	0,2	-5,3	-8,0	-3,1	-1,4	0,2	-8,1
Intermediate consumption	0,9	9,0	8,6	10,8	5,9	6,3	3,3	5,6	3,7	5,8
Gross value added	17,4	10,0	-1,3	30,5	2,1	12,4	-2,4	3,8	-4,2	9,9
Net value added	9,8	7,3	-1,0	18,2	1,4	19,6	-0,8	6,5	-6,1	3,8
Average AWU	0,5	-1,4	-2,6	-2,2	-3,3	-2,3	-0,5	-3,5	-4,2	-5,0
Agricultural income per AWU	0,5	8,8	1,7	20,9	4,9	22,5	-0,3	10,3	-2,0	9,3
Share of intermediate consumption in the output of the agricultural industry	68	57	68	73	71	58	39	41	44	63
Share of gross value added in the output of the agricultural industry	32	43	32	27	29	42	61	59	56	37

# Table 3.5. Changes in gross agricultural output, intermediate consumption and value added in selected EU countries, at current prices (2007 compared to 2006), in per cent

Indicators	Poland	Lithuania	Netherlands	France	Finland	Slovenia	Slovakia	Sweden	Hungary	Germany	EU-27
Output of the agricultural industry	17,9	17,0	2,3	5,6	11,8	3,4	1,2	11,7	-1,5	10,0	4,3
crop output	29,1	35,9	1,9	10,4	30,6	1,7	7,9	36,3	1,9	17,2	7,8
animal output	6,0	3,0	3,3	-0,5	0,3	5,1	-7,6	-2,9	-6,0	3,7	0,6
Intermediate consumption	16,3	14,7	5,4	4,3	6,0	8,3	0,4	10,5	2,2	9,6	5,8
Gross value added	20,1	21,3	-2,1	7,2	33,6	-3,2	3,2	14,9	-7,5	10,9	2,3
Net value added	17,0	22,0	2,0	5,5	11,3	7,7	4,1	15,0	-5,5	10,9	3,1
Average AWU	2,8	-12,4	-2,8	-1,9	-2,7	-0,7	-4,7	-1,3	-4,5	-1,4	-2,2
Agricultural income per AWU	13,7	39,3	4,9	7,5	14,4	8,5	9,2	16,5	-1,0	12,5	5,4
Share of intermediate consumption in the output of the agricultural industry	59	64	61	57	75	60	71	72	65	68	х
Share of gross value added in the output of the agricultural industry	41	36	39	43	25	40	29	28	35	32	x

Source: Information of the EU Statistical Organisation "Statistics in focus". – 2007.

Intermediate consumption (costs of all goods and services used for production) increased by 5.8% in 2007 as compared to 2006. Farmers used by 0.3% more inputs and services for the production: for feedingstuffs by 1.2% (the share of which accounts for the largest proportion in the intermediate consumption – 39%), plant protection products by 5.3% (4.6%.), veterinary services by 0.9% (2.8%), equipment and tools by 0.2% (6%), seeds by 0.5% less (4.8% respectively), energy by 2.2% (11%), fertilizers and soil improvers by 0.01% (6.7%) and maintenance of agricultural buildings by 0.6% (2.1%). The prices on feedingstuffs went up by 14%, fertilizers and soil improvers by 4.6%, construction materials by 4.1%, seeds by 1.5%, equipment and tools by 0.5%, and plant protection products by 0.1%.

The gross value added in the EU member states increased by 2.3%, and the net value added – by 3.1%. In 2007, the gross value added in agriculture increased in more than half of the EU member states (16), the largest growth was noted in Finland, Czech Republic, Lithuania and Poland. The gross value added decreased the most in Bulgaria (25%), Romania (23%), and Portugal (14%).

The number of people employed in agriculture has a downward trend in all EU member states, except for Ireland, Luxembourg and Poland. This number has mostly decreased in Lithuania (12%), Bulgaria (11%), Latvia (5%), and Slovakia (4.7%). The number of AWU decreased by 2.2% in all EU member states.

#### 2. Structure of entities in agriculture and food processing industry

**Entities in agriculture**. The number of entities in agriculture by categories has been unevenly changing during the period of 2003–2007. The number of registered farmers increased by 2.2 times in 2007 as compared to 2003, and by 7.2% as compared to 2006. The number of agricultural companies and enterprises which have declared UAA, increased by 5% during the reference period, while the number of persons, who declared individual households, decreased by 10.4% (Table 3.6).

Tuble etor (uniber of ugriculturu)		<b>e 1</b> 000			
Agricultural entities	2003	2004	2005	2006	2007
Registered farmer farms, thou.	45,0	76,5	85,9	94,2	101,0
Agricultural companies and enterprises	579	536	543	558	586
Households, thou.	200,7	163,9	153,1	139,9	125,3

Source: Data of the Agricultural Information and Rural business Centre.

The average size of a farm in Lithuania based on UAA and areas under crops declared by agricultural entities in 2007, was 13,4 ha, i.e., by 8.1% larger than in 2006, but the total declared area was less by 1.3%. This resulted due to several factors. Farms are becoming larger due to restructuring processes. Some farmers refuse to declare areas because of the requirements on good agrarian and environmental condition. Besides, some older farmers, who receive the EU support, are leaving commercial agricultural production.

Analysis of the structure of farms by the area and the number in Lithuania and in some other EU member states revealed that the structure of farms in Lithuania is irrational: 91% of farms are small, up to 20 ha covering 39% of the area of all farms in the country. The situation is relatively worse in Italy (by number – 94%, by area – 41%), in Bulgaria (by number – 98%, by area – 17%), in Poland (by number – 96%, by area – 58%). The greatest number of large farms (over 100 ha) is in the United Kingdom (by number – 16%, by area – 69%), in Czech Republic (by number – 10%, by area – 88%), and in France and Denmark – 15% respectively in each. In Lithuania farms larger than 100 ha account for 1%, covering 36% of the total UAA (Table 3.7).

Almost a third of UAA is managed by the owners of 101 thousand of registered farmer farms. The number of registered owners increased by 7.3% in 2007. The largest registered farmer farms are located in Šiauliai, Utena, Panevėžys counties, the smallest - in Vilnius, Alytus and Klaipėda counties. In 2007, the size of an average farm in Utena county increased by 68.2%, and decreased by 21.3% in Kaunas county.

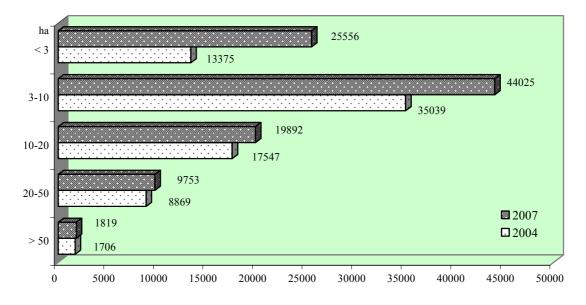
During the period of 2004–2007 the number of registered farmers increased considerably, in particular the number of small farmers. The most noticeable growth (91%) was in the group of farms up to 3 ha, while the number of farms managing the area of more than 50 ha increased only by 6.6% (Figure 3.4). Such situation has developed because of the city dwellers becoming farmers entitled to build living houses on the land marked for agriculture.

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
Bulgaria	13	95	4	3	3	1	4	0	75	1
Czech Republic	1	52	3	22	4	11	4	5	88	10
Denmark	0	3	8	39	16	26	24	18	52	15
Germany	1	22	8	33	17	23	22	14	50	8
Estonia	4	45	12	36	11	11	8	3	65	5
Ireland	1	7	14	37	40	39	31	15	14	3
France	1	25	4	19	14	19	29	20	52	15
Italy	16	74	25	20	20	5	14	1	25	1
Latvia	8	47	31	41	19	8	10	2	33	1
Lithuania*	14	60	25	31	15	6	10	2	36	1
Hungary	8	89	11	7	10	2	9	1	62	1
Netherlands	3	28	14	31	39	28	30	11	15	2
Austria	4	32	24	42	32	20	16	5	23	2
Poland	18	71	40	25	19	4	6	1	17	0
Romania	37	91	20	9	3	0	2	0	38	0
Slovenia	23	59	53	37	14	3	3	0	7	0
Slovakia	2	90	2	5	2	2	2	1	92	3
Finland	1	9	13	35	37	37	32	15	17	4
Sweden	1	14	10	38	18	23	24	15	47	11
United Kingdom	1	28	4	23	10	19	16	14	69	16

Table 3.7. Farm structure by area and number in Lithuania and selected EU countries in 2005, in per cent

\* 2007.

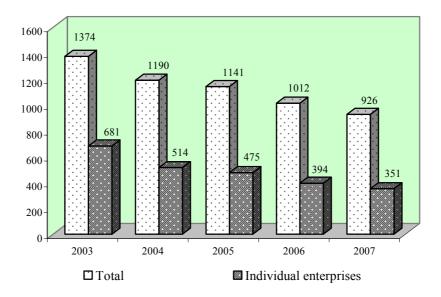
Source: Eurostat data.





Source: Data of the Agricultural Information and Rural business Centre.

**Entities in food production industry.** In 2007 the number of companies operating in manufacture of food products and beverages in Lithuania amounted to 926. Almost 38% of all entities were individual enterprises. During the period of 2003–2007 the total number of enterprises decreased almost by 35% and the number of individual enterprises decreased by more than 48%.



## Fig. 3.5. Number of enterprises in manufacture of food products and beverages in 2003–2007

Source: Internet access: http://www.stat.gov.lt/lt/pages/view/?id=2284

During the reference period the total number of enterprises in all sectors of the food industry was decreasing, the fastest decrease was noted in the number of enterprises producing grain milling products, fish and fish products, meat and meat products, by 53%, 44% and 38%, respectively (Table 3.8).

Indicators	2003	2004	2005	2006	2007					
Production of food products and beverages										
Number of enterprises	1374	1190	1141	1012	926					
Number of employees	54043	52909	51678	52176	46613					
Sales in domestic market, mill. Lt	4312,9	4691,7	4747,4	5497,5	6653					
Export, mill. Lt	1660,6	2078,4	2387,2	2800,4	3744					
Production of grain mil	lling produ	icts and sta	arch							
Number of enterprises	83	69	51	44	39					
Number of employees	1359	1314	1741	1289	1142					
Sales in domestic market, mill. Lt	136,0	162,8	163,8	188,1	190					
Export, mill. Lt	18,7	31,5	52,0	64,6	110					

#### Table 3.8. Food Industry Entities in 2003–2007

Indicators	2003	2004	2005	2006	2007					
Production of meat and meat products										
Number of enterprises	312	264	263	226	193					
Number of employees	9878	9758	9876	10980	10512					
Sales in domestic market, mill. Lt	821,1	1001,6	1030,1	1204,8	1341					
Export, mill. Lt	70,4	90,7	174,4	276,6	382					
Production of milk and dairy products										
Number of enterprises	39	32	31	30	32					
Number of employees	10472	10877	9806	9386	6054					
Sales in domestic market, mill. Lt	816,3	815,2	827,8	1035,2	1411					
Export, mill. Lt	544,2	862,2	833,2	990,8	1399					
Preservation and processi	ng of fish a	and fish pi	oducts							
Number of enterprises	89	67	70	55	50					
Number of employees	4527	4743	4829	4742	4616					
Sales in domestic market, mill. Lt	191,6	226,7	243,0	220,9	211					
Export, mill. Lt	281,5	354,6	465,9	504,0	597					
Preparation, processing and conservation of fruit, berries and vegetables										
Number of enterprises	41	37	35	30	34					
Number of employees	832	843	752	854	979					
Sales in domestic market, mill. Lt	66,9	76,2	76,8	83,3	101					
Export, mill. Lt	29,5	23,4	35,9	29,3	43					

Source: Data of the Department of Statistics to the GovLR.

In 2007 the largest number of enterprises operated in the production of bread (including freshly baked confectionery and cakes), and meat and meat products, however, by the number of employees they were relatively smaller than the enterprises in other sectors of the economy. Enterprises producing milk and dairy products were among the largest.

The total number of employees in manufacture of food products and beverages decreased by 13.7% in the period of 2003–2007. The most noticeable decrease occurred in 2007, when the number of employees decreased by 10.7%. The trends in different sectors varied. In 2007, as compared to 2003, the number of employees decreased only in the sectors of milk and dairy products, and grain milling products (42.2% and 6%, respectively), and as compared to 2006, the number of employees decreased in all sectors, except for the sector of preparation, processing and conservation of fruit, berries and vegetables where the number of employees increased by 14.6%.

43% of all enterprises in Lithuania operating in manufacture of food products and beverages could be attributed to micro enterprises by the number of employees (less than 10), 36% were small and 16% medium-sized enterprises (Figure 3.6). The number of enterprises with more than 250 employees accounted only for 4.6% in 2007, but almost 46.4% of all employees in manufacture of food products and beverages were employed there.

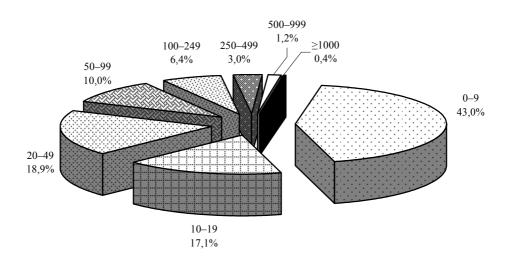


Fig. 3.6. Structure of manufacture of food products and beverages enterprises by number of employees in 2006

Source: Data of the Department of Statistics to the GovLR.

Although the share of medium-sized and large enterprises (by number of employees) accounts for a small proportion in the structure of manufacture of food products and beverages enterprises, it is much larger in Lithuania, as well as in Latvia and Estonia, than in the old EU countries (Table 3.9).

m 2005, m per ce						
Country	0–9	10–19	20–49	50-249	$\geq 250$	Total
EU-27	78,6	11,3	5,7	3,6	0,9	100
Denmark	51,8	23,7	15,8	6,5	2,2	100
Estonia	40,9	19,5	20,9	14,6	4,0	100
Spain	76,9	11,2	8,0	3,3	0,6	100
France	88,9	5,9	3,0	1,7	0,5	100
Latvia	45,3	16,0	16,1	18,9	3,7	100
Lithuania*	43,0	17,2	18,9	16,3	4,6	100
Netherlands	66,0	16,1	9,3	7,1	1,6	100
Austria	64,4	18,9	10,7	5,0	0,9	100
Poland	70,2	10,3	10,4	7,4	1,7	100
Slovenia	73,8	11,3	6,2	6,4	2,3	100
Finland	80,2	7,9	6,2	4,2	1,5	100

Table 3.9. Structure of manufacture of food products and beverages enterprises by number of employees in Lithuania and the selected EU countries in 2005, in per cent

\* 2007.

Source: Eurostat data.

The process of production concentration in the Lithuanian manufacture of food products and beverages continues. In the period of 2003–2007, when the total number of employees decreased by 13.7%, the average number of employees per individual enterprise increased by 25.7% (from 39 to 50). In different sectors the average number

of employees varied considerably: the smallest number was in the sector of preparation, processing and conservation of fruit, berries and vegetables (29 on the average), and the largest number was in the dairy sector (189).

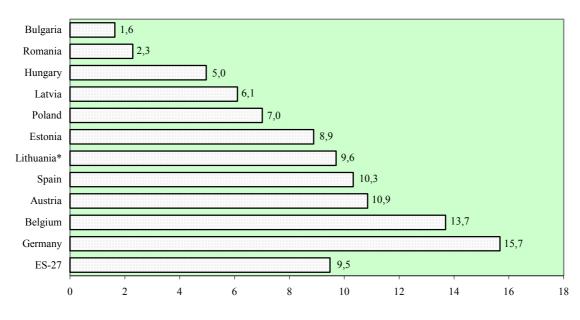
In 2007, as compared to 2003, the average number of employees per enterprise in the sector of preparation, processing and conservation of fruit, berries and vegetables increased 2.8 times, in the sector of preservation and processing of fish and fish products by 82%, while in the dairy sector, due to the automation of production processes and the implementation of new technologies the number of employees decreased by almost 30%.

The amount of sold output indicates the changes and the level of production concentration. In 2003, the average sales per enterprise in manufacture of food products and beverages amounted to LTL 4,3 million, and in 2007 - to LTL 11,2 million. In 2007, as compared to 2003, the sales per enterprise increased nearly 2.6 times.

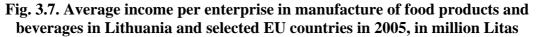
The fastest process of production concentration was in the sectors of grain milling products and starch, where the average volume of production per enterprise during the five year period increased by 4.1 times, meat and meat products (3.1 times), and preservation and processing of fish and fish products (3 times).

The largest concentration of production is in the dairy sector, where the volume of sales per enterprise in 2007 amounted to LTL 87,8 million, and the five largest enterprises produced 90% of the total output of the sector. The volume of sales in the sector of preservation and processing of fish and fish products was by almost 44% higher than the average sales per enterprise in the sector of food production.

The level of production concentration in manufacture of food products and beverages is growing fast. According to the Eurostat data, the average income per Lithuanian enterprise in the food industry in 2005 exceeded the average income of enterprises in the EU-27, and is only slightly behind the average income of enterprises in some old EU member states (Spain, Austria) (Figure 3.7).

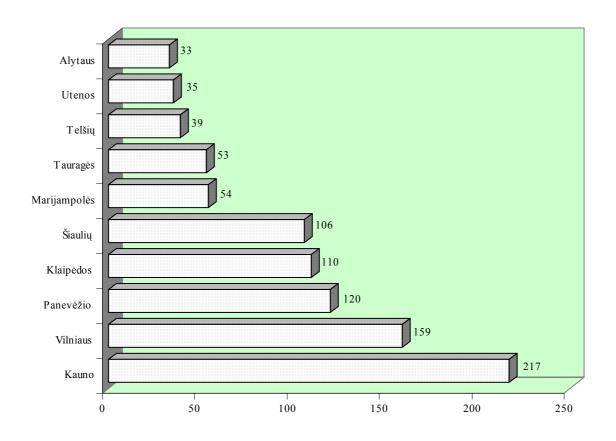


\* 2007.



Sources: Data of Eurostat and the Department of Statistics to the GovLR.

According to the data of the Department of Statistics to the GovRL, most enterprises of manufacture of food products and beverages are located in the areas close to the largest cities of Lithuania; more than 23% of all enterprises of manufacture of food products and beverages are established in the county of Kaunas, and over 17% in Vilnius county. Only a few food production enterprises are established in Alytus and Utena counties, 3.6% and 3.8%, respectively (Figure 3.8).

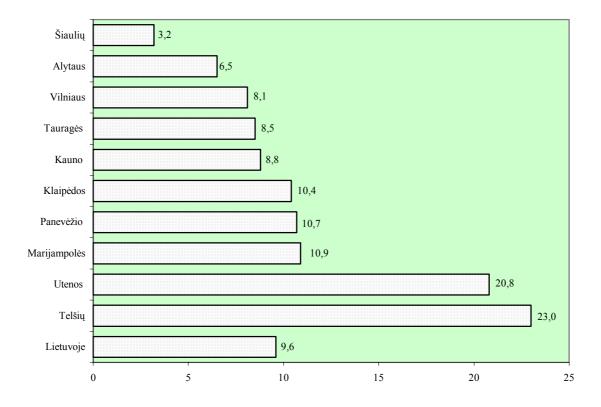


#### Fig. 3.8. Number of enterprises of manufacture of food products and beverages in Lithuania by county at the end of 2007

Source: Data of the Department of Statistics to the GovLR.

According to the income raised from the sales, enterprises operating in the counties of Kaunas, Panevėžys, Vilnius and Telšiai receive the highest income. During the reference period of 2003–2007 the income from sales of food and beverages enterprises in Tauragė county grew the most (2.2 times). Such growth resulted through the increased production of meat and meat products, vodka and liqueur, fruit and vegetable juice, and non-alcoholic beverages. The income grew fast in Marijampolė county as well. The growth of income of food enterprises in this county was mainly influenced by the renewal of the operation of Marijampolė milk preserve plant and fast development of markets for dairy products.

According to the income from sales of food and beverages production, the greatest concentration of production is in Telšiai, Utena, and Marijampolė counties (Figure 3.9).



## Fig. 3.9. Average annual income from sales per enterprise of manufacture of food products and beverages in Lithuania by county in 2007, in million Litas

Source: Data of the Department of Statistics to the GovRL.

It is obvious from the provided data that one enterprise of manufacture of food and beverages in Telšiai county receives 2.4 times more income than the average country's enterprise, and over 7 times more than an enterprise in Šiauliai county. The income of enterprises within the branch of reference in Utena and Panevėžys counties is relatively high as well, exceeding the national average by 117% and 13.5%, respectively. The relatively high level of the average income per enterprise was achieved due to the concentration of the largest enterprises of food production operating in the abovementioned counties, such as AB "Rokiškio sūris", AB "Pieno žvaigždės", and AB "Žemaitijos pienas".

### SUMMARY

The year 2007 was the first year of the new EU programming period. Following the provisions of the EU CAP and the national policy on agricultural and food sector, including rural development, the National Rural Development Strategy and Rural Development Programme for Lithuania for the period 2007–2013 have been prepared. The Rules for the implementation of the Programme were adopted and other legal acts related to the administration of measures under this programme were approved.

Lithuanian agricultural entities and food industry enterprises were able to take the advantages of free movement of goods and capital in the single market, and implement modernisation projects through the EU support, strengthening significantly their competitive abilities.

In 2007, as compared to 2006, the turnover of foreign trade in agricultural and food products increased almost by 30%, amounting to LTL 13,4 billion, and accounting for 17% of the total amount of the national foreign trade.

Over 2007, export of Lithuanian agricultural and food products increased by 36% and totalled to LTL 7,4 billion; import increased by 28% and amounted to LTL 6,1 billion. The positive foreign trade balance amounted nearly to LTL 1,3 billion. Dairy products made up the largest share in the structure of the total export of agricultural products. Germany, Latvia, Poland and other EU countries, as well as Russia, were the major partners of Lithuania's foreign trade.

In 2007, as compared to the unfavourable year of 2006, gross agricultural output increased by 33% and exceeded LTL 6,5 billion. The value of gross crop output went up by 49%, and of animal output by 19%. Animal husbandry was for a long time a leading branch in the sector, but gave the leading position to the crop production branch, which created 52% of the total value of gross agricultural production in 2007.

Positive tendencies in agriculture were conditioned by a rapid increase of farmers' income: in 2007 the average monthly disposable income per household member amounted to LTL 969,6. It slightly exceeded the income of urban population and noticeably overtook the average income of the total rural population. The gap between the average earnings in the country and in agriculture has decreased: wages in agriculture were growing up more rapidly than the national average and increased by 28%.

In 2007, 101 thousand of family farms and 586 of agricultural companies and enterprises were registered and operational. With reference to the data of crop declarations of all agricultural entities in 2007, the average farm size was 13,4 ha, i.e. by 8.1% larger than in 2006.

A considerable share of small semi-subsistent farms, senior age and insufficient education of farmers are the main obstacles impeding labour productivity and competitiveness in agricultural production. Therefore, training of human resources is a priority in the development of agriculture and food sector.

The main fishing regions of the Lithuanian marine fishing fleet are the Atlantic ocean and the Baltic sea, since 2007 the Pacific ocean as well. Over 2007, fish catches increased nearly by 25% and amounted to 190,6 thou. tons. Fish catches in inland waters totalled to 5,3 thou. tons, of which 64% accounted for pond fish production.

The EU social policy and financial support encouraged social activeness of the rural population. In 2007 there were 1,3 thousand of registered rural communities in Lithuania and 45 local action groups (LAG) covering almost the entire rural territory of the country. 10 LAGs have prepared local development strategies, the implementation of which is financed from the Rural orientation and guarantee fund.