

AGRICULTURE AND RURAL LIFE

2006/2007



AGRICULTURE AND RURAL LIFE

2006/2007

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DEAR READER,

You are holding the Ministry of Agriculture yearbook, which is a statistical summary rather than a performance assessment of the previous year. Articles by various authors cover the changes that have taken place and the policy measures applied in agriculture, fisheries, the food industry, and rural development. Thorough assessments and conclusions can be made when data for longer periods are analysed.

Agricultural development is related to long-term natural processes, which is why the desired results, and sometimes undesired consequences, emerge only during subsequent generations. This has brought about changes in agricultural policy, which no longer focuses narrowly on agricultural production and producers.

The principles of current agricultural policy take increasingly more account of broader interests of society such as food safety and animal welfare, the use of environmentally friendly production methods, and rural development.

We are pleased to witness a growing new generation of farmers, many of whom are successful. They have already proven that they can successfully compete on the market place with their counterparts from the old EU Member States. Our undertakings also understand that we are at the same time competing on the European labour market, where the wages are much higher compared to our level. According to the logic of economics, we can increase wages only if we can improve the efficiency of production. Larger enterprises have a competitive advantage here.

The broader objective of rural development measures which accompany agricultural policy is to balance the development opportunities of large and small producers. Where agricultural production cannot be extended or rendered more efficient, other means must be sought.

As the efficiency of agriculture improves, however, the number of jobs decreases and this deteriorates the viability of rural areas. The nature of the problems is thus broader. We have to find the possibilities and means of creating new jobs, developing village infrastructure, and preserving low-density areas and the farm lifestyle, while keeping in mind that the state supports those who have the wish and willingness to find their own path to success.



Minister of Agriculture
Helir-Valdor Seeder

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1. AGRICULTURE, FISHERIES, AND FOOD INDUSTRY
RELATIVE TO NATIONAL ECONOMY

Ants Laansalu

According to preliminary data, the value of agricultural production was BEEK 8 in 2006. Livestock (53.7%) and crop (34.6%) production account for the bulk of total agricultural production in terms of value. The value added by agriculture and hunting was BEEK 3.45 in 2005, forming 2.4% of gross domestic product (GDP). In 1992, the value added by agriculture was 11.7%, and it decreased by nearly 0.9% per year in the GDP from 1992–2001. The value added started to increase again after Estonia acceded to the EU, while its relative share in the GDP did not change significantly. This means that the rate of agricultural development reached the same level as the rate of national economic development.

Agriculture employed 23 400 persons in 2005, which is 3.9% of the national employment. In 1992, agriculture employed 114 600 persons, which was 15% of national employment. The number of persons employed in agriculture decreased by 88 700 from 1992–2003. The decrease in the number of agricultural workers slowed down after EU accession. In 1991 there were 237 300 employed persons in rural areas. Till EU accession, their number decreased by more than 6000 every year. After accession, the number of employed persons in rural areas increased by nearly 10 000 and reached a total of 172 800 in 2005.

According to the 2005 structural survey data, there were 27 746 agricultural holdings in Estonia. Of those, 6724 are professional farms that earn more than EEK 37 550 a year. The number of agricultural holdings has decreased constantly. According to the 2001 structural survey, there were 54 728 agricultural holdings in Estonia, including 8137 professional farms.

The total output of the food industry was BEEK 14.9 in 2006 and the food industry accounted for 17% of the total value of industrial output. The dairy industry (28%), beverages industry (21%) and meat industry (18%) had the largest shares in the food industry’s total output. The value added by the food and beverages industries was BEEK 2.77 in 2005 and the sector accounted for 1.6% of GDP. The value added by the food industry has not significantly changed over the past three years; its relative share in GDP has decreased by an average of 0.1–0.2% every year. The food industry employed 17 310 persons, including 2963 in the meat industry, 6192 in the fishing industry, and 2531 in the dairy industry.

Fish processing formed 9.4% of the food industry. 73 039 t of fish was caught from the Baltic Sea and 2856 t was caught from internal waters in 2006. The fishing quota in the Atlantic waters was 10 445 t. Baltic Sea catches accounted for more than four-fifths of the total volume of fishing. Sprat and Baltic herring are the main species caught. There are a total of 90 fish processing enterprises in Estonia. The main operations of the fish processing industry are freezing, filleting, making canned fish and fish preserves, and ready-to-eat foodstuffs. Most of the canned fish is exported to the eastern market.

Agricultural product and products accounted for 7% of total export and 7.3% of total import of goods in 2006. The value of agricultural exports and imports was BEEK 8.37 and BEEK 11.80, respectively. Export volumes increased by one-fifth during the year. This resulted in a reduction of external deficit by MEEK 614. More than one-third of total agricultural exports went to third countries. Fishery products (20.5%) and dairy products (17.5% of total agricultural production) were the largest export articles.

2. AGRICULTURAL PRODUCTION,
FISHING, PROCESSING, MARKET AND TRADE

2. AGRICULTURAL PRODUCTION,
FISHING, PROCESSING, MARKET AND TRADE

2.1. Production

Kristel Maidre, Elsa Nurk, Viive Alliksoo, Matti Piirsalu, Eha Niinepuu, Merle Saaliste

Agricultural production

According to preliminary information, the output of the agricultural industry, including refunds, was BEEK 8.0, of which 6.5% (MEEK 528.3) were product refunds for crop and livestock farming. The value of the output decreased by 2% in base prices and 4.5% in producer prices compared to the previous year. The difference is due to the fact that output in base prices includes production related refunds (complementary national direct payments for field crops, suckler cows, bovine animals and ewes), which increased by 56.1% in 2006. The volume of total output decreased by 6.3% and prices rose by 1.9% on the average.

According to preliminary estimations for 2006, crop production and livestock production formed 34.6% and 53.7%, respectively, of the total agricultural output in terms of value, that is 2.3 percentage points less and 2.1 percentage points more, respectively, than last year. Agricultural services formed 2.2% of the output of the agricultural industry and inseparable non-agricultural secondary activities formed 9.4%.

Crop production decreased by 8% in base prices in 2006 compared to 2005; the output of cereals decreased by 4%, vegetables 14%, fodder crops 17%, potatoes 23% and fruits and berries 30%. Rye was the only cereal whose production

did not decrease. The production of industrial crops (rape, protein crops) and flowers and ornamental plants increased by 30% and 7%, respectively.

Crop production decreased by 13.2% in producer prices; the volume of production decreased by 17.8% although producer prices rose by 5.6% on average. As a result of an 82.1% increase in product refunds, the decrease in the value of production was smaller in base prices compared to producer prices. Cereals (37.3%), fodder crops (20.6) and industrial crops (14.5%) formed the largest shares in crop production. The relative share of potatoes fell from 14.4% to 12% compared to 2005; the relative share of industrial crops increased from 10.2% to 14.5%.

Livestock production, which is based both on the live weight of slaughtered animals as well as live weight increase and livestock products, increased by 1.9% in base prices compared to 2005. The value of sheep and goat production increased the most (30%) owing to an increase in the number of animals; the value of milk (3%) and pig (2%) production increased to a lesser extent. The value of poultry and egg production decreased by 7% and bovine animal production decreased by 4%.

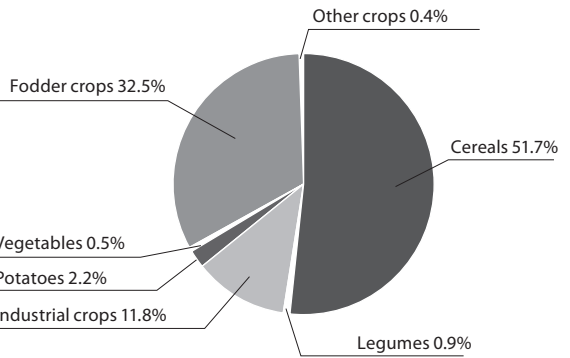
Livestock production increased by 0.6% in producer prices; the volume of production increased by 1%, but producer prices fell by 0.3% on average. As a result of a 32.6% increase in product refunds, the increase in the value of production in base prices was somewhat higher. Raw milk (57.8%), pigs

(21.3%) and bovine animals (8.4%) formed the largest shares of livestock production. The share of raw milk has increased year by year, for example in 2003 raw milk accounted for less than one half of the value of livestock production.

Growing areas and yields of agricultural crops

According to the Estonian Statistical Office, the growing area of field crops was 529 400 ha in 2006, which is 31 300 ha or 6% less than in 2005. Cereals were grown on 273 900 ha or 51.7% of the total growing area, fodder crops on 32.5%, industrial crops on 11.8%, and potatoes, legumes, and other crops on 4% of the total growing area.

Figure 1. Breakdown of growing areas for agricultural crops in 2006



Source: Estonian Statistical Office

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FISHING, PROCESSING, MARKET AND TRADE

2. AGRICULTURAL PRODUCTION,
FISHING, PROCESSING, MARKET AND TRADE

Table 1. Production of main crop products in 2004–2006

Crop	2004			2005			2006 *		
	Growing area ('000 ha)	Quantity ('000 t)	Yield (kg/ha)	Growing area ('000 ha)	Quantity ('000 t)	Yield (kg/ha)	Growing area ('000 ha)	Quantity ('000 t)	Yield (kg/ha)
Total cereals	261.0	608.1	2 330	282.1	760.1	2 694	273.9	605.5	2 211
incl. rye	8.1	18.1	2 228	7.4	20.4	2 747	7.3	17.9	2 454
winter wheat	23.2	66.4	2 869	19.6	71.4	3 634	23.1	64.7	2 796
summer wheat	55.2	130.2	2 357	65.8	192.0	2 917	66.3	149.7	2 257
oats	35.4	72.7	2 057	33.7	84.2	2 496	31.9	62.0	1 947
barley	127.0	292.9	2 306	143.7	365.6	2 544	137.6	294.7	2 141
Legumes	4.4	3.3	757	4.4	5.7	1 282	4.4	5.4	1 227
Rape	50.4	68.6	1 362	46.6	83.1	1 781	61.8	83.5	1 352
Oil flax	0.13	0.11	831	0.16	0.2	1 282	0.2	0.13	610
Potatoes	16.1	166.5	10 342	14.0	209.8	15 028	11.5	148.4	12 945
Open field vegetables	3.5	44.1	12 548	3.0	50.7	16 874	2.8	39.6	14 143
Total field crops	495.6	x	x	560.7	x	x	529.4	x	x

Source: Estonian Statistical Office, Ministry of Agriculture

Number of animals and poultry

According to the Estonian Statistical Office’s preliminary data, and the Ministry of Agriculture’s estimates, the number of bovine animals, including dairy cows, pigs, and poultry decreased in 2006. As of 31 December 2006, there were 245 000 bovine animals, including 108 900 dairy cows; 341 200 pigs, 61 500 sheep and goats, and 1 592 200 poultry in Estonia. Compared to 2005, the number of bovine animals had decreased by 2%, dairy cows 3%, pigs 2%, and poultry 15%; the number of sheep and goats had increased by 17%.

Output of the processing industry

The total output of food industry undertakings was BEEK 14.9 in 2006; this accounts for 17% of the total output of the processing industry (Table 3). The dairy industry, beverages industry and meat industry continue to be the largest contributors to Estonia’s total food industry output with 28%, 21% and 18%, respectively.

Table 2. Number of animals and poultry as of 31 December 2006 ('000)

	2005	2006	2006/2005 +/-	2006/2005 %
Bovine animals	249.5	245.0	-4.5	98
incl. cows	112.8	108.9	-3.9	97
Pigs	346.5	341.2	-5.3	98
Sheep and goats	52.4	61.5	+9.1	117
incl. goats	2.8	3.4	+0.6	121
Poultry	1 878.7	1 592.2	-286.5	85

Source: Estonian Statistical Office, Ministry of Agriculture

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Table 3. Output and export of the food industry in current prices (EEK '000 000) in 2000–2006

	2000	2001	2002	2003	2004	2005*	2006*
Industrial output							
All fields of activity	52 583	60 371	68 116	76 177	86 121	82 469	97 203
Processing industry	45 513	52 554	59 663	66 409	77 023	72 340	86 427
food and beverages	9 776	11 101	11 384	11 737	13 268	12 935	14 924
percentage of food and beverages in the entire processing industry	21.5	21.1	19.1	17.7	17.2	17.9	17.3
meat and meat products	1 500	1 800	1 931	2 073	2 314	2 344	2 711
fish and fishery products	1 514	1 934	1 724	1 448	1 381	1 033	1 365
dairy products	2 557	2 916	2 815	2 930	3 892	3 917	4 203
products of the milling industry	56	99	130	180	202
ready-made feedingstuffs	240	296	344	308	358	254	295
bread and bakery products	1 010	1 134	1 205	1 275	1 352	1 874	2 072
beverages	1 893	1 810	1 966	2 134	2 278	2 586	3 147
Production sales for export							
All fields of activity	23 915	28 191	31 516	36 042	41 443	42 986	50 234
Processing industry	23 215	27 789	31 033	35 513	40 917	42 032	49 379
food and beverage production	2 794	3 190	3 030	3 222	3 570	3 549	4 139
meat and meat products	191	238	271	300	283	303	375

fish and fishery products	1 212	1 540	1 234	1 099	930	785	1 048
dairy products	740	688	704	886	1 415	1 270	1 236
products of the milling industry	4	6	8	7	19
ready-made feedingstuffs	10	22	18	3	3	5	17
bread and bakery products	26	12	15	31	26	266	352
beverages	255	326	360	434	402	517	653
Percentage of export							
All fields of activity	45.5	46.7	46.3	47.3	48.1	52.1	51.7
Processing industry	51.0	52.9	52.0	53.5	53.1	58.1	57.1
food and beverage production	28.6	28.7	26.6	27.5	26.9	27.4	27.7
meat and meat products	12.7	13.2	14.0	14.5	12.2	12.9	13.8
fish and fishery products	80.1	79.6	71.6	75.9	67.3	76.0	76.8
dairy products	28.9	23.6	25.0	30.2	36.4	32.4	29.4
products of the milling industry	7.1	6.1	6.2	3.9	9.4
ready-made feedingstuffs	4.2	7.4	5.2	1.0	0.8	2.0	5.8
bread and bakery products	2.6	1.1	1.2	2.4	1.9	14.2	17.0
beverages	13.5	18.0	18.3	20.3	17.6	20.0	20.7

* – preliminary data
.. – data not available

Source: Estonian Statistical Office

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Figure 2. Percentage of the number of food and beverage production enterprises in the processing industry, 2000–2006

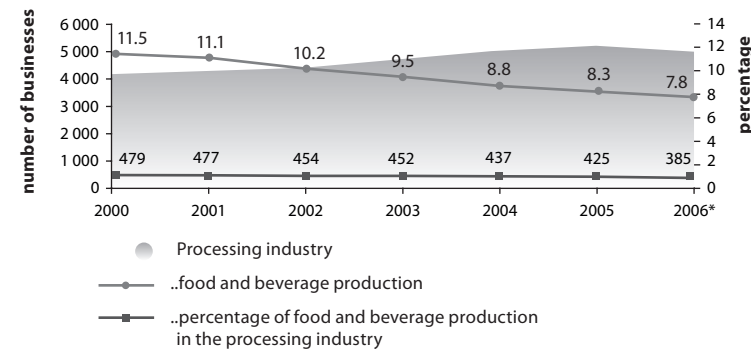
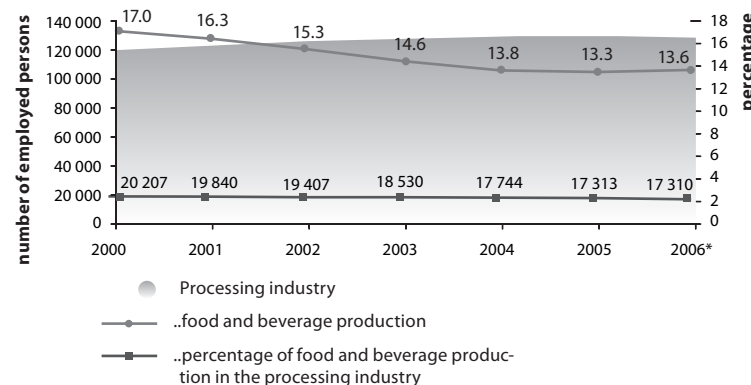


Figure 3. Percentage of persons employed in food and beverage production enterprises relative to the processing industry, 2000–2006



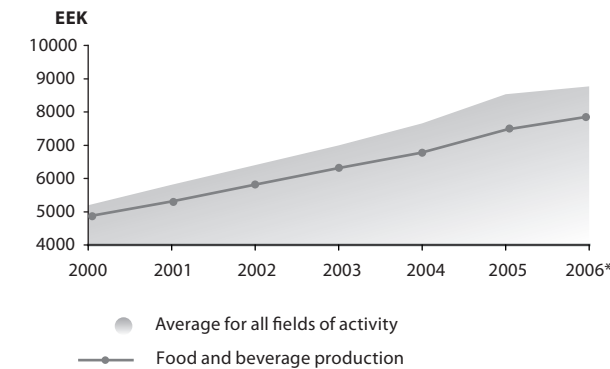
* - according to short-term statistics
Source: Estonian Statistical Office

The trade balance of agricultural products has been negative since 1995. It has only been positive for dairy and fishery products. In 2006, 28% of food industry output was exported. The relative share of exports is traditionally largest in the fisheries sector, followed by the dairy sector, while export of bread and bakery products has grown the fastest. While only a few percent of the bread and bakery industry output was exported in 2000–2004, in 2006 the share of export was already 17%.

According to short-term statistics, the food industry employed an average of 17 310 persons in 2006. Of these, 2963 worked in the meat sector, 6192 in the fisheries sector and 2531 in the dairy sector. While the total number of enterprises and employment both show upwards trends in Estonia, the number of food industry enterprises and the number of people employed by them continues to decrease every year by a few percent, owing to the modernisation of production and the closing down of less competitive businesses (Figures 2 and 3).

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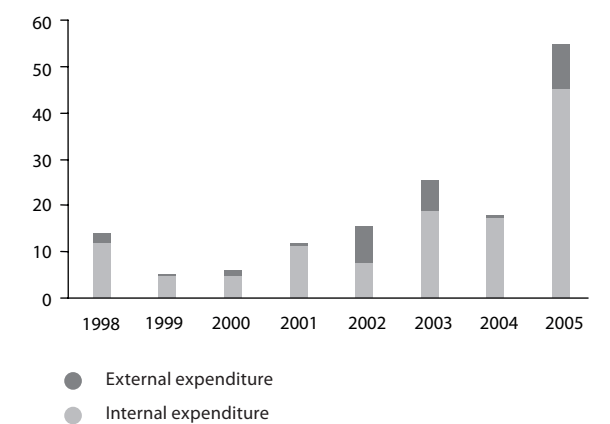
Figure 4. Average gross monthly salary in food and beverage production enterprises, 2000–2006



* - according to short-term statistics
Source: Estonian Statistical Office

The weakness of R&D and innovation is one of the major bottlenecks in the Estonian food industry. Intensifying competition forces Estonian undertakings to make more use of the possibilities offered by new approaches, technologies, and innovation, and this requires much greater cooperation with various research institutions. The fact that food industry enterprises have invested nearly MEEK 153 in R&D between 1998–2005, while last year's expenditure accounts for as much as 29% of these investments, indicates that cooperation between the food industry and research institutions and the launch of innovation projects is intensifying (Figure 5).

Figure 5. R&D expenditure of food and beverage production enterprises in 1998–2005, EEK '000 000



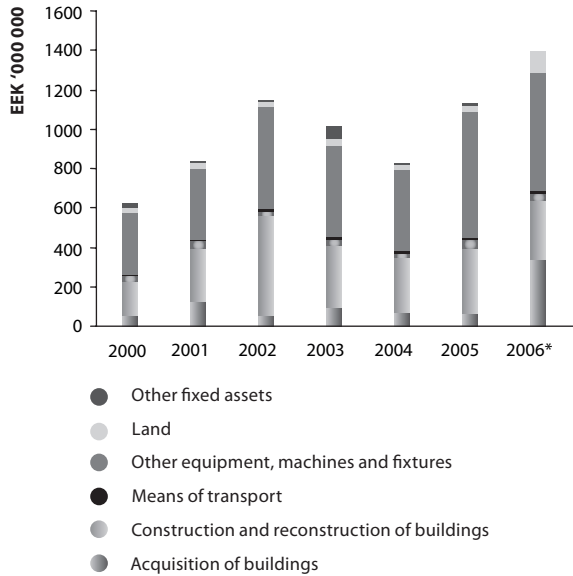
Source: Estonian Statistical Office

Although all Estonian food industry enterprises meet EU hygiene requirements, they continue to feel the need for further modernisation of production, so as to maintain competitiveness and meet the consumers' growing demands for food quality and variety. The food industry's main investments in 2006 were made in buildings (45.9%) and machines and fixtures (43.2% of total investments) (Figure 6).

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Figure 6. Investments by food and beverage production enterprises in fixed assets at current prices, 2000–2006*



* - according to short-term statistics

Source: Estonian Statistical Office

2.2. Dairy market, milk production, processing and trade

Matti Piirsalu, Kalev Karisalu, Eha Niinepuu

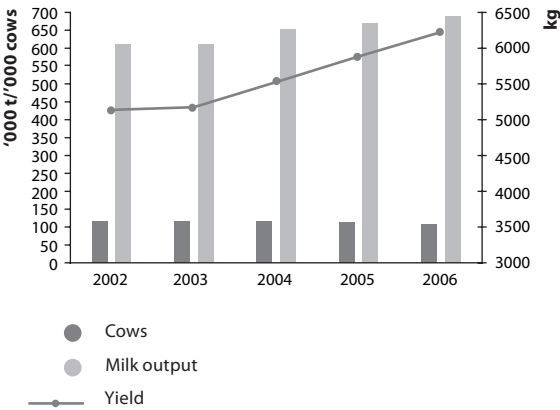
Milk production

According to the Statistical Office, 690 300 t of milk was produced in 2006, which is 19 900 t or 3% more than in 2005. The increase in milk output was due to higher yields, as the number of cows as of 31 December was 3900, which is 3% less than in 2005. 2006 was the first year when the average yield per cow was over 6000 kg. According to preliminary data, the yield was 6225 kg per cow, which is 339 kg or 6% more than in 2005.

A new yield record was made at Põlva Agro OÜ, where the Estonian Holstein breed cow Haavi yielded 16 794 kg in the second lactation. The herds with the highest average yields per cow were Lea Puur's herd in Viljandi County, 11 907 kg (32 cows), followed by Põlva Agro OÜ with 11 145 kg (1129 cows) and Tartu Agro AS with 9732 kg (1189 cows).

605 900 t of milk with a 4.1% fat content was sold to the dairy industry; this is 34 700 or 6% more than in 2005. Similarly to 2005, milk sold to the dairy industry accounted for 88% of the total milk output. Of the milk sold to the dairy industry, 49% was premium milk and 46% was higher grade milk. Premium milk retained the same relative share as in 2005, while the share of higher grade milk declined by one percentage point. Figure 7 depicts the main indicators of milk produc-

Figure 7. Main milk production indicators for 2002–2006



Source: Estonian Statistical Office

Table 4. Relative share of the dairy industry in the business sector

	1996	1998	2000	2001	2002	2003	2004	2005	2006
Share of dairy industry in the processing industry, %	8.8	8.0	5.6	5.5	4.7	4.4	6.2	5.4	4.9
Share of dairy industry in the food industry, %	26	28	26	26	25	25	32	30.3	28.2
Share of dairy products in export of foodstuffs, %	33	32	26	22	23	27	40	35.8	29.9
Number of enterprises	28	41	44	38	38	41	42	40*	38*

* at end of year

Source: Estonian Statistical Office, Ministry of Agriculture

tion over the past five years. Although the number of cows has decreased year after year, total milk output has increased constantly in 2002–2006, owing to greater yields.

Milk processing, consumption and trade Relative share of dairy industry in Estonia's processing industry

According to preliminary data, the dairy industry accounted for 4.9% of the total output of the processing industry and 28.2% of that of the food industry. Dairy products accounted for 29.9% of the total export of food products.

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Number and location of dairy enterprises in Estonia

There were 38 registered dairy enterprises in Estonia as of 24 January 2006 according to the Veterinary and Food Board. Their regional distribution is as follows: 10 in northern Estonia, 8 in central Estonia, 5 in western Estonia, 15 in southern Estonia, and 2 in north-eastern Estonia. The only county without its own dairy industry is Lääne County.

Of the approved enterprises, 29 procure crude milk, including one that acts as a collection point for crude milk); one engages in storage and deep freezing; two have specialised in packaging exclusively; six enterprises use other processors' products as raw material (pasteurised cream, curds, powders, butter, whey). Three enterprises that procure crude milk process their own farms' milk. Farm dairies mainly produce cheese, soft cheeses, curds, cottage cheese and soured milk products (yoghurt, sour cream). As an exception among conventional dairy products, one dairy farm produces a cream dessert with an alcohol content.

The Estonian industries may be divided by their specialisations:

- producers of city dairy products (drinking milk, yoghurt, kefir, cream, sour cream, curds, cottage cheese, puddings), who, as a rule, also engage in other activities (packaging, storage, juice production, powders);
- cheese producers who additionally produce butter or powder, depending on the market situation;
- producers of glazed cheese curds, who buy curds from other industries;

- ice cream manufacturers, who buy cream, butter, powder;

Processing areas of the enterprises:

- drinking milk – 10 enterprises;
- fresh cream – 15 enterprises;
- soured milk products – 19 enterprises;
- butter and butter mixes – 14 enterprises;
- cottage cheese, curds, glazed cheese curds, desserts, sauces – 21 enterprises;
- cheese – 11 enterprises;
- processed cheese – 4 enterprises;
- soft cheeses – 12 enterprises;
- UHT¹ – 1 enterprise;
- milk-based powders – 5 enterprises;
- ice cream – 4 enterprises;
- packaging – 6 enterprises;
- other activities – 10 enterprises.

Number of employees and wages in the dairy industry

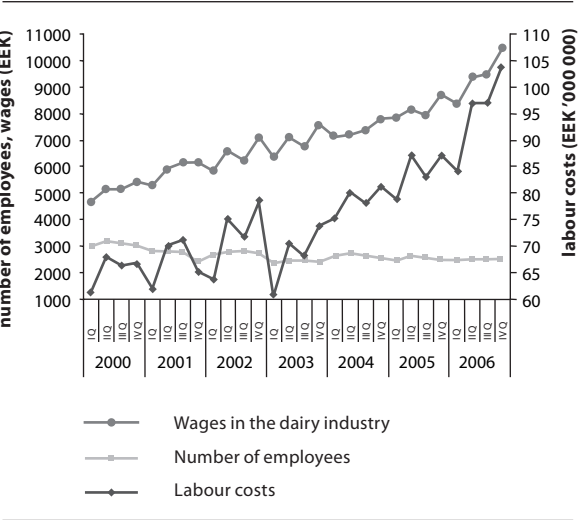
The number of employees continues to fall in the dairy industry (Figure 8). The Estonian dairy sector employed an average of 2531 persons in 2006, which is 37 less than in 2005. As three dairy enterprises went out of business in the third calendar quarter of 2006, the decrease in the number of enterprises is one of the reasons behind the decrease in the number of jobs. Another important reason is the con-

¹ Ultra high temperature treated milk.

stant modernisation of technology and equipment, which results in greater production efficiency and less need for human labour.

The average wages in the dairy sector increased by EEK 1266 (15.6%) in 2006 compared to the previous year. Wages increased the most in the fourth calendar quarter: by EEK 931 compared to the third quarter.

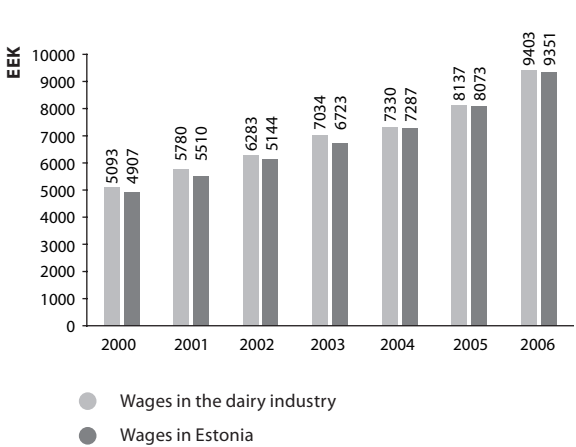
Figure 8. Average number of employees, labour costs and average monthly gross wages in the dairy industry, 2000–2006



Source: Estonian Statistical Office, Ministry of Agriculture

The average gross monthly wages in the dairy industry (Figure 9) were EEK 9442 in 2006, which is higher than the national average by EEK 52. The difference between the Estonian average (EEK 9351) and the dairy sector wages has shrunk further during the past year. One of the main reasons behind the rapid growth of the national average wages is that workers can move freely within the EU and seek more lucrative jobs. As a result of this development, skilled workers in certain areas are migrating to other countries. In order not to lose experienced personnel, local employers are forced to increase wages.

Figure 9. Average monthly gross wages in the dairy industry and Estonia, 2000–2006 (EEK '000)



Source: Estonian Statistical Office, Ministry of Agriculture

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Table 5. Production and buying-in of crude milk

	2000	2001	2002	2003	2004	2005	2006
Crude milk production, '000 t	629	684	621	611	640	670	690
Crude milk buying-in, '000 t	396	424	497	485	536	571	606
Bought-in milk, %	63	62	80	79	84	85	88

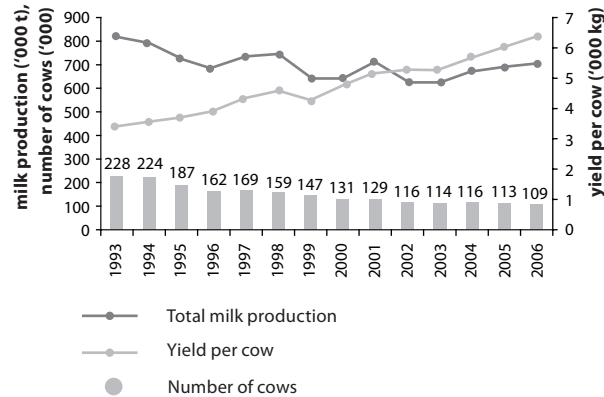
Source: Estonian Statistical Office

Raw material quality and price

Milk bought in by dairy processing enterprises formed 87.8% of the total production and amounted to 605 900 t.

The prevailing trends in Estonian dairy cattle breeding in recent years are toward increased yields and reduction of dairy herds. Over 13 years, the number of dairy cows has dropped by 119 000 cows (52%). However, the average yield per cow has increased by 2903 kg (87.7%).

Figure 10. Total milk production, yield per cow, and number of cows, 1993–2006

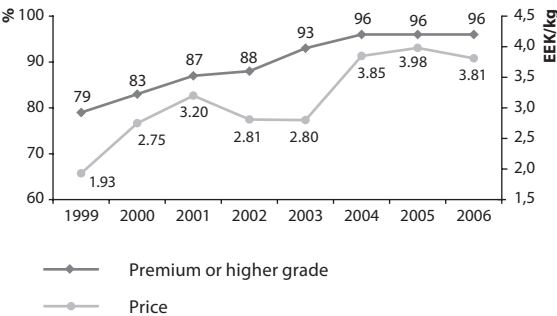


Source: Estonian Statistical Office

96% of bought-in milk was premium or higher grade (Figure 11). Bought-in milk had an average fat content of 4.1% and an average protein content of 3.3%, which is on the same level as in 2005. The average buying-in price of crude milk was 3.805 EEK/kg in 2006, which is 4.3% or 17 cents per litre less than in 2005.

The buying-in price of crude milk in Estonia consists of various components. Each processor sets the buying-in price for crude milk depending on their possibilities and the agreement reached with producers. The buying-in price is based on the grade price to which a price for protein and fat content is added. When the protein and fat content are taken into account, the price is increased or decreased depending on the basic figures and the actual qualities of the milk. The basic figures may differ between enterprises. Therefore, the rises and falls of milk are closely related to raw material needs, quantities, grades, as well as protein and fat content.

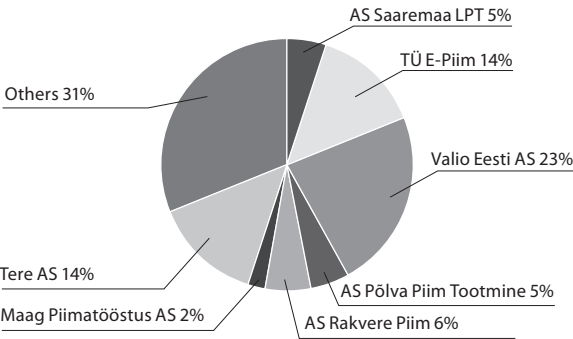
Figure 11. Crude milk quality (percentage of premium and higher grade milk in total bought-in milk) and price, 1999–2006



Source: Estonian Statistical Office

Enterprises belonging to the Estonian Dairy Association bought 69% of the total bought-in crude milk (Figure 12).

Figure 12. Buying-in of crude milk, 2006



Source: Estonian Dairy Association, Ministry of Agriculture

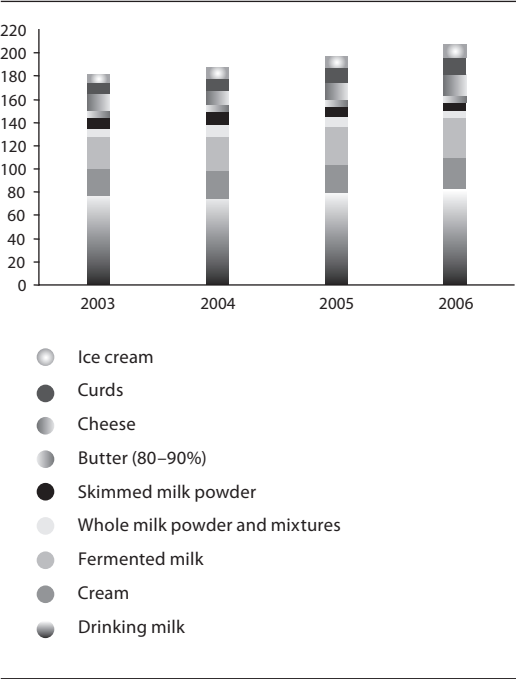
Production, consumption, sale, export and import of dairy products

The viability of the dairy sector depends on quality raw materials, competitive products, and agreements with retail chains. Dairy enterprises continue to specialise and provide mutual services.

The development of production is characterised by orientation to higher value added products. According to preliminary data (Figure 13), the production of whole milk powder (-31.3%), skimmed milk powder (-20.4%) and butter (-5.1%) has decreased, while the production of cheese (19.1%), curds (17.9%), ice cream (14.1%), cream (12.4%) and fermented milk products (6.4%) has increased. The production of drinking milk has continued to increase (4.0%) – this relates to the successfully launched school milk support programme.

Products in which butterfat and/or milk protein has been replaced with vegetable fats and/or proteins are presently competing on the market with traditional dairy products. Estonian consumers are very familiar with blended spreads (Võidel, Võideks), products similar to glazed cheese curds, ice creams, as well as products similar to cheese, in which milk fat has been partly replaced with vegetable fat. In addition to these competing products which partly contain milk, products have entered the market, which are competing with dairy products only in name, such as products made from soya protein.

Figure 13. Production of dairy products, 2003–2006 ('000 t)



Source: Estonian Statistical Office

Consumption of dairy products

According to a consumer survey by the Estonian Institute of Economic Research, Estonian consumers prefer domestic dairy products and the reason for their choice is the constantly expanding range of products, reliability, stable quality, attractive and modern packaging, modern technology, natural ingredients, freshness, taste, and affordable price. For example, in 2006, 100% of the drinking milk, 94% of the curds, 82% of the yoghurt, 76% of the ice cream and 55% of the natural cheese assortments offered in the shops were domestic.

Chain stores have developed their own private label products. In order to receive quality products with an as low as possible price, bids are collected from various producers and the best bid is chosen. It is positive that Estonian enterprises that have participated in such bidding have also been awarded contracts outside Estonia.

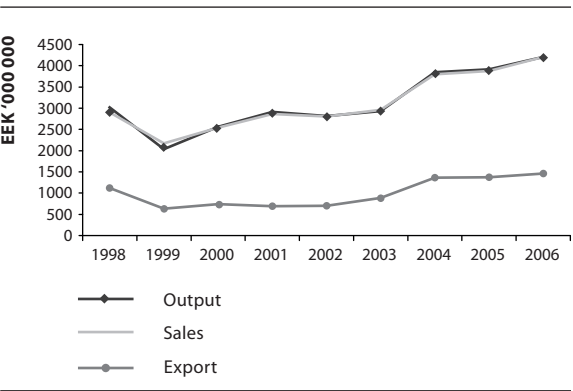
The common practice is that retail businesses dictate the product range for the consumers, by entering into favourable contracts with a few sellers, and they do not consider it necessary that all the drinking milk, kefir, sour and fresh milk products from all Estonian dairy processing enterprises be simultaneously available from each shop.

Not long ago, it was almost impossible for small producers to sell their products via supermarkets, since they were able to supply only small quantities on an unstable schedule. As of today, the situation has improved. “Niche products” by small producers, such as flavoured curds, desserts, etc., can now be found in Tallinn supermarkets.

Sale, export and import of dairy products

The output and sales of dairy products increased in 2006 compared to the previous year. The total output was MEEK 4203 (+1.7%) and sales amounted to MEEK 4207 (+1.9%). Exports amounted to MEEK 1465.5 in 2006, which is MEEK 93.6 more than in 2005 (6.8%).

Figure 14. Output, sales, and export in 1998–2005



Source: Estonian Statistical Office

The foreign trade balance of dairy products continued to be positive (MEEK +1194.7) in 2006; the export of dairy products surpassed imports 5.4-fold. Export of dairy products accounted for 17.5% (EEK 1465.5) of total agricultural exports (MEEK 8374.9).

Most of the products were exported to EU Member States (83.2%). The major partners among EU countries were Germany (23.4%), Latvia (19.1), Finland (12.8%) and the Netherlands (7.9%). Exports to Russia have increased 1.7-fold (MEEK

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96.3), forming 16.0% (MEEK 234.9) of total exports. The rapid growth of exports to Russia can be associated with the export licenses granted by the Russian Federation to Estonian dairy processing enterprises. The number of dairy enterprises holding licenses to export to Russia increased from 10 in 2005 to 14 in 2006.

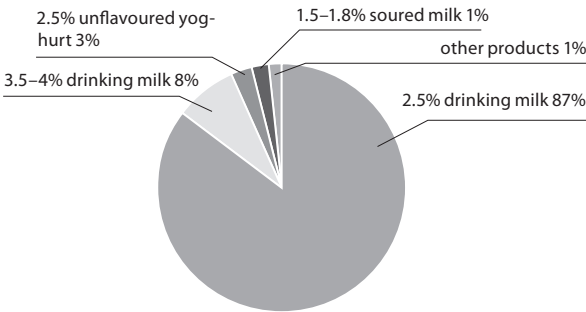
The main export articles in 2006 were non-condensed dairy products (57 672 t), cheese (11 516 t) and milk powder (5627 t). The export of whey products continues to grow (66%); with the main destination being Russia (87.1%), but whey still forms only 4% of all exports. Export prices are more favourable than in 2005 for the following products: fresh cheese and curds 14.4% (+5.26 EEK/kg), yoghurt 27.7% (+3.15 EEK/kg), whey products 20.9% (+1.69 EEK/kg), skimmed milk powder 7.4% (+2.13 EEK/kg) and cheese (KN 0406 90) 0.90% (+0.39 EEK/kg), and lower for: cheese 11.2% (-3.88 EEK/kg) and milk powder 0.6% (-0.2 EEK/kg).

Imports of dairy products decreased 13.4% (by MEEK -41.7) in 2006 compared to the previous year and formed 2.3% of total agricultural imports. 96.5% of the imports came from EU countries (Lithuania 23%, Finland 21.2%, Latvia 16.6% and Germany 14%). The main import articles were cheese (1925.2 t), whey products (1886.1 t), ice cream (1360 t), and fermented milk products (901.9 t). Compared to the same period last year, the import prices of fermented products and whey powder decreased (-2.67 EEK/kg or 12.9%, and -0.13 EEK/kg or 0.5%, respectively). The average prices of cheese (KN 040690) (7.23 EEK/kg or 14.9%), butter (3.78 EEK/kg or 9.3%), ice cream (1.37 EEK/kg or 4.8%) and milk powder (3.82 EEK/kg or 12.2%) increased.

School milk

According to preliminary data by the Agricultural Registers and Information Board (ARIB), MEEK 14.28 was paid out in support of the school milk products consumed in 2006. Over this period, support was extended for a total of 2431.2 t of school milk products, of which 2.5% drinking milk formed 87.3% (Figure 15). The quantity of products consumed (1 936 200 litres) has increased 25.6% or by 494 800 litres since last year, while the amount of support (MEEK 11.84) has increased by 17.1% or MEEK 2.44. The availability of dairy products for affordable prices was ensured during the study of kindergarten opening hours by March 2007, in 877 educational establishments for a total of 184 702 children.

Figure 15. Share of school milk products supported, 2006



Source: Agricultural Registers and Information Board, preliminary data

2.3. Meat market, production, processing, trade

Matti Piirsalu, Martin Pretke, Kalev Karisalu, Tiia Reede, Ahto Tilk, Ragne Lökk

Meat production

99 900 t (live weight) of animals and poultry were slaughtered on farms or sold to meat processing enterprises in 2006 (102 300 t in 2005). Meat processors received 9800 t of beef (9300 t in 2005) and 26 700 t of pigmeat (26 900 t in 2005) in 2006.

Pigmeat

There were 341 200 pigs in Estonia as of 31 December, which is 5500 or 2% less than in 2005. Pigmeat production was 55 000 t in live weight, i.e. the same as in 2005. In 2006, meat processing enterprises bought-in 340 700 pigs and obtained 26 700 t of meat from the bought-in pigs, which is 200 t less than in 2005. The average weight of a dressed body was 78 kg, which is in the same range as in 2005. Pigmeat accounted for 59% of the total meat production in 2006. 664 400 piglets were born in 2006, which is 9000 piglets or 1% more than in 2005. Total pigmeat production was roughly the same as in 2005.

Table 6. Meat production in live weight in 2005 and 2006 (t)

	2005	2006	2006/2005 +/-	2006/2005 %
Live weight of slaughter animals and poultry	102 183	99 868	-2 315	98
including bovine animals	27 244	26 013	-1 231	95
pigs	54 894	54 999	+105	100
sheep and goats	775	1 058	+283	137
poultry	19 270	17 798	-1 472	92

Source: Estonian Statistical Office, Ministry of Agriculture

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Beef

There were 245 000 bovine animals in Estonia as of 31 December, which is 4500 or 2% less than in 2005. The total number of meat breed bovine animals has grown constantly and was 17 825 as of 31 December according to the register of farm animals. The most numerous breed was Hereford, followed by Aberdeen-Angus, Limousin, and Charolais.

A total of 26 000 t of beef (live weight) was produced in 2006, which is 1200 t or 5% less than in 2005. Beef accounted for 19% of the total meat production in 2006. 109 500 calves were born in 2006, which is 7600 calves or 7% more than in 2005. However, this had no impact on the increase in the total number of bovine animals, as 24 200 calves or one-fifth of those born during the year were exported at an age of up to three months.

Sheepmeat and goatmeat

There were 61 500 sheep and goats in Estonia as of 31 December, which is 9100 or 17% more than in 2005. The production of sheepmeat and goatmeat amounted to 1100 t in 2006, i.e. 283 t or 37% more than in 2005. The production of sheepmeat and goatmeat has increased considerably, but the relative share of this type of meat continues to be low, reaching only 1% of total meat production.

Poultrymeat

There were 1 592 200 poultry in Estonia as of 31 December 2006, which is 286 500 or 15% less than in 2005. The number of poultry has decreased because of the market situation, which has led Estonia's only poultrymeat producer AS Tall-egg to reduce its number of chickens for fattening. A total of 17 800 t of poultrymeat (live weight) was produced in 2006, which is 1500 or 8% less than in 2005. Poultrymeat accounted for 21% of total meat production in 2006.

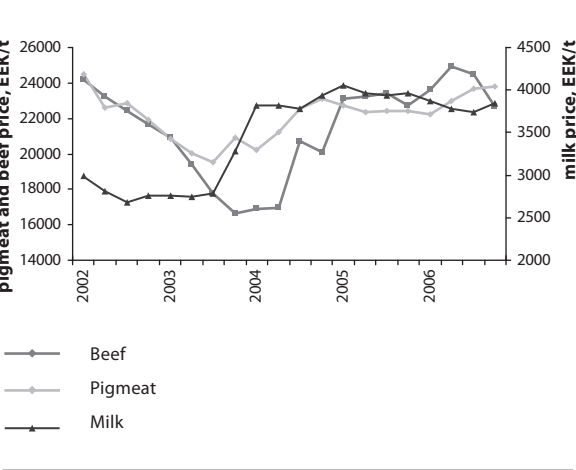
Buying-in prices of milk and meat

The time series for the past five years' buying-in prices of milk and meat (Figure 16) shows that the fall in the first half of 2003 was followed by a rise in 2004, followed by relatively stable buying-in prices in 2005. The buying-in prices of both beef and pigmeat rose in 2006, but that of milk remained short of the level of 2005 in 2006.

The average buying-in price of milk in 2006 was 3805 EEK/t, which is 170 EEK/t or 4.5% lower than in 2005. The average buying-in price of pigmeat in 2006 was 2318 EEK/t, which is 70 EEK/t or 1% higher than in 2005.

The average buying-in price of beef in 2006 was 2329 EEK/t, which is 186 EEK/t or 9% higher than in 2005.

Figure 16. Buying-in prices of milk and meat in 2002–2006



Source: Estonian Statistical Office

Egg production

179.2 million eggs were produced in Estonia in 2006, which is 29.8 million or 14% less than in 2005. The main reason for the decrease in egg production is the toughening competition with Lithuanian, Latvian, and Finnish egg producers. Veterinary restrictions imposed in the first half of the year in fear of bird flu, which prohibited the sale of chicks and young poultry at public markets, certainly contributed to the decrease in egg production. AS Eesti Munatooted terminated the production of eggs.

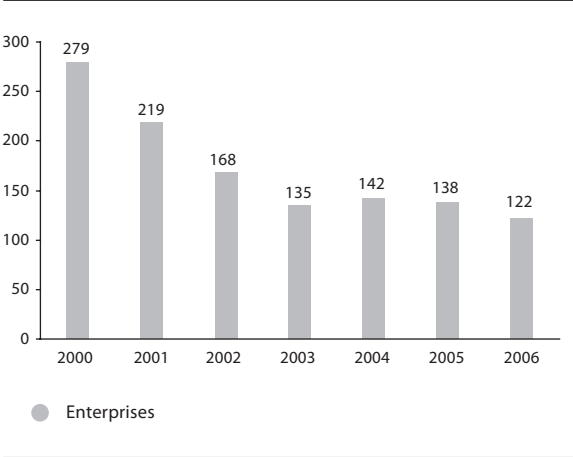
The average output per hen was 269 eggs in 2006, which is 9 eggs or 3% more than in 2005.

Meat processing. Meat industry's position on the food market

According to the Veterinary and Food Board, there were 122 meat processing enterprises in Estonia at the end of 2006 (Figure 17). This is 16 enterprises less than in 2005. Many meat enterprises have new owners, some have merged, and some have gone bankrupt.

The number of small-scale slaughterhouses has generally decreased. Competition continues to be tough on the domestic market for meat. Companies based on foreign capital produce about 80% of the sector's total output.

Figure 17. Number of meat processing enterprises, 2000–2006



Source: Veterinary and Food Board

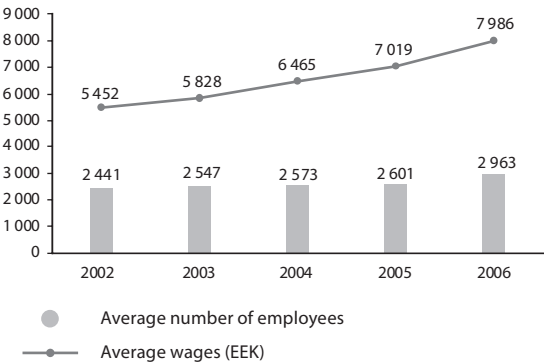
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Number of employees and wages

According to the Statistical Office, the meat sector employed an average of 2963 persons during 2006 (Figure 18). The number of employees has increased by 362 (13.9%) since 2005 and by 390 (15.1%) since 2004. The average wages in the meat sector were EEK 7986 in 2006, which is EEK 967 (13.7%) more than in 2005 and as much as EEK 1521 (23.5%) more than in 2004. The wages in the meat sector were 17% below the national average and about 10.5% below the food industry's average in 2006.

Figure 18. Average number of employees and wages in 2002–2005 (EEK)

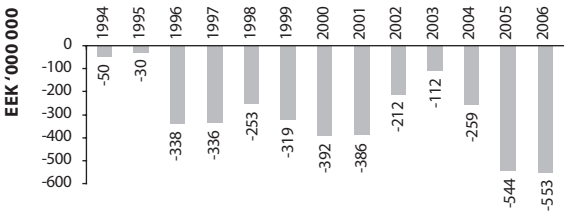


Source: Veterinary and Food Board

Trade in meat (export, import)

There were seven meat processing enterprises in Estonia in 2006 (four in 2005) that held a license to export their products to Russia; one enterprise held an export license to the USA. The foreign trade balance of meat and meat products continued to increase and is still negative (Figure 19).

Figure 19. Foreign trade balance of meat and meat products, 1994–2006



Source: Estonian Statistical Office, Ministry of Agriculture

Compared to the same period last year, the export of meat and meat products increased by MEEK 25.7 (5.1%) in 2006, while exports to EU Member States increased 1.7% and exports to third countries increased 1.9-fold. Exports to Russia increased 3.2-fold. The export of sausage products and poultrymeat increased the most (37.2% and 8.8%, respectively).

The average export price of pigmeat was 32.8 EEK/kg, which is EEK 1.3 (4.1%) higher than in 2005. The price of poultrymeat was 19.4 EEK/kg, which is about EEK 0.20 (1.1%) higher, and the price of beef was 55.9 EEK/kg, which is EEK 13.9 (33.3%) higher than the average in 2005.

The importing of meat and meat products increased by MEEK 27.2 (2.5%) in 2006 compared to 2005. Imports from EU Member States increased 10.2% and imports from third countries decreased seven-fold.

Import of pigmeat was MEEK 107.1 (28.2%) greater than in 2005. Imports of poultrymeat and beef decreased and amounted to MEEK 45.9 (16.9% less) and MEEK 9.9 (8.6% less), respectively. The average import price of pigmeat was 24.6 EEK/kg, which is EEK 1.6 (7%) higher than in 2005. The import price of beef was 31EEK/kg, which is EEK 3.5 (10%) lower than last year, and the import price of poultrymeat was 15.3 EEK/kg, which is EEK 2.6 (14.7%) lower than last year's price.

Market organisation

During the first nine months of the milk quota year that began on 1 April 2006, producers supplied the industry with 453 200 t of milk, which is 72.4% of the annual delivery reference quantity, and marketed directly to end consumers 5400 t of milk, which is 26.7% of the annual reference quantity for direct sales. As of the beginning of 2007, there are 1555 holders of milk production quotas in Estonia, of whom 1372 hold a delivery reference quantity and 342 hold a reference quantity for direct sales.

Intervention buying-in of butter takes place from 1 March to 31 August; the European Commission decides on the opening and closure of buying-in based on market prices. In 2006, the limit on the quantity of butter bought in by the Commission at a fixed price was 50 000 t. After the limit was reached,

additional butter was bought in by way of a tendering procedure. In the course of intervention buying-in in Estonia, from 1 March till 29 July, 861 t of butter was bought in at a total price of MEEK 40 (inclusive of VAT). The largest quantities of butter were bought in from OÜ Põlva Piim Tootmine, AS Võru Juust, and PÜ E-Piim. In 2005, when intervention buying-in was first applied in Estonia, 968 t of butter was sold in the course of the buying-in.

Eight applications were received in 2006 for purchasing butter from intervention stores; six of these applications were granted. A total of 886 t of butter was sold from the store for a total price of MEEK 38.4.

Using support for milk products is a measure supporting the use of butter for making ice cream and bakery products and for using concentrated butter for direct consumption. According to the Estonian usage support statistics, granted applications for using support covered 10 t of butter and 34 t of cream in 2006. The respective amounts paid were EEK 62 700 and EEK 94 200.

As regards trade in dairy products, 144 export licenses and one import license were issued in 2006. A total of MEEK 60.88 of export refunds were paid, including MEEK 25.2 for the export of cheese and MEEK 28.8 for the export of butter.

School milk support has been applied in the EU since 1977. In Estonia, support was first extended to school milk products in 2001, and the EU school milk scheme has been applied since 1 October 2004. The products covered by the

programme must be made in the EU and purchased in Estonia. In order to receive support, an ex post application has to be submitted within two months based on the quantities of milk and dairy products actually consumed by the children. Applications may be submitted within six months after the end of the period on which the applications are based. The maximum quantity eligible for support is calculated by applying a ration of 250 ml of milk or dairy products per child per school day. Products for which support is requested must not be used for preparing food. Support is available for milk, flavoured milk, soured milk (with a fat content of 1.5–1.8%) and unflavoured yoghurt, which is offered to kindergarten children, school children, and children studying at vocational schools which operate on the basis of basic education.

School milk support is paid from two different budgets: the EU budget and the Estonian state budget. Under the school milk scheme, Member States have the right to cover from the state budget a part or all of the difference between the actual cost of a dairy products and the support rate granted by the EU. Estonia decided to use this opportunity. The aggregate level of EU and Estonian support (6.20 EEK/l) remained on the same level as in the first academic year (2004/2005), which ensured stability of support for the applicants participating in the scheme. From 1 July 2005, an additional 3.34 EEK/l was paid from the Estonian state budget in addition to EU support during the academic year 2005/2006. In the academic year 2006/2007, the rate of additional support by the state rose to EEK 3.55 and will rise to 3.61 EEK/l from 1 June 2007.

According to the ARIB, 414 applicants were approved by the end of the first school year (30 June 2005), which covered school milk for 134 500 children, i.e. 53% of the maximum target group. By the end of the second school year, 2005/2006, already 860 educational institutions with a total of 175 600 children (72% of the target group) had joined the programme. By the end of the calendar year 2006, a total of 183 300 children (76.8% of the target group) were receiving school milk.

MEEK 8.0 was paid out as school milk support for the academic year 2004/2005 and MEEK 14.3 for the academic year 2005/2006.

The ARIB received 61 applications for the export of pigmeat in 2006; all the applications were granted. Enterprises submitted 28 applications for export refunds, which were also granted. No pigmeat was imported to Estonia from third countries, which is why no pigmeat import licenses were applied for.

No applications were received for beef export refunds or import licenses for imports subject to full custom duties. One license was issued in 2006 for the export of live bovine animals. During the year, the ARIB issued 11 tariff quota licenses for the import of beef based on import rights allocated earlier.

2.4. Cereals market, production, processing, trade

Elsa Nurk, Marje Mäger, Kadri Rand, Viive Alliksoo

Cereal cultivation

Cereals were grown on 273 900 ha in 2006, which is 8200 ha or 3% less than in 2005. Summer cereals were grown on 240 500 ha or 87.8% and winter cereals were grown on 33 400 ha or 12.2% of the total growing area.

The growing area of rye was only 7300 ha; the growing area of barley was the largest – 137 600 ha. The growing area of summer wheat has increased in recent years: 55 200 ha in 2004, 65 800 ha in 2005, and 66 300 ha in 2006.

The total harvest of cereals was 605 500 ha; the average yield was 2211 kg per hectare of growing area. The total harvest of cereals decreased by 154 600 t or 20% compared to 2005, and the yield decreased by 483 kg/ha or 18%.

Those producers who sowed summer cereals in the first days of May reaped a good harvest despite the lasting drought, and those who harvested during the dry days of August obtained high quality food and seed cereals. As a result of high temperatures, the cereals in the fields were so dry at the beginning of harvest that they did not need any drying. In drought-sensitive soils, however, cereals did not complete their growth. The growth of plants, especially medium-ripening barley, halted due to lack of water; the head of grain did not completely grow out of the sheath and the plants arrived at “premature ripeness”. The beards were tightly stuck to the seeds and grain loss increased where the harvesters were not appropriately fitted.

Winter wheat had the highest yields – 2796 kg/ha, and buckwheat yielded the least – 645 kg/ha. The rye yield was 2454 kg/ha and the total harvest was 17 900 t. Estonia’s annual food rye need is 40 000–42 000 t. Considering that a part (up to 50%; exceptionally only 5% in 2006) of the rye produced every year does not meet the quality requirements for food rye, the annual rye production should reach at least 75 000–80 000 t. Rye falling short of the quality requirements for food rye is bought in by distillers.

According to the ARIB, there were 6790 cereal farmers in 2006, including 580 rye farmers.

Figure 7. Number of cereal farmers broken down by size groups

Size groups by growing area, ha	Number of cereal farmers
Up to 50	5715
50.01–100	433
100.01–200	287
200.01–300	116
300.01–500	133
500.01–1000	84
Over 1000	22

Source: Agricultural Registers and Information Board

Rye farmers broken down by rye growing area are as follows: 324 producers with 0.1–3 ha, 88 producers with 10.01–50 ha, 130 producers with 3.01–10 ha, and 27 producers with 50.01–100 ha. Only 11 farmers grew rye on 100 ha or more, and one farmer grew rye on 560 ha.

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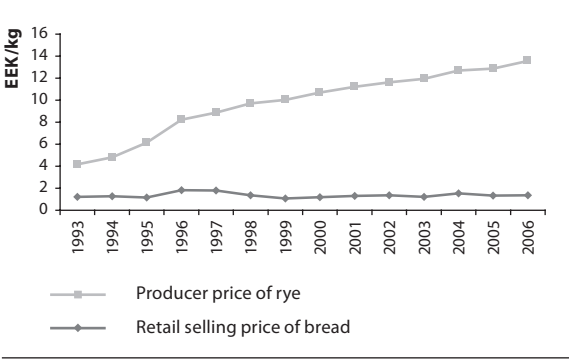
Farmers growing rye on small areas do so in order to prevent fields from being subjected to the intensive weed invasion common for shorter cereals. Rye is also sown for green fallow, so as to destroy weeds, particularly wild oats, and to enrich the soil with organic matter.

There are only a few rye farmers who sell food rye to the milling industry. Few farmers are able to sell to the industry food rye obtained from small growing areas, as experience shows that the industry wishes to buy larger lots of homogeneous quality. However, farmers are not especially interested in producing rye in larger quantities, as the producer price of rye is low. For example, the producer price of rye was almost on the same level from 1993 till the end of 2006, and according to the Estonian Institute of Economic Research, the price paid on week 51 of 2006 was 2 EEK/kg. The price of bread has constantly risen over the same period and was 3.5–4 times higher in 2006 than in 1993 (Figure 20).

Cereal production

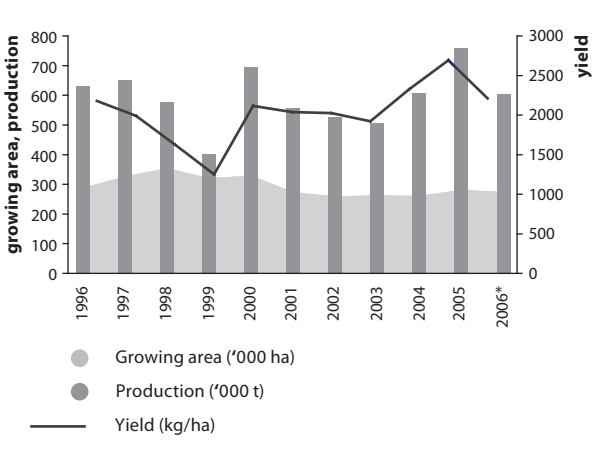
Owing to varying growing areas and yields, cereal production in Estonia ranged from 400 000 t to 700 000 t from 1996–2006. The only exception was the year 2005, when 760 000 t of cereals were harvested. The growing area was mainly influenced by demand; yield was influenced by weather, and the development of agricultural technology. The substantial decrease in the growing area of cereals occurred after the year 2000. The growing areas of cereals have decreased from over 300 000 ha before 2000 to 250 000–280 000 ha after 2000. Cereal yields increased after 2003. Increased use of plant protection products, as well as increased investments in production and harvesting technology, have contributed to the higher yields.

Figure 20. Dynamics of the producer price of rye and the retail price of bread, 1993–2006



Source: Estonian Institute of Economic Research

Figure 21. Growing area of cereals, production and average yields, 1996–2006



* preliminary data

Source: Estonian Statistical Office

Table 8. Growing area of cereals, production and average yields, 2005–2006

Crop	2005			2006*			Change 2006/2005 (%)		
	Growing area ('000 ha)	Production ('000 t)	Yield (t/ha)	Growing area ('000 ha)	Production ('000 t)	Yield (t/ha)	Growing area	Production	Yield
Winter cereals									
...rye	7.4	20.4	2.7	7.3	17.9	2.5	-1.4	-12.3	-10.7
...wheat	19.6	71.4	3.6	23.1	64.7	2.8	17.9	-9.4	-23.1
...barley	0.5	1.1	2.5	0.5	1.2	2.4	0.0	9.1	-3.1
...triticale	6.2	15	2.4	2.5	5.3	2.1	-59.7	-64.7	-12.0
Summer cereals									
...wheat	65.8	192	2.9	66.3	149.7	2.3	0.8	-22.0	-22.6
...barley	143.7	365.6	2.5	137.6	294.7	2.1	-4.2	-19.4	-15.8
...oats	33.7	84.2	2.5	31.9	62	1.9	-5.3	-26.4	-22.0
...mixed grain	4.5	9.9	2.2	4.6	9.9	2.1	2.2	0.0	-3.6
...buckwheat	0.7	0.5	0.7	0.1	0.1	0.6	-85.7	-80.0	-10.2
Total	282.1	760.1	22.2	273.9	605.5	19.0	-2.9	-20.3	-14.7

*- preliminary data

Source: Estonian Statistical Office, Ministry of Agriculture

Legumes cultivation

The growing area of legumes was 4400 ha in 2006, i.e. the same as in 2005. The total harvest was 5400 t and the average yield was 1227 kg/ha. Over the past two years, consumption has broken down as follows: 18–25% for human consumption, 45–54% for animal feed, and 24–29% for seed. The share of own produced legume species used for animal feed may be assumed to increase and the growing area of legumes to somewhat extend in the forthcoming years in order to satisfy the protein need.

Cereal quality

Data from the laboratory of the Agricultural Research Centre shows that the specific weight of cereals and rape were lower in 2006 than in previous years due to the lengthy drought that prevailed during the growing season. The average specific weight of winter wheat from production fields was 719 g/l according to the laboratory; the required average specific weight is from 730 g/l upward. 79% of the winter wheat analyses met that requirement. It should be said that the average specific weight of winter wheat trials conducted by the Jõgeva Plant Breeding Institute in recent years was 814 g/l. 97% of the samples submitted for analysis contained 22% or more wet gluten; 96% of the submitted samples met the requirements for food wheat with respect to the falling number. Higher wet gluten content depends most of all on the variety.

According to laboratory data, the average wet gluten content of summer wheat samples was 32.3% and their protein

content was 15.5%, which is a very good result. The average specific weight of rye was 738 g/l according to the laboratory analyses; the required average specific weight is 690 g/l, which 95% of the analyses met. The average falling number was 187 s, owing to the dry harvesting season. The required falling number is 80 s for food rye (the higher the falling number the better), and 97% of samples met or exceeded that requirement.

According to the researchers of the Jõgeva Plant Breeding Institute, the summer drought had the least impact on the qualities of longer-stemmed varieties. Varieties of barley had an average specific weight of 658 g/l and a protein content of 14.4% according to the analyses made for production fields. Such high average protein content is a very good indicator for fodder barley. The quality of oats was poor: the average specific weight was only 512 g/l and the chaff content was very high.

Rape cultivation

The growing area of rape was 61 800 ha in 2006, which is 15 200 ha or 33% more than in 2005. Rape yields were low due to the summer drought, only 1352 kg/ha, but since the growing area of rape increased significantly, the total harvest of 83 500 t was on the same level as in 2005.

The journal *Maamajandus*, Kemira GrowHow AS, and Farm Plant Eesti AS conducted a second cereal farmers' competition in 2006 in order to introduce new valuable experience and recognise those who introduce such experience. The cultivation competition was summarised by calculating the

expected profit and yields per hectare of competing fields. On a field belonging to OÜ Rannu Seeme, the 'Banjo' winter rape variety yielded 3670 kg/ha and the expected profit was 4668 EEK/ha.

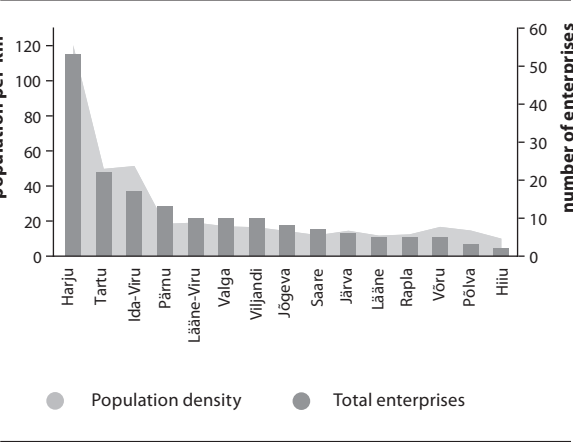
Cereal processing. Structure of the cereal processing industry

The cereal processing industry comprises milling industry enterprises and enterprises producing feedingstuffs, bakery products, and other products made of flour. As of 20 February 2007, there were 330 enterprises processing food of non-animal origin under the supervision of the Veterinary and Food Board. Out of those, 327 were approved (two of them conditionally²) and three enterprises were subject to notification³.

The VFB supervised 176 cereal processing enterprises as of 20 February 2007. Of these, 149 were bakeries, 11 made pastry products, and 16 produced or handled other cereal products.⁴

Cereal processing enterprises are located very unevenly across the country's territory. A majority of them can be found in Harju and Tartu counties. Hiiu and Põlva counties have the lowest numbers of cereal processing enterprises. This pattern directly associates with the population densities of the counties.

Figure 22. Population density*, number of cereal processing enterprises by county, 2006



* preliminary data
Source: Estonian Statistical Office, Ministry of Agriculture

Enterprises producing feedingstuffs are supervised by the Plant Production Inspectorate (PPI), and from 1 July 2007 the Veterinary and Food Board. According to the TTI, there were 13 approved⁵ feedingstuffs producers in Estonia as of 31 January 2007. The operations of one enterprise were suspended. There were six registered feedingstuffs producers according to the PPI, one of whom had ceased production operations. There were 35 approved and/or registered intermediaries of feedingstuffs; the approval decisions of four of them were suspended. The cereal processing industry provides about 19% of the total output of the Estonian food industry in terms of value.

² Conditional approval is granted for a tentative period of up to three months, and compliance with requirements is assessed in the course of production operations.
³ Notification is a simplified form of the approval procedure, which is applied to e.g. food transport and retail businesses that handle food which may be stored at room temperature.
⁴ Such as flour, flakes, mueslis, macaroni, etc.

⁵ Enterprises producing lower risk feedingstuffs are subject to registration and those producing higher risk feedingstuffs are subject to approval. Approved enterprises must meet stricter requirements and may also handle compound feedingstuffs, additives in feedingstuffs, feedingstuffs intended for particular nutritional purposes and medicated feedingstuffs, the ingredients of which (such as medicinal products, growth promoters, enzymes, micro-organism proteins, etc.) pose a higher risk to the health of people or animals or the environment.

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Production of cereal products

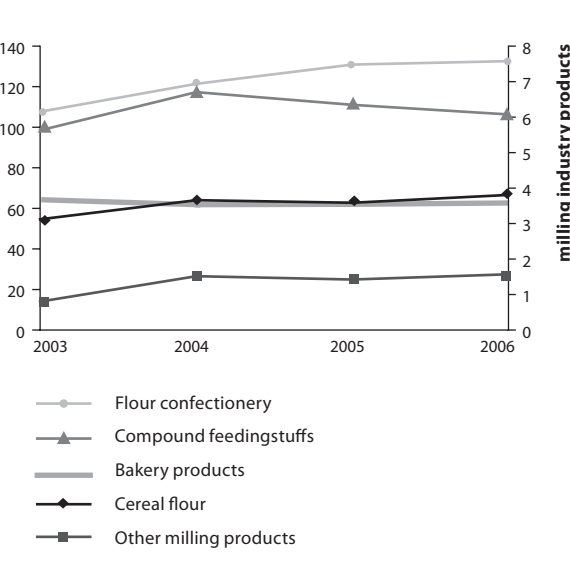
According to the Statistical Office, Estonia's total output of cereal products was 311 300 t in 2006, which is 1.3% more than in 2005. 66 600 t of cereal flour was produced, which is 6.1% more than in 2005. The output of milling industry products other than flour increased 10.3%, that of flour confectionery 1.3%, and that of bakery products 1%. Only the production of compound feedingstuffs decreased (4.3%).

Consumption of cereal products

Estonia's cereal output in the harvest year⁶ 2005/2006 was 760 000 t; the domestic market demand for cereals and cereal products (in grain equivalents) was 689 000 t. This includes consumption as animal feed (69.2%), human consumption (14.7%), seed (9.5 %), and industrial consumption⁷ (5.9%) (Figure 25). Compared to the previous harvest year, the need for fodder cereals increased the most (12.4%) in 2005/2006, which is due to the increased number of cattle and the higher average slaughter weight of pigs. The (2.6%) greater consumption of cereals as seed is due to the fact that last year's cold and snowless winter destroyed almost one half of the sown winter cereals; the need for cereal seeds increased in proportion to the area of destroyed crops. The need for cereals for human consumption decreased 17.7% during the harvest year 2005/2006 as the consumption of cereal products decreased along with the overall population of the country.

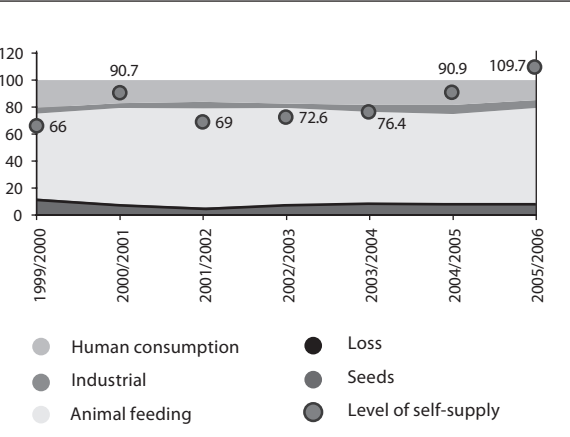
⁶ The harvest year is the period from 1 July to 30 June.
⁷ Industrial consumption means the use of cereals for production of alcoholic beverages and other products, except for food and feedingstuffs.

Figure 23. Production of cereal products ('000 t)



Source: Estonian Statistical Office

Figure 24. Cereal resource and consumption in Estonia (%)

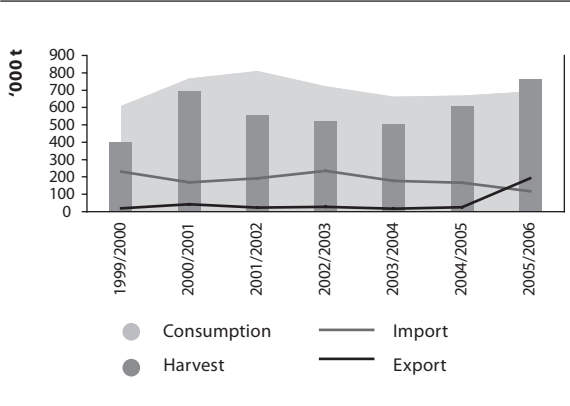


Source: Estonian Statistical Office

Cereal consumption has increased 13.9% over the past six harvest years. This is due to an increase in the consumption of animal feed and industrial consumption. Since the production of bioenergy has become more and more topical, the share of industrial consumption will certainly increase in the forthcoming years.

Because of hectic weather conditions and Estonia's geographic location, it is difficult for the country to meet its domestic market needs by self-supply, but in the good harvest year 2005/2006, the self-supply level was 109.7%. The good cereal harvest is also reflected in the export and import volumes (Figure 25).

Figure 25. Cereal consumption, export, import

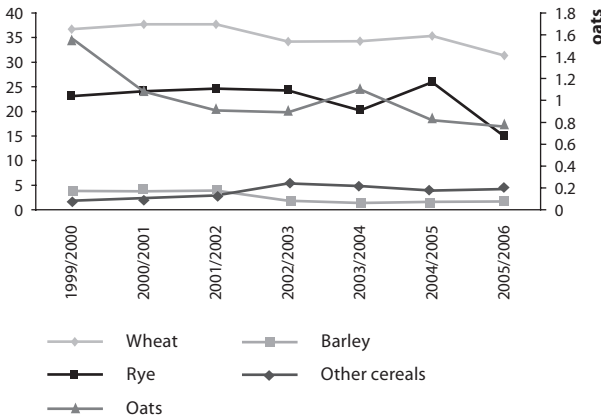


Source: Estonian Statistical Office

Per capita cereal consumption was 52.9 kg in 2005/2006, which is 14.6 kg (21.6%) less than in the previous harvest year. The consumption of rye (42.3%) and wheat (11.3%) has decreased the most, mainly due to decreased consumption of black and white breads. However, wheat (59.2%) and rye (28.2%) are still the most consumed cereals.

Oats constituted 1.4% of total consumption. The decrease in oats consumption is attributable to the decrease in the number of horses, but there are also other reasons. The areas that were formerly under oats are now used for other crops with higher nutritional values. Farmers raising highly productive meat and dairy cattle need higher energy feed with higher protein content, and this is why oats have become a secondary fodder crop.

Figure 26. Per capita cereal consumption in the harvest year (kg)



*-maize, sorghum, mixed cereals, triticale, buckwheat
Source: Estonian Statistical Office

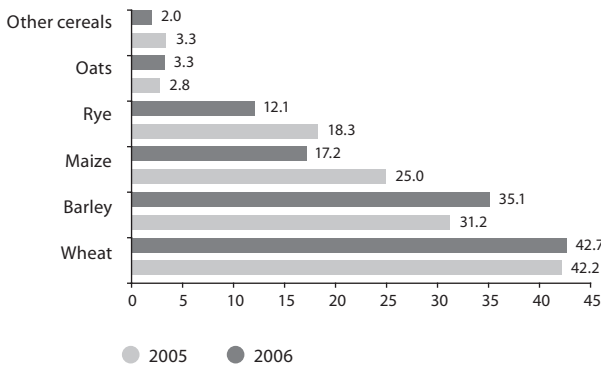
Trade

Cereals⁸ were imported in 2006 for MEEK 95.9. The volume of imported cereals and cereal-based products was 112 300 t (in grain equivalents), which is 1.2 times (17 500 t) less than in the same period during the previous year. The import of cereals (as grain) formed 25% of this (28 000 t).

The relative share of cereals in the import of cereals and cereal-based produces has decreased 8.6%. The bulk of imported cereals (99%) came from EU Member States. Wheat had the largest share – 38% (42 700 t) of imported cereals, followed by barley – 31.3% (35 100 t) and maize – 15.3% (17 200 t).

⁸ Chapter 10 of the combined nomenclature of goods (CN), except for rice.

Figure 27. Cereal import in 2006 ('000 t)



Source: Ministry of Agriculture

42 700 t of wheat and wheat products (in grain equivalents) were imported into Estonia in 2006. Last year's import amounted to 42 200 t over the same period, that is 1.1% (450 t) less than this year. Wheat (as grain) accounted for 14.2% (6000 t) of the total import of wheat and wheat products. Out of the wheat and wheat products imported to Estonia in 2006, 82% came from Latvia and 12% from Germany.

The import of rye and rye products (in grain equivalents) amounted to 12 100 t in 2006. The import of rye (as grain) decreased 34% (6200 t) compared to the same period last year. Rye (as grain) accounted for the bulk (88.5%) of the import of rye and rye products (in grain equivalents). Most of the rye and rye products were imported from Latvia (96.3%), and to a lesser degree from Lithuania (3.7%).

35 100 t of barley and barley products (in grain equivalents) were imported into Estonia in 2006. Most of it was processed barley products. Only 4 t of barley was imported as grain. The import of barley and barley products (in grain equivalents) was 31 200 t in the same period of the previous year, that is 12.5% (3900 t) less than this year. Barley and barley products were imported mainly from Sweden (54.1%), Lithuania (29.7%), and Germany (16.2%).

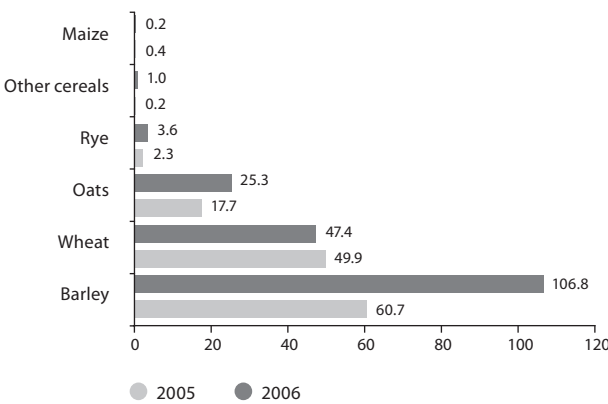
Oats and oat products (in grain equivalents) were imported to Estonia in a volume of 3300 t in 2006, which is 17.1% (483 t) more than at the same time last year. Oats as grain formed 22.6% of the total imported oats and oat products. Oats and oat products were mainly imported from Latvia (77.2%), Finland (21.1%), and Lithuania (1.6%).

17 200 t of maize and maize products (in grain equivalents) were imported into Estonia in 2006. Compared to the same period last year, the import of maize and maize products (in grain equivalents) decreased 31.2% (7800 t). Maize and maize products were mainly imported from Hungary (61.6%), Lithuania (29.7%), and Poland (8.3%).

The total import of cereals and cereal-based products (in grain equivalents) amounted to 184 300 t in 2006. Compared to the same period last year, the import of cereals and cereal products (in grain equivalents) increased 1.4 times (53 100 t). Cereals as grain formed 84% of total exports. 71.7% of cereals exported as grain and 84.6% of first degree processed products were of Estonian origin. 127 500

t (69.1%) of the overall quantity of exported cereals and cereal products were exported to EU Member States.

Figure 28. Cereal export in 2006 ('000 t)



Source: Ministry of Agriculture

47 400 t of wheat and wheat products (in grain equivalents) were exported from Estonia in 2006. 54.8% of this was wheat exported as grain. The export of wheat and wheat products (in grain equivalents) has decreased 1.1 times (2400 t) compared to last year. The main destinations were the Netherlands (86.4%) and Sweden (12.3%).

The export of rye and rye products (in grain equivalents) from Estonia amounted to 3600 t in 2006, which is 1.5 times (1300 t) more than at the same time last year. 1500 t of rye was exported as grain. No rye was exported as grain during the same period last year. Rye and rye products were exported to Latvia (100%).

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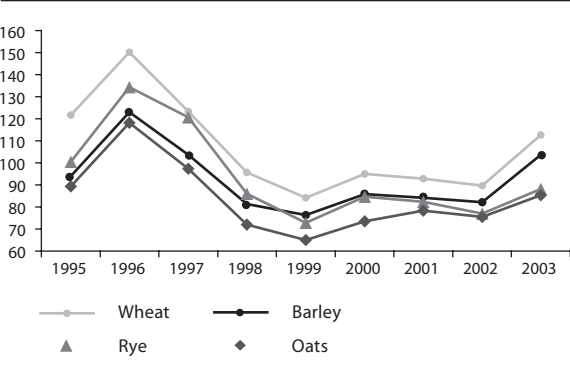
The export of barley and barley products (in grain equivalents) from Estonia amounted to 106 800 t in 2006, which is 1.8 times (49 900 t) more than at the same time last year. 104 500 t of barley was exported as grain. The main destinations for barley and barley products were Saudi Arabia (47.4%), the Netherlands (26.7%), and Germany (25.1%).

Oats and oat products (in grain equivalents) were exported from Estonia in 2006 in the amount of 25 300 t, of which 90.2% (22 900 t) was oats exported as grain. Compared to the same period last year, the export of oats and oat products (in grain equivalents) increased 1.4 times (7700 t). The main destinations of oats and oat products were Denmark (40.5%), the Netherlands (24.1%), and Spain (19.7%).

Buying-in prices of cereals around the world

According to the Food and Agriculture Organization of the United Nations (FAO), the average producer prices of cereals in the world have started to rise again after the end of the 1990s. The price increase is mainly due to the shortage of cereals on the world market, caused by poor weather conditions. The relative importance of bioenergy using cereals as raw material is also increasing. This is another factor influencing cereal prices.

Figure 29. Average producer prices of cereals in the world, 1995–2003 (USD/t)

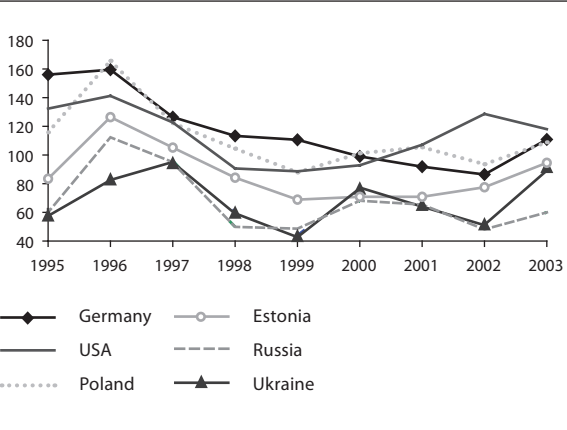


Source: Food and Agriculture Organization of the United Nations

If we look at the producer prices of cereals in the world, the average producer price of barley had increased the most by 2003 when compared to 1999 (35.7%), followed by wheat (33.8%), oats (31.3%), and rye (21.3%).

The changes in producer prices of cereals vary by country. The average producer prices increased the most from 1999 to 2003 in Ukraine (109.9%), followed by Estonia (37.4%), the USA (33%), Russia (26.6%), and Poland (23.8%). The prices were the most stable in Germany, where the average price of a tonne of cereals in 2003 was 110.9 USD, which is only 0.3% more than in 1999.

Figure 30. Cereal producer prices (USD/t)

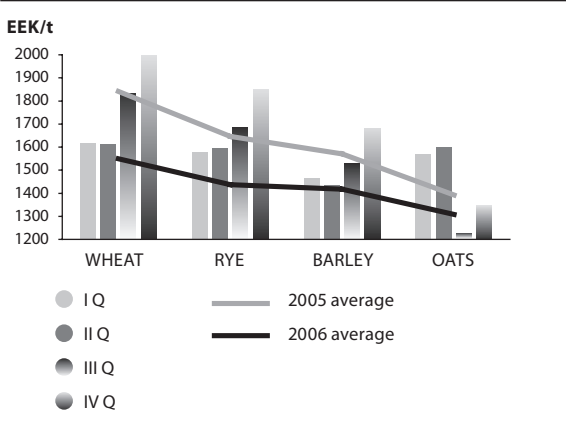


Source: Food and Agriculture Organization of the United Nations

Buying-in and producer prices of cereals in Estonia

According to the Estonian Institute of Economic Research, the buying-in prices of cereals (the actual average purchasing prices of food and fodder cereals paid by the cereal industries, mills, and other buyers in Estonia, weighted by the weekly buying quantities and exclusive of VAT) rose in 2006 compared to 2005 (Figure 31). The main reason for the increase was the cereal shortage on the world market, caused by poor weather conditions, and also the increase in the relative share of bioenergy production, which uses cereals, especially maize, as raw material.

Figure 31. Buying-in prices of cereals in 2006 compared to 2005, EEK/t



Source: Estonian Institute of Economic Research

The prices of all types of cereals bought in Estonia rose in the fourth quarter. The prices of food wheat, food rye, and fodder barley rose to 2057 EEK/t, 1862 EEK/t, and 1682 EEK/t, respectively (Table 9). The average buying-in price of food wheat was 1910 EEK/t in 2006, which is 260 EEK/t or 15.8% more than the average for 2005 (1650 EEK/t). The average buying-in price of food rye was 1687 EEK/t in 2006, which is 163 EEK/t or 10.7% more than the average for 2005 (1524 EEK/t). The average price of fodder barley was 1570 EEK/t in 2006, which is 10.7% higher than in 2005.

Table 9. Buying-in prices of cereals in 2006, EEK/t

	I Q	II Q	III Q	IV Q	2006 average	2005 average	Change +/-% 2006 average/ 2005 average
WHEAT	1 617	1 615	1 831	1 997	1 842	1 550	18.8
Food wheat	1 652	1 680	1 889	2 057	1 910	1 650	15.8
Fodder wheat	1 539	1 553	1 578	1 686	1 593	1 383	15.2
RYE	1 576	1 597	1 684	1 848	1 647	1 437	14.6
Food rye	1 616	1 620	1 703	1 862	1 687	1 524	10.7
Fodder rye	1 520	1 551	1 526	1 751	1 545	1 238	24.8
BARLEY	1 464	1 438	1 527	1 682	1 570	1 418	10.7
Food barley	1 800	1 490	1 585	1 700	1 568	1 700	-7.8
Fodder barley	1 461	1 435	1 524	1 682	1 570	1 418	10.7
OATS	1 570	1 599	1 227	1 349	1 392	1 309	6.4
Food oats	1 552	1 599	1 408	1 600	1 571	1 507	4.2
Fodder oats	1 574	1 599	1 216	1 338	1 372	1 259	9.0

Source: Estonian Institute of Economic Research, Ministry of Agriculture

Market organisation

In 2006, a total of 23 248 t of cereals, of which 793 t was wheat and the remainder barley, were sold to **intervention buying-in**. A total of MEEK 44.5 including VAT was paid for the intervention cereals.

A tendering procedure for the export of intervention barley was also opened for Estonia in June, but no tenders were submitted. According to the new Regulation (EC) No 990/2006 concerning export, Estonia may export 30 000 t of barley till the end of the financial year (28 June 2007). Ten-

ders submitted for the export of a total of 30 000 t of barley were approved by the European Commission. In addition to export, 9.9 t of cereals were sold to the domestic market. The intervention stock contained 1837 t of cereals at the end of 2006, of which 793 t of wheat is intended for food aid and 1044 t of barley is for sale to the domestic market. As cereal prices have been high since the end of the summer of 2006, no tenders were submitted for selling cereals to intervention buying-in in the new tendering period beginning from 1 November 2006, till the end of 2006.

Distribution of food from intervention stocks to the most deprived persons

Agricultural products in intervention storage or processed products made from them can be distributed to deprived persons free of charge or at a minimum price covering the distributing organisation’s direct distribution costs via a volunteer programme implemented in the Member States since 1987. Charitable organisations carrying out the distribution of food play an important role in the scheme; they must meet certain conditions (e.g. checked accounting system, compliance storage facilities, sufficient manpower, readiness to involve volunteers, etc.).

Estonia decided to participate in the scheme for the distribution period 2006/2007. The distribution period lasts from 1 October till 31 December of the following year. The funds required for implementation of the plan, totalling EUR 324 813, were allocated in accordance with Commission Regulation (EC) No 1539/2006. Within the limits of this amount, Estonia can use 3000 t of cereals and buy from the market EUR 5190 worth of skimmed milk powder and EUR 300 worth of rice.

47 export licenses and 60 import licenses were issued in 2006, which are respectively 17 and 14 more licenses than in 2005. Kazakhstan’s and Russia’s cereal transit passed through Estonia in 2006. As of the beginning of December 2006, 414 800 t of wheat and 17 600 t of barley had passed through the Muuga Port.

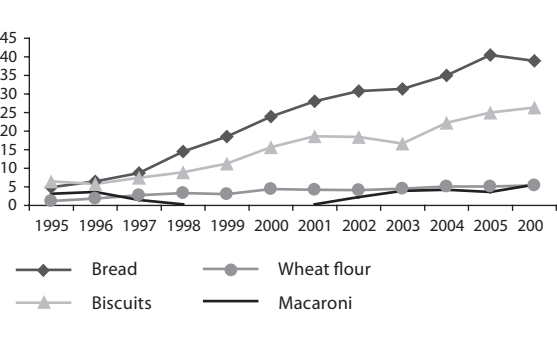
No applications were submitted in 2006 for export refunds for fruits and vegetables. All nine applications which were submitted for import licenses for fruits and vegetables (apples, garlic, mushrooms) were granted.

The quality of fruits or vegetables was checked in 1603 lots in 2006, including 190 import lots and 151 export lots. Non-compliances with the established requirements were detected on 27 occasions; seven injunctions were issued (for non-compliance with quality requirements for apples, lettuce, tomatoes, nectarines, and cauliflower). The non-compliant goods mainly originated from Poland and Spain.

Consumption of cereal-based products

Estonian food industry enterprises have paid great attention to product development in recent years. Product assortment surveys of shops, conducted by the Estonian Institute of Economic Research, showed that the assortment of bread available in shops has increased 7.9 times since 1995. The assortment of biscuits, wheat flour, and macaroni has also increased – 4.6 times, 4.5 times, and 1.8 times, respectively. The number of consumers preferring domestic flour, milling industry products, biscuits, and shortcakes has increased together with the diversification of assortment.

Figure 32. Assortment of domestic cereal-based products in shops (number of designations)



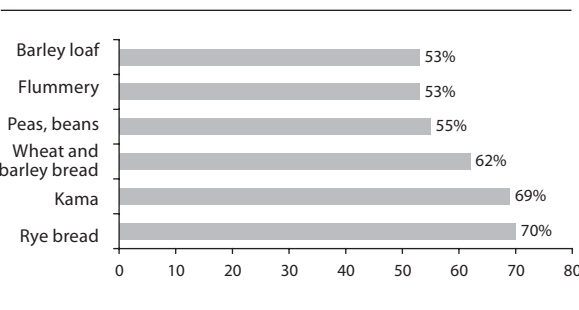
Source: Estonian Institute of Economic Research

Based on the Estonian Institute of Economic Research “Typical Estonian food” survey of 2005, consumers in Estonia consider bread to be the most typical Estonian cereal product (70% of respondents). Bread varies greatly in various cultures. While in the rest of the world, the most common bread flour is obtained from wheat, maize, or other cereals growing well in warm climates, Estonian bread is made from rye. This is what makes our bread exotic to foreigners. Bread has been a central part of the diet in Estonian culture. As rye tolerated poor weather well, bread was available even when all other crops failed. This is the source of the nation’s great respect for both the bread cereal and bread itself.

69% considered kama the most typical Estonian cereal-based product. Kama is a coarse meal of cooked, dried, and ground mixed cereals, usually eaten (drunk) with soured milk, kefir,

or yoghurt. It is a universal food which can serve as a dessert or a drink to accompany a main course. Also mentioned as typical Estonian cereal-based products were wheat and barley bread (62%), dried and husked or whole peas and beans (55%), flummery (53%), and barley loaf (53%).

Figure 33. “Typical Estonian food” (% of respondents)



Source: Estonian Institute of Economic Research

2.5. Fruit and vegetable market, production, processing and trade

Viive Alliksoo, Marje Mäger

Open field vegetable growth

The growing area of open field vegetables was 2800 ha in spring, which is 93.3% of the previous year’s growing area. The growing area has decreased by 474 ha compared to the average for 2000–2005. The growing area of all vegetables has decreased. The strong drought in the summer of 2006 reduced the yields considerably, especially for early and medium early crops. Higher temperatures during the growth period affect the harvest quality and shorten the shelf life of many vegetables. The average harvest of open field vegetables has been 46 200 t over the past five years (excluding the crop failure year of 2002). In 2006, the harvest was 39 600 t, which is 15–20% less than in recent years.

Fruit and berry growth

The total area of orchards and berry gardens was 11 700 ha in 2005. Most of this, 6500 ha, was apple orchards. As regards berries, the largest areas were under strawberries (865 ha), black currant (785 ha) and red currants (671 ha). Compared to the average for 2000–2005, the area of orchards and berry gardens has decreased by 3400 ha. The areas under cherry and plum orchards, as well as black currant, strawberry and gooseberry plantations have decreased.

The very low temperatures in January damaged those fruit and berry crops which are sensitive to cold (plums, cherries, raspberries, strawberries). Newly established apple orchards also suffered. The frosts in May damaged the blossoms of fruit trees and berry bushes. In addition to the cold winter and spring, the lengthy drought in summer again damaged plantations, especially strawberry fields. The fruit and berry harvests of 2006 are therefore well below the average. The plum harvest was especially poor. Almost all berries ripened too early and this had a negative impact on the harvest and quality. The harvest of strawberries, the most widely grown berry, was poor. The weather has not been favourable for strawberry growth and development in recent years. The gooseberry harvest was good and some apple orchards yielded a very rich harvest.

The producer prices of potatoes and vegetables, according to the Estonian Institute of Economic Research (average selling prices of own products at the warehouses of potato and vegetable farmers), for the last quarter of the year show that only the price of greenhouse cucumbers went up compared to September (118%). Other vegetable prices decreased: cabbage -23%, beet -17%, carrot -16% and cucumber -14%.

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Table 10. Producer prices of vegetables in 2006 exclusive of VAT, EEK/kg (arithmetic mean at end of month)

	September	October	Change %	November	Change %	December	Change %
Headed cabbage	3.20	2.45	-23.4	2.45	0	2.45	0
Carrot	5.00	4.20	-16.0	3.93	-6.3	3.93	0
Beet	4.00	3.33	-16.8	3.45	3.8	3.45	0
Swede	7.00	7.00	-	7.00	0	7.50	7.1
Long cucumber	11.00	24.00	118.2	34.00	41.7	34.00	0
Tomato	14.00	12.00	-14.3	-	-	-	-

The change % is the change compared to the previous month.
Source: Estonian Institute of Economic Research, Ministry of Agriculture

All vegetables were more expensive in October 2006 than in October 2005. Swede was much more expensive (160%), because the exceptionally dry summer was especially unsuitable for growing swede. Potato (65%), beet (56%), cucumber (55%) and cabbage (44%) were also notably more expensive.

The price of greenhouse cucumbers went up the most in November compared to October (42%). The price increase for beets was small (4%) and carrots were the only vegetable that decreased in price (-6%). All vegetables were more expensive in November 2006 than in November 2005: swede (150%), carrot (62%), beet (53%), cabbage (47%) and cucumber (36%).

Only the price of swede was higher in December than in November (7.1%). The prices of other vegetables remained at

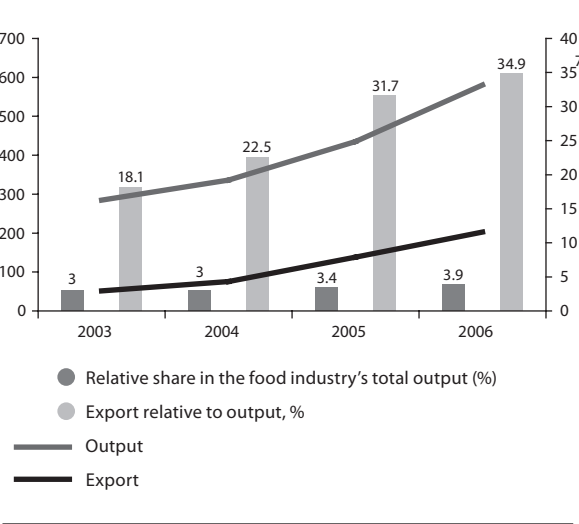
the November level. Most vegetables were more expensive in December 2006 than in December 2005: swede (168%), carrot (60%), beet (52%) and cabbage (34%); only the price of cucumbers did not rise.

Processing of fruits and vegetables. Relative share in the processing industry

The relative share of the output of the fruit and vegetable sector accounted for 0.7% of the processing industry's, and 3.9% of the food industry's, total output in 2006. The fruits and vegetables sector produced nearly MEEK 580 worth of output in 2006, of which 34.9% was exported. Fruits and vegetables formed 4.9% of the total export of food products in 2006. Output grew 33.2% and export grew 46.9% compared

to the year 2005. The relative share of fruit and vegetables in the food industry's total output has increased slightly year by year (0.5% in 2006 compared to 2005).

Figure 34. Output and export of fruits and vegetables (MEEK), relative share in the food sector and export relative to output (%), 2003–2006



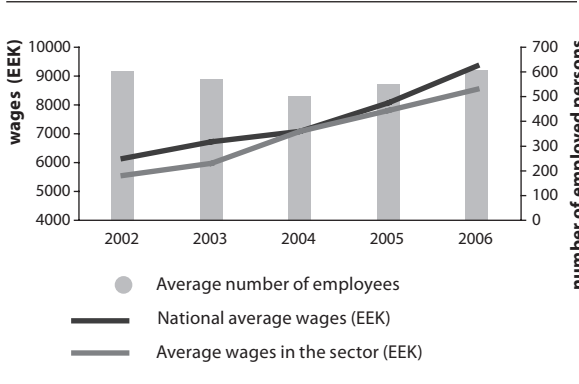
Source: Ministry of Agriculture

Employees and wages

The number of people employed in the fruits and vegetables sector has increased again after 2004. The average number of employees in the sector was 502 in 2004 and 606 or 20.7% more in 2006. Compared to 2005, the number of employees increased 10.1% in 2006.

The average gross wages in the fruits and vegetables sector were EEK 8547 per month in 2006, which is EEK 804 or 8.6% less than the national average. The wages increased 9.4% compared to 2005.

Figure 35. Number of employed persons and average monthly wages in the fruits and vegetables sector; average wages in Estonia, 2002–2006



Source: Estonian Statistical Office

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According to the preliminary information of the Statistical Office, the realised net turnover of the fruits and vegetables sector was MEEK 727 in 2006. Profits accounted for 9.4% or MEEK 68.6 of the turnover. Compared to the previous year, turnover increased 38.2%, while profits decreased 25% or by MEEK 22.8. An estimated MEEK 151.8 of value was added in 2006. The value added decreased 5.4% compared to the year 2005 (by MEEK 8.6).

Figure 36. Realised net turnover, gross profit and value added (MEEK)



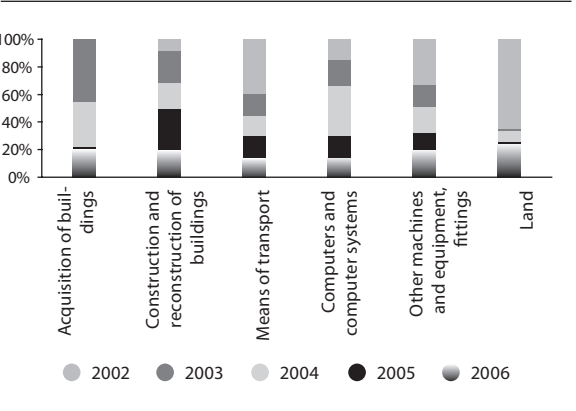
Source: Estonian Statistical Office

Investments

The fruits and vegetables industry invested MEEK 43.9 in fixed assets in 2006, which is MEEK 3.2 or 6.7% less than in 2005. The greatest investments were made in 2006 in machinery and equipment, totalling MEEK 32 and accounting for 72.9% of all investments in tangible assets. MEEK 8.6

(19.6%) was invested in the construction and reconstruction of buildings and MEEK 1.4 (3.2%) was invested in means of transport. Acquisition of new buildings was the only category in which no investments were made in 2006.

Figure 37. Investments in fixed assets in the fruits and vegetables sector, 2002–2006



Source: Estonian Statistical Office

Vegetable production

Vegetable harvests were low in 2006 because of the dry summer. The harvest of open field vegetables was 39 600 t or 22% less than in the previous year. The average yield decreased 17% compared to 2005. The yields of corm (-55%) and swede (-55%) decreased the most in 2006. The yields for carrot (-30%), beet (-35%) and open field cucumber (-7.5%) also decreased. The yield for cabbage decreased the least (-4%) compared to the previous year.

Table 11. Growing area, harvest, and yields of open field vegetables

	Growing area ('000 ha)		Harvest ('000 t)		Yield (kg/ha)	
	2005	2006*	2005	2006*	2005	2006*
Open field vegetables	3	2.8	50.7	39.6	16.9	14.0
cabbage	0.8	0.8	17.8	17.1	22.0	22.0
beetroot	0.4	0.3	6.3	4.1	17.3	13.6
carrot	0.6	0.6	15.6	10.9	27.6	19.1
cucumber	0.2	0.2	4	3.7	16.6	17.7
corm	0.3	0.2	2.2	1	7.2	4.0
swede	0.1	0.1	2.2	1	18.3	7.9
other vegetables	0.4	0.4	2.2	1.6	5.6	4.0

*- preliminary data
Source: Estonian Statistical Office

The area of greenhouses was 278.7 ha in 2005,⁹ which was 23.3 ha (-7.7%) less than in 2004. Tomato and cucumber are the main greenhouse vegetables grown in Estonia (60% and 31%, respectively). In 2005 greenhouses yielded 12 000 t of vegetables, which was 20% more than in the previous year. The growing area of cucumber increased from 56 800 ha

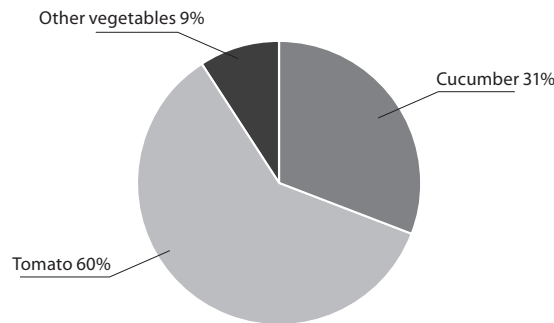
in 2004 to 86 100 ha in 2005. Harvests increased by 900 t or 18% owing to the larger growing area. The growing area of tomatoes was 166 600 ha in 2005, which is 15.2% less than in the previous year, and the harvest increased 24%.

⁹ The Estonian Statistical Office has not yet published data on the area of greenhouses used in 2006.

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Figure 38. Percentage of vegetables grown in greenhouses



Source: Estonian Statistical Office

Table 12. Growing areas of greenhouse vegetables, harvests¹⁰

	Growing area (ha)				Harvest ('000 t)			
	2002	2003	2004	2005	2002	2003	2004	2005
Greenhouses	255.4	176.4	302	278.7	12	7.1	10	12
cucumber	81.7	56.8	81.8	86.1	7	4	5	5.9
tomato	152.6	104.8	196.5	166.6	4.2	2.4	4.1	5.1
other vegetables	21.1	14.8	23.7	26	0.8	0.7	0.9	1

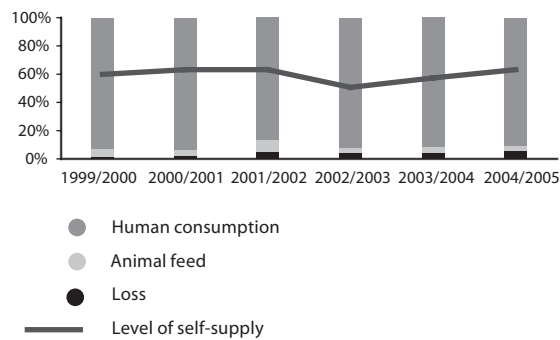
Source: Estonian Statistical Office

¹⁰ The Estonian Statistical Office has not published data for 2006.

Consumption

Vegetables are mainly used for human consumption in Estonia, and to a small extent as animal feed. Human consumption amounted to 76 700 t of vegetables, i.e. 90.4% of total consumption in the harvest year 2004/2005. Human consumption decreased by 15 300 t (-16.6%) compared to the previous harvest year. The share of vegetables used for human consumption has remained relatively stable between 87% and 93% in recent harvest years. The level of self-supply of vegetables was 63.2% in the harvest year 2004/2005, which was 5.8 percentage points higher than in the previous harvest year.

Figure 39. Vegetable resource and level of self-supply, 1999–2005



Source: Estonian Statistical Office

Foreign trade

The importing of vegetables to Estonia increased as a result of the poor harvest of 2006. The importing of vegetables amounted to 22 800 t or 1200 t more than in the previous year. The total value of imported vegetables was MEEK 214.4. Tomato and cucumber made up 52.7% and 17.1% of all imported vegetables, respectively. Only the importing of onions decreased by 2.5%. The importing of lettuce increased the most (65.9%); cucumber imports increased 16.9% compared to the previous year. The largest import partners in terms of value were the Netherlands and Spain (47.6% and 24.1% of all imported vegetables, respectively).

The export of vegetables amounted to 1900 t, which was 631 t more than in 2005. In terms of value, the export of vegetables amounted to MEEK 28.8 in 2006; 79.2% of this were veg-

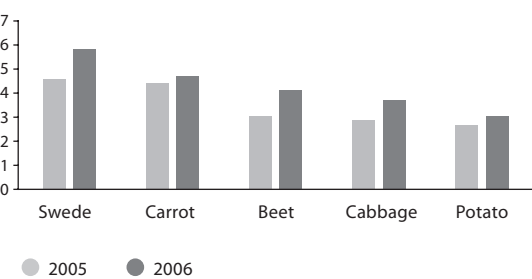
etables of Estonian origin. The main export vegetables were lettuce and cucumber, which accounted for 47.9% and 28.1% of total exports in terms of value, respectively. The main export destinations for vegetables were Lithuania (44.1%) and Latvia (32.7%).

Vegetable and potato prices

Weather problems had their impact on the producer prices of potatoes and vegetables. The dry summer and small harvests placed potato and vegetable prices higher than a year earlier. The lack of precipitation in summer also had an impact on potato and vegetable yields in most other European countries.

According to the Estonian Institute of Economic Research, the average producer price of carrots was EEK 4.7 in 2006, which was 34.9% higher than in the year before. The producer price of beets increased 29.9%, potatoes 26.6%, swedes 13.4%, and cabbages 6.7% compared to the previous year.

Figure 40. Average producer prices of vegetables (EEK), 2005–2006



Source: Source: Estonian Institute of Economic Research

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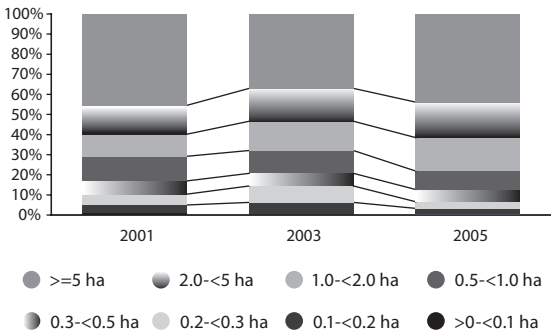
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Fruit and berry production

Orchards and berry gardens covered 11 600 ha in 1996 (Table 13). By the year 2002, the growing area of orchards and berry gardens had increased to 17 600 ha, but decreased again to 11 700 ha by 2005. The establishment of a large and profitable orchard or berry garden is very expensive, which may be one of the reasons for the decrease in the growing area. The Estonian climate poses great risks to farmers.

Changes have occurred in the size groups of orchards and berry gardens. The number of orchards and berry gardens with a size up to 1 ha has decreased year after year. Profitable production requires a large orchard or garden, which yields enough income to acquire equipment and build storage facilities. Orchards and berry gardens with a size of at least 5 ha formed the largest share (44%) in 2005.

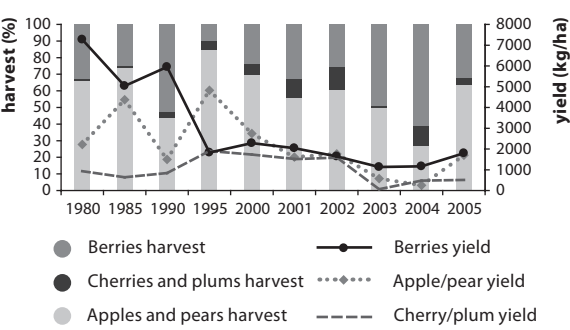
Figure 41. Size classes of orchards and berry gardens



Source: Estonian Statistical Office

Fruit harvest accounts for 67.9% of the total harvest of fruits and berries and amounts to 11 400 t. Of fruits, 63.7% are apples and pears, and 4.2% are plums and cherries. Berries account for 32.1% of the total harvest of fruits and berries.

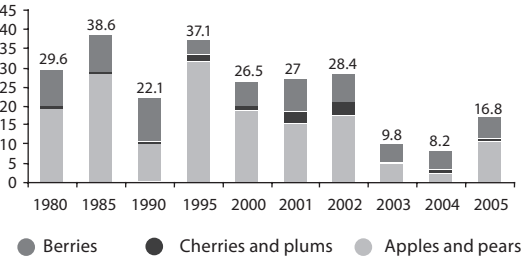
Figure 42. Harvest and yields of fruits and berries



Source: Estonian Statistical Office

The area of orchards decreased 28.4% in 2005 compared to 2004, i.e. to 7900 ha. The harvests of fruits and berries increased considerably in 2005 compared to 2004. The reason for the poor harvest of 2004 was poor weather; strong frosts in mid-May destroyed the blossoms of fruit trees. The fruit harvest increased to 11 400 t in 2005. The harvest of 2005 was 3.6 times larger than the harvest of 2004. The good harvest of apples and pears contributed to the total harvest of 2005. Compared to the previous year, the harvest of apples and pears increased 4.9 times, i.e. to 10 700 t in 2005. The harvest of cherries and plums was 700 t in 2005, which is

Figure 43. Harvest of fruits and berries ('000 t)



Source: Estonian Statistical Office

Table 13. Gross area of orchards and berry gardens in Estonia, 1996–2005 (ha)

Fruits and berries	1996	1998	2000	2002	2003	2004	2005
TOTAL	11617	12399	11644	17578	15562	15690	11733
Fruits	9109	9121	8233	12429	10725	11039	7902
apples and pears	7868	8008	7153	9924	8590	8895	6538
plums	785	715	682	1524	1294	1298	836
cherries	456	398	398	981	841	846	528
Berries	2508	3278	3411	5149	4837	4651	3831
red, white currant	563	735	614	1151	925	994	671
black currant	835	921	893	1034	1228	1137	785
gooseberry	390	317	291	668	582	589	362
raspberry	99	130	145	517	457	382	328
strawberry	336	883	1052	1458	1230	1095	865
others	285	292	416	321	415	454	820

Source: Estonian Statistical Office

300 t less than in the previous years. Berry harvest was 5400 t in 2005 and accounted for 32.1% of the total harvest of fruits and berries. The harvest of berries increased by 400 t or 8% in 2005 compared to 2004.

Consumption

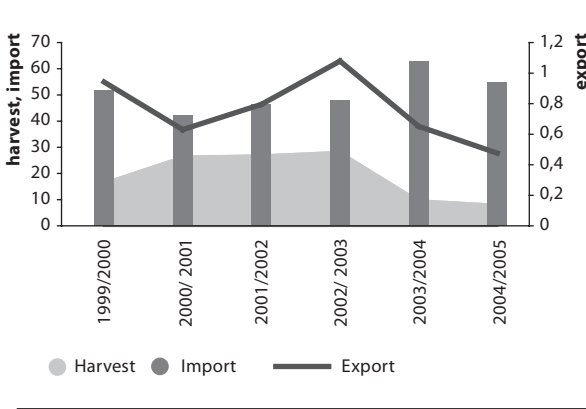
A total of 62 100 t of fruits and berries were consumed in Estonia in the harvest year 2004/2005, which was 9900 t (-13.8%) less than in the previous year. Most of the production is consumed as food and a small part is consumed industrially¹¹. Human consumption amounted to 52 800 t in the harvest year 2004/2005, which accounts for 85% of total consumption. Industrial consumption was 2100 t or 3.4% of total consumption. The gradual reduction in the area of orchards and berry gardens is noticeable at the level of self-supply. Estonia supplied only 13.1% of its consumption of fruits and vegetables in the harvest year 2004/2005. In the harvest year 2004/2005, consumption of fruits and berries was 39.2 kg per capita, which was 6.3 kg less than in the previous harvest year.

Foreign trade

Imports play a great role in the fruits and berries sector, as Estonia's own production is small. Import of fruits and berries amounted to 54 700 t in 2004/2005, which is 800 t (-12.8%) less than in the previous harvest year. Export of fruits and berries from Estonia is very small. It amounted to 500 t in 2004/2005. Export decreased by 200 t (-27%) compared to the previous year.

¹¹ Production of fermented juice and alcoholic beverages.

Figure 44. Harvest, import and export of fruits and berries ('000 t)



Source: Estonian Statistical Office

2.6. Potato market, production, processing, trade

Elsa Nurk, Marje Mäger

Potato growth

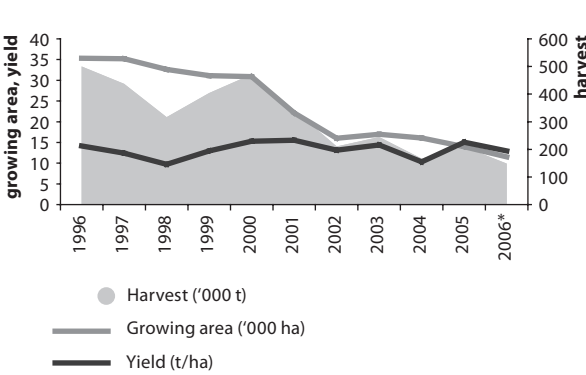
Potatoes were grown on 11 500 ha in 2006, which is 2500 ha or 18% less than in 2005. Total potato output was 148 400 t and the average yield was thus 12 945 kg/ha. The total harvest was 30% or 61 400 t less than in 2005 due both to a smaller growing area and 15% lower yields.

The lengthy drought at the beginning of the summer had an impact on the growth of potatoes, which are especially sensitive to a lack of moisture at the time of blossoming. Only those producers who used irrigation had good yields of early potatoes. Rains later in the summer were good for the growth of later varieties.

Potato production

According to the Statistical Office, the growing area of potatoes has decreased from year to year. Potatoes were grown on 11 500 ha in 2006. The growing area decreased by 17.9% compared to 2005. The harvest was also smaller because of the dry summer and smaller growing area. According to preliminary data, the 2006 potato harvest was 148 400 t and the yield was 12.9 t/ha, which is 13.9% less than in the previous year.

Figure 45. Growing area of potato, harvest and yield, 1996–2006



*preliminary data

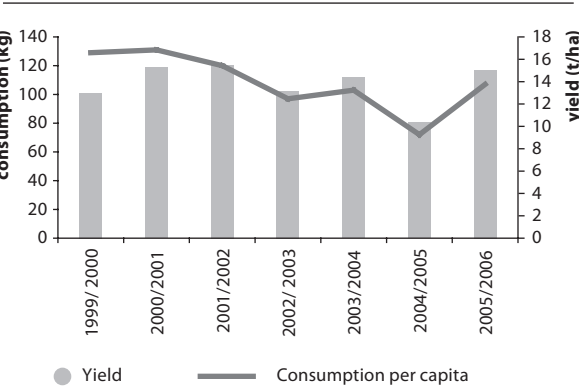
Source: Estonian Statistical Office

Consumption

There are many reasons for the decrease in the growing area of potatoes and the declining share of domestic potatoes available to consumers. Potato consumption has decreased since the end of the 1990s. This is partly due to changes in our eating habits. The potato is being replaced by rice and other milling products and macaroni, which are quicker and easier to cook. People's sensitivity to prices has also had an impact on consumption. In better harvest years¹² the potato price is lower and this is reflected in the purchased quantities. In the good harvest year 2005/2006, potato consumption was 107 kg per capita, which is as much as 49% more than in the previous harvest year.

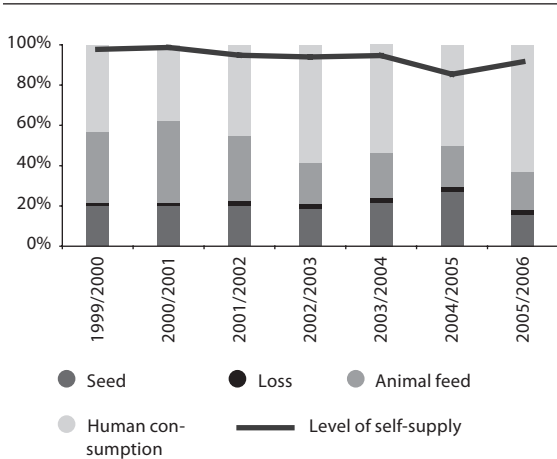
¹² The harvest year is the period from 1 July to 30 June.

Figure 46. Potato yield (t/ha) and annual consumption per capita (kg)



Source: Estonian Statistical Office

Figure 47. Potato resource and level of self-supply, 1999–2006



Source: Estonian Statistical Office

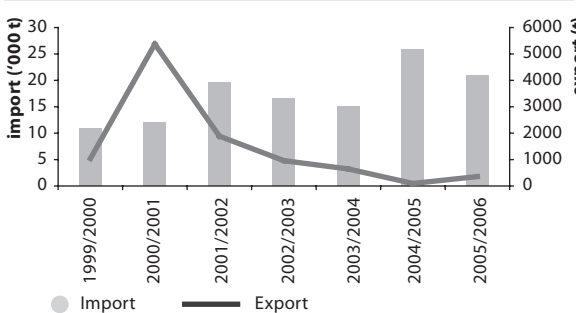
The self-supply level of potatoes has been more than 90% in recent years; only in the poor harvest year 2004/2005 did it fall to 85%. In the harvest year 2005/2006 the self-supply level was 92%.

Potatoes are mostly used for human consumption (62.9%). Compared to the harvest year 2004/2005, human consumption increased 48.6% and consumption as animal feed increased 9.6% in 2005/2006. The use of potatoes as seeds decreased (-32.2%) because of the smaller growing area. Potatoes are not used industrially in Estonia.

Foreign trade

In the harvest year 2005/2006, 20 900 t of potatoes were imported into Estonia, which is 19.3% less than in the previous period. Potatoes were mainly imported from Finland and Sweden. The export of potatoes amounted to 395 t in 2005/2006, which is 3.8 times more than in the previous harvest year. The main export destination was Latvia.

Figure 48. Potato export and import, 1999–2006



Source: Estonian Statistical Office

2.7. Honey production

Agne Tammistu

According to the Statistical Office, there were 33 000 colonies of bees in Estonia as of 31 December 2005. The number of colonies increased 0.9% compared to the year 2004. 638 t of homey was produced in 2005, which is 15% more than in 2004. To improve the production and marketing conditions of honey and bee-keeping products, the Estonian Apicultural Association and the Ministry of Agriculture prepared a National Programme for developing the production and marketing of honey for 1.9.2004–31.8.2007 (Apiculture Programme), which was approved by the European Commission (50% financed from the EU). The Apiculture Programme consists of three measures:

- 1) technical assistance to bee-keepers and associations of bee-keepers;
- 2) control measures for varroasis and accompanying bee diseases;
- 3) assessment of the quality of honey.

69% of the planned measures were completed in the second year of the Apiculture Programme. The objective of technical assistance was to improve the efficiency of the marketing strategy, to extend the bases of apiculture and thereby intensify the production of honey and other bee-keeping products. Seven nationwide seminars and 73 training days for local county associations were held for bee-keepers and other interested persons during the second year of the Apiculture Programme. Inform on the training days is available

at www.mesi.ee. Various training materials and the apicultural newsletter Mesinik were published under the same measure. The measure also covered regional monitoring for bee diseases, development of apicultural technology, and honey market and product development activities. Various items of equipment were bought for the test and observation apiaries (such as hive scales).

The objective of the varroasis control measure is to reduce losses caused by varroasis, to improve the profitability of apiculture and honey production, and to increase honey output. In the second year of the Apiculture Programme, the infection level of colonies was assessed and instructions and advice were developed for bee-keepers; lines of bees tolerant to varroa destructors are also under observation. Varroasis monitoring has been carried out and various equipment for field work and observations (such as devices for oxalic acid vaporiser, treatment and protection products, screened bottom boards and counting tables) has been purchased for the apiaries covered by the observation programme under this measure during the two programme years and bee-keepers were also trained (during training days) in varroasis control methods, and relevant information material was published.

The objective of the honey quality assessment measure is to improve the quality of honey produced and marketing, and to ensure compliance with food safety requirements. More than 200 honey samples were collected during the two programme years, and advice was developed for bee-keepers based on the analysis and assessment results.

2.8. Development of renewable energy

Maris Tõnuri, Einar Kikkas

The reform of the EU Common Agricultural Policy places greater emphasis on green public service – ensuring sustainable rural and environmental development. Studies by the European Commission refer to biomass as the main raw material for renewable energy in the short and medium terms. In its Communication of 7 December 2005, “Biomass Action Plan”, the Commission called on Member States the draw up national biomass action plans. The “Development Plan 2007–2013 for Enhancing the Use of Biomass and Bioenergy” was drafted during 2006 and approved by the Government of the Republic on 25 January 2007.

The main objective of the development plan is to create favourable conditions for the development of domestic biomass and bioenergy production so as to reduce Estonia’s dependence on fossil fuels and to reduce environmental pressure by making more efficient and sustainable use of land resources, and promoting employment in rural areas. This would include the optimum use of biomass in the materials industry and energy production.

The development plan will be implemented in two stages:

In stage I (2007–2008), surveys will commence to analyse the market, resources, technologies, market organisation measures and other factors affecting the use of biomass. The following activities are planned:

- 1) analysis of the distribution of land resources;
- 2) assessment of biomass resources (physical and economic availability of various types of biomass);
- 3) surveys and analyses of energy crops (agricultural technology, varieties, cost-effectiveness);
- 4) technology studies and possibilities for use (biogas, combustion, combined production, fuel production, production of materials, assessment of the lifecycle of biomass products);
- 5) cost-effective types of transport biofuels in Estonia and the preconditions necessary for their use and setting the objective pursuant to the directive by 2010;
- 6) analysis of the market regulation in the field (law, support, charges, public procurement);
- 7) analysis of research and development and the condition of studies in the field of biomass and bioenergy.

In stage II (2009–2013), all reasonable, well justified market organisation measures under the analyses and surveys made in stage I – support, charges, standards, availability of know-how, etc. – will be implemented to promote biomass use.

From 2007, a number of support measures from the EU budget and from the Estonian budget will be targeted at the biomass and bioenergy markets. The RDP measures encourage agricultural producers to invest in biomass and bioenergy production. The EU will pay support for growing energy crops. According to the development plan, MEEK 20 will be invested in biomass development in 2007 and 2008.

2.9. Alcohol Market, Production, Trade

Katrin Karolin

According to the Veterinary and Food Board there are: 1 spirit producer, 11 distilleries, 9 breweries, 6 producers of other alcoholic drinks, and 7 producers of fruit and berry wines and cider in Estonia as of 10.4.2007, who are all approved producers of alcohol within the meaning of the Food Act. The operations of three approved enterprises are temporarily suspended and two enterprises are currently not producing alcohol. This overview uses the production and foreign trade data of the Estonian Statistical Office, the production and domestic sale data of enterprises, and the alcohol sector studies and retail price surveys conducted by the Estonian Institute of Economic Research.

Table 14. Output of alcoholic beverages in Estonia, 2004–2006 (millions of litres)

	2004	2005	2006*	Change %	
				2006/2005, '000 000 l	2006/2005 %
Rectified ethanol	4.00	3.67	6.14	2.47	67.3
Spirits	18.68	15.70	16.70	1.0	6.4
Fruit and berry wines by assessment of the Estonian Institute of Economic Research	3.48	4.32	3.18	-1.14	-26.4
	5.70	9.22	7.87	-1.35	-14.6
Beer	109.73	135.21	141.80	6.59	4.9
Low-alcohol beverages	15.06	23.26	33.58	10.32	44.4

*2006. a – short-term statistics of the Estonian Statistical Office (extended from a smaller sample)
Source: Estonian Statistical Office, Estonian Institute of Economic Research

Production

Data analysis showed that the output of most alcoholic beverages increased in 2006, with the exception of only fruit and berry wines. The output of fruit and berry wines decreased by more than one quarter according to the Statistical Office, but less (15%) according to the Estonian Institute of Economic Research. The difference can be explained by the fact that the Statistical Office’s sample apparently did not include all producers. The output of low-alcohol beverages and rectified ethanol (spirit) grew rapidly: 44% and 67%, respectively. The output of spirits increased 6.4%, particularly as a result of greater production of vodka and liqueurs (9% each).

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Foreign trade

According to the foreign trade data of the Statistical Office, the export of alcoholic beverages increased 15% and import decreased 3% in 2006. Although lower than last year, the foreign trade balance continued to be negative: imports exceeded exports by 1.5 times (for 9 months of 2005: 1.7 times). The export turnovers of most alcoholic beverages grew during the period, as both quantities and prices increased. As earlier, spirits took first place in the structure of alcohol exports and their share did not change significantly

from the previous year (65% in 2006 and 64% in 2005). The sales turnover of spirits was 16% higher than in 2005. 2006 was the first year when the export of low-alcohol beverages exceeded the export of beer from Estonia. Low-alcohol beverages accounted for 14% of exports, while beer accounted for 12%, which is nearly 7% less than a year ago. The share of spirits in imports decreased (13%) and so did the shares of beer and spirit, but to a smaller extent. Imports of low-alcohol beverages increased 9%, whereas the import only grew in mixed spirit drinks.

Table 15.a Basic export and import of alcoholic beverages and export and import prices, 2004–2006

	Price, EEK/l			Turnover, MEEK			
	2004	2005	2006	2004	2005	2006	2006/05 +/- %
EXPORT							
Beer	4.69	5.68	5.83	126.4	131.5	122.6	-6.8
Grape wine	52.09	46.93	36.52	26.7	60.8	52.2	-14.1
Vermouth	31.57	19.12	19.37	1.2	1.2	1.2	0.0
Low-alcohol beverages including cider mixed spirit drinks	5.99	6.13	7.07	40.3	102.1	138.6	35.7
	7.52	7.21	7.54	14.2	39.5	65.0	64.6
	5.02	5.55	8.64	22.3	45.3	51.6	13.9
Ethyl alcohol, >80% alcoholic	9.77	9.09	10.20	18.6	14.6	35.1	140.4
Spirits, up to 80% alcoholic content*	174.63	242.35	267.28	362.3	548.8	635.6	15.8
TOTAL EXPORT	x	x	x	575.6	859.0	985.3	14.7

IMPORT							
Beer	7.25	8.46	8.29	195.5	114.2	113.1	-1.0
Grape wine	30.86	32.40	33.20	333.6	420.4	440.4	4.8
Vermouth	30.70	27.67	27.67	15.3	17.7	19.8	12.1
Low-alcohol beverages including cider mixed spirit drinks	10.70	14.96	16.48	209.4	242.7	265.3	9.3
	13.20	12.73	12.28	41.9	44.1	41.6	-5.7
	9.25	17.70	20.15	94.1	135.5	161.8	19.4
Ethyl alcohol, >80% alcoholic	9.01	9.32	8.72	46.2	27.9	27.6	-1.1
Spirits, up to 80% alcoholic content*	95.96	130.09	86.29	380.5	617.0	536.7	-13.0
TOTAL IMPORT	x	x	x	1180.5	1439.9	1402.9	-2.6

* in 100% alcohol

Source: Estonian Statistical Office

Tabel 15.b Basic export and import of alcoholic beverages by quantity, 2004–2006 ('000 l)

	2004	2005**	2006	2006/2005, %
EXPORT				
Beer	26 927	23 144	21 019	-9.2
Grape wine	513	1 296	1 428	10.2
Vermouth	39	61	60	-2.6
Low-alcohol beverages including cider mixed spirit drinks	6 735	16 664	19 600	17.6
	1 882	5 471	8 618	57.5
	4 441	8 169	5 975	-26.9
Ethyl alcohol, >80% alcoholic	1 903	1 601	3 446	115.2
Spirits, up to 80% alcoholic content*	2 075	2 265	2 378	5.0

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IMPORT				
Beer	26 964	13 486	13 644	1.2
Grape wine	10 809	12 977	13 265	2.2
Vermouth	497	640	717	12.1
Low-alcohol beverages including cider mixed spirit drinks	19 580	16 220	16 102	-0.7
	3 177	3 461	3 385	-2.2
	10 169	7 656	8 032	4.9
Ethyl alcohol, >80% alcoholic	5 129	2 996	3 165	5.7
Spirits, up to 80% alcoholic content*	3 965	4 743	6 199	30.7

* in 100% alcohol

** adjusted data

Source: Estonian Statistical Office

Consumption and domestic market prices

According to the Statistical Office, the retail turnover of alcoholic beverages in current prices was BEEK 3.95 in 2006, which is 14.8% more than in 2005 (BEEN 3.44). The growth in turnover is largely due to greater purchases, as the CPI for alcoholic beverages increased only 2.0% in 2006 compared to 2005. The retail prices of all popular domestic alcoholic beverages rose. At the same time, the retail prices of almost all alcoholic beverages were lower in Tallinn than the Estonian average, with the exception of berry wines.

Table 16. Average retail prices of Estonian spirits in shops (price for 0.5 l glass bottle, EEK, including VAT)

	2004	2005	2006	2006/2005, %
Estonia on average				
Vodka (unflavoured)				
Lower price class	55.18	55.17	55.92	1.36
Medium price class	65.96	67.22	67.87	0.97
Liqueurs				
Berry liqueurs	49.96	51.35	52.18	1.62
High-alcohol liqueurs	91.25	91.94	93.46	1.66
Cream liqueurs	75.52	75.48	76.46	1.30
Gins	70.61	71.79	72.72	1.30
Tallinn on average				
Vodka (unflavoured)				
Lower price class	54.21	55.00	54.62	-0.67
Medium price class	66.67	68.31	68.89	0.85
Liqueurs				
Berry liqueurs	49.45	50.95	51.58	1.24
High-alcohol liqueurs	90.34	92.63	92.28	-0.38
Cream liqueurs	75.61	76.93	76.47	-0.60
Gins	72.01	73.33	73.44	0.16

Source: Estonian Institute of Economic Research

The alcohol consumption of Estonian inhabitants increased, while the quantities of alcoholic beverages exported by tourists were smaller than a year ago. Because of the latter, it may be concluded that the increase in retail turnover was mainly due to greater consumption among the Estonian population and due to legalised sales resulting from the application of tax stamps. Consumption increased since the income of

Estonia’s residents grew significantly more than alcohol prices. The sale of alcoholic beverages on the domestic market, calculated using the balance method, shows that 17.4 million litres of spirits were sold in Estonia in 2006, i.e. 13 litres *per capita* (at the alcoholic strength marked on the drink) or 3% more than in 2005. The sale of vodka increased 13% and reached 12.8 million litres, which is 9.5 litres *per capita*. The

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sales of other spirits were less *per capita*. The sale of low-alcohol beverages has increased at a rapid rate (+23%): the sale of cider and low-alcohol mixed spirit drinks on the domestic market increased 44% and 49%, respectively, compared to the previous year. The sale of beer amounted to 134.4 million litres or 100 litres *per capita*, which is 7% more than in 2005.

According to the Estonian Statistical Office, 14.2 l of legal absolute ethanol was sold in Estonia *per capita* in 2006. If we deduct the quantities purchased by tourists for export, which amounted to 2.79 l of absolute alcohol *per capita* (shops and ships), a total of 11.4 l of absolute alcohol was legally sold *per capita* in Estonia in 2006. Taking into consideration illegal alcohol consumption, which according to the estimation of the Estonian Institute of Economic Research was 0.6 litres of absolute alcohol in 2006, the total consumption was 12 litres of absolute alcohol *per capita*, i.e. 9% more than in 2005. In

2006, the Institute of Economic Research carried out the first study into the alcohol consumption of tourists staying in Estonia. The study showed that tourists consume 0.6 l of alcoholic beverages (as 100% alcohol) *per capita* during their stay in Estonia, but no data is available on the alcohol consumption of Estonian tourists visiting other countries.

Competitiveness of the Estonian alcohol producers

Domestic beer and vodka continued to have strong positions on the Estonian market in 2005, but competition between the local producers and importers intensified in both product groups, and local producers must be flexible in renewing the product range and packages to meet the developing demands of consumers. Both local and foreign consumers have especially great appreciation for the quality of Estonian beer (the beer *Saku Kuld* won the Best Estonian Food competition in 2005).

Table 17. Share of domestic and imported beer in the sales of shops (%)

	Total Estonia		including Tallinn		Other cities		Rural areas	
	Estonian beer	Imported beer	Estonian beer	Imported beer	Estonian beer	Imported beer	Estonian beer	Imported beer
2006 May	88	12	80	20	89	11	91	9
2005 May	88	12	70	30	90	10	94	6
2004 May	88	12	83	17	91	9	87	13
2003 May	92	8	83	14	92	8	94	6
2002 May	93	7	87	13	93	10	95	5
1996 May	88	12	77	23	87	13	93	7

Source: Estonian Institute of Economic Research

Table 18. Share of domestic and imported vodka in the sales of shops (%)

	Total Estonia		including Tallinn		Other cities		Rural areas	
	Estonian vodka	Imported vodka	Estonian vodka	Imported vodka	Estonian vodka	Imported vodka	Estonian vodka	Imported vodka
2006 May	89	11	79	21	87	13	95	5
2005 May	89	1	67	33	91	9	97	3
2004 May	93	7	87	13	93	7	95	5
2003 May	92	8	84	16	90	10	97	3
2002 May	91	9	87	13	91	9	92	8
1996 May	84	16	69	31	80	20	96	4

Source: Estonian Institute of Economic Research

According to the Estonian Breweries Association, 39% of Estonian beer was sold in glass bottles, 36% in plastic bottles, 20% in cans and 5% in kegs. Estonian breweries have reduced the share of beer sold in plastic bottles. Domestic canned beer cost 21.79 EEK/l and imported beer cost 27.14 EEK/l in May 2006 on average, which is 1.1% and 6.7% more, respectively, than in May 2005. In the assortment of imported beer, Russia ranks first with 17%, Germany is second with 15%, and Finland third with 11%.

Imported vodka originated from 19 countries. 28% of the imported vodka available in shops originates from Russia and 12% from Ukraine. Of vodka available in May 2006, 30% of Estonia vodka and 42% of imported vodka was packaged into 0.7 l glass bottles. In May 2006, local vodka in a 0.7 l bot-

tle cost 141.41 EEK/l and imported vodka cost 259 EEK/l, on average. The prices of domestic and imported vodka rose 3.3% and 1.7%, respectively, over the year. A requirement for state tax stamps was applied from 2006 to spirits in order to reduce the share of the illegal market.

Share of tourists

According to the Statistical Office, 1.4 million foreign visitors were accommodated in Estonia in 2006, which is 1.8% less than in 2005. According to the Estonian Institute of Economic Research, Estonia was visited by 4.2 million foreign tourists in 2006, including 44% from Finland. According to the survey of tourists, 54% of the respondents bought or intended to buy alcoholic beverages in Estonia to take back

to their home countries. Tourists mainly bought beer (43% of those who purchased alcohol to take back to their home countries), liqueurs (41%), and vodka (41%). 36% of alcohol shops in tourism areas assessed the purchases of tourists to be on the same level as in 2006 and 57% of shops believed the purchases of tourists had decreased. Shops in the Tallinn port area showed a declining tendency while shops in the Old Town and city centre showed a growth.

Of all tourists who purchased alcohol for to take back home, 68% considered the Estonian origin of the products important. Estonian origin was particularly appreciated by Estonia's Eastern and Southern neighbours and tourists from elsewhere in Europe and other continents; Finnish tourists often have a preference for products originating from Finland. According to the specialists of shops, most alcoholic beverages bought by tourists were made in Estonia (81–91%

of tourists' purchases). The chief reasons for the purchases were to buy something as a souvenir or gift (58% of respondents) and affordable prices (53%).

Tourists' expenditure on alcoholic beverages increased 4% in 2006 and reached an average of EEK 236 per adult visitor (EEK 227 in 2005). Purchases for export accounted for nearly 20% of the retail turnover of alcoholic beverages of the shops and amounted to MEEK 940–950, of which vodka accounted for one-third, i.e. 3.3% more than in 2005. Money was also spent on alcohol in restaurants and on ships.

A majority of the tourists drank beer on the spot in Estonia (60% of respondents). 19% drank wine and 12–13% of respondents drank other drinks. According to estimations, tourists purchased 4.54 million litres of alcoholic beverages (in 100% alcohol) from shops and ships for consumption in Estonia and for export.

Population's assessment of alcohol consumption and alcohol policy

Nearly four adults out of five consume alcohol in Estonia; wine (including sparkling wine) and beer are the most frequently consumed beverages. According to the self-assessment of alcohol consumers, they consume alcohol mainly because it is a traditional part of celebrations, but also for socialising, relaxing, and because they like the taste of alcohol. Those who believe that they consume little alcohol are of the opinion that alcohol consumption is large in Estonia and it should be cut. Drunk driving was considered the greatest problem associated with alcohol consumption, but the situation of drinking among children and young people was also considered highly critical.

Alcohol is readily available in Estonia; 57% of respondents believe that the state's current alcohol policy is in favour of the liberal sale and consumption of alcohol. Ready availability is witnessed by the fact that every 4th to 5th person can buy alcohol in the same building where they live or at a point of sale in a neighbouring building; for the rest it would usually take less than 10 minutes to get to the nearest point of sale.

Compared to 2005, the population is more supportive of a stricter alcohol policy. Every other respondent believes that Estonia's alcohol policy should include tougher restrictions. For example, 58% of respondents believe that the retail sale of alcohol at night should be banned nationwide; current-

ly this measure has been applied by local governments at their own discretion. As regards points of sale, the respondents would particularly impose limits on various events (for example, 88% of respondents were against alcohol being sold at sporting competitions) and the catering establishments at places of work. The survey also covered opinions on alcohol advertising channels: respondents are the most against large alcohol advertising posters on the streets, but also against radio and TV commercials promoting alcohol. The respondents believed that points of sale would be the most appropriate places of advertising. The survey suggests that the population is supportive of limiting the availability of alcohol.

Table 19. *Population's assessment of personal alcohol consumption in (% of respondents)*

	2000		2005	2006
Do not consume at all	16	Do not drink at all	18	17
Consume little	54	Drink little	50	55
Consume less than average	15	Drink moderately	29	26
Consume on average	12	Drink a lot	3	2
Consume above average	1			
Cannot assess	2			
Total	100		100	100

Source: Estonian Institute of Economic Research

2.10. Fishing, fish market, processing and trade

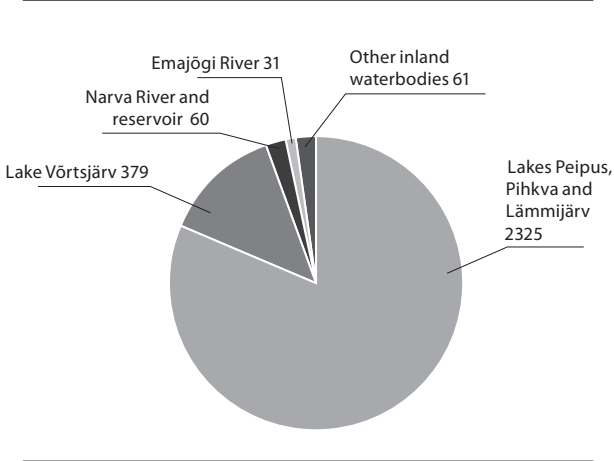
Lya Mägi

Fishing and fish resources

The Estonian fisheries sector uses the Baltic Sea and inland waters’ fish resources; Estonia also has access to the north-west Atlantic (NAFO), north-east Atlantic (Spitzbergen and NEAFC) and south-west Atlantic fish resources. The status of internationally regulated fish resources is assessed by international research organisations. The assessments of fish resources become increasingly critical year by year and it is recommended to ease fishing efforts (Table 21). The situation of the fish resources of internal waters mainly depends on the effectiveness of the national control system.

Brisling and Baltic herring from the Baltic Sea are of economic importance to Estonia. The status of these resources is assessed to be good in the Estonian exclusive economic zone, but the resources are shrinking. The resources of codfish and salmon are considered unsatisfactory. 73 039 t of fish was caught from the Baltic sea in 2006; coastal fishing accounts for 13% of this (Table 22). In addition to the Baltic Sea catch, 2856 t of fish was caught in inland waters (Figure 49). Fishing in the offshore part of the Baltic Sea is regulated by maximum allowed fishing quantities (quotas) (Table 20); fishing in coastal and inland waters is regulated by the amount of fishing gear. The fishing restrictions are established by the Minister of the Environment.

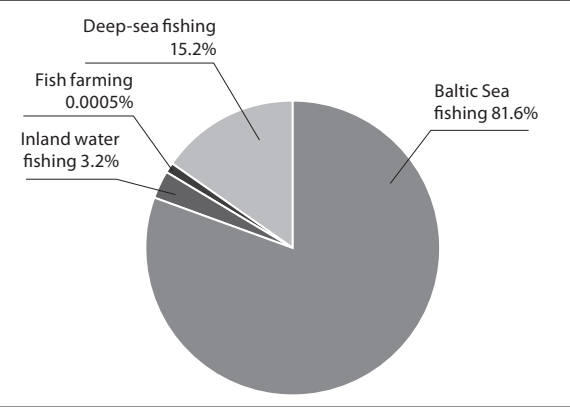
Figure 49. Fishing in internal waters in 2006 (t)



Source: Ministry of Agriculture

Baltic Sea catches account for 82% of the total catches. But in terms of value, deep-sea fishing is very important for Estonia: although it accounts for only 15% of Estonia’s total fishing capacity by quantity, it considerably exceeds Baltic Sea and inland waters’ fishing in terms of value. The reason for this is the highly valuable fish species caught by deep-sea fishing; while the main species caught in the Baltic Sea – Baltic herring and brisling – are considered low-value species.

Figure 50. Structure of fishing and fish farming in 2006 (% of total)



Source: Ministry of Agriculture

Table 20. Baltic Sea catch quotas

Name	Unit	2001	2002	2003	2004	2005	2006	2007
Baltic herring	tonnes	41 070	39 000	26 036	20 800	21 536	31 487	32 227
Brisling	tonnes	41 200	41 200	35 123	43 260	56 650	48 204	52 060
Codfish	tonnes	1 869	1 353	1 335	1 060	1 079	1 290	1 171
Salmon	individuals ¹³	15 807	14 877	14 154	2 555	2 000	11 008	10 609

Source: European Commission Regulation

¹³Individuals: 1 tonne = 200 individuals

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Table 21. Estonia’s deep-sea catch quotas

	Unit	2001	2002	2003	2004	2005	2006	2007
NAFO								
Redfish ¹⁴	tonnes	13 850	13 850	13 850	9 071	1 571	1 571	1 571
Redfish ¹⁵	tonnes		7 500	7 500	5 000	5 000	5 000	5 000
Squid (Illex) ¹⁶	tonnes	1 133	1 133	1 133	128	128	128	128
Yellow tail flounder ¹⁴	tonnes	67	65	73	73			
Greenland halibut ¹⁷	tonnes	1 971	2 167	2 070	985	380	371	321
Deep-sea mackerel	tonnes						245	245
Rajiformes	tonnes					546	546	546
Shrimp (in zone 3L)	tonnes	67	67	144	145	145	245	245
Shrimp (in zone 3M)	fishing day	1 389	1 667	1 667	1 667	1 667	1 667	1 667
Spitzbergen								
Shrimp ¹⁸	fishing day	377	377	377	377	377	377	377
NEAFC								
Redfish ¹⁹	tonnes	1 175	1 175	500		344	284	210
Mackerel ¹⁹	tonnes	1 000	600	511		115	119	135

Source: European Commission Regulation

¹⁴ Common quota for Estonia, Latvia, Lithuania, and Russia for 2001–2004

¹⁵ “others” quota for Member States which have no individual quota for the given species

¹⁶ Common quota for Estonia, Latvia, Lithuania, and Russia for 2001–2003

¹⁷ “others” quota for Member States which have no individual quota for the given species in 2001–2004

¹⁸ with a maximum of 3 vessels simultaneously

¹⁹ “cooperation quota” allocated to non-NEAFC countries (Japan, Canada, Estonia, Latvia, and Lithuania) for 2001–2003

Table 22. Fishing from the Baltic Sea in 2006

Species	Coastal fishing	Offshore fishing	Total
Perch	1117.2	0.0	1117.2
Eel	9.0		9.0
Pike	19.6		19.6
Brisling	29.0	46659.9	46688.9
Pike-perch	94.0	0.1	94.1
Crucian carp	39.1		39.1
Bream	6.4		6.4
Flounder	327.5	24.5	352.0
Burbot	3.1		3.1
Salmon	5.6	0.2	5.8
Sea trout	12.4	0.0	12.4
Rainbow smelt	372.6	62.2	434.8
Silver bream	31.1		31.1
Baltic herring	6996.7	16194.9	23191.6
Houting	27.8		27.8
Roach	60.6		60.6
Ide	8.1		8.1
Codfish	0.6	701.8	702.4
Garfish	191.3		191.3
Baltic vimba	27.5		27.5
Other	16.4	0.2	16.6
Total	9395.6	63643.8	73039.4

Source: Ministry of Agriculture

Table 23. Fishing from Estonian inland waters in 2006

Species	Lakes Peipus and Lämmijärv	Lake Võrtsjärv	Narva River and Reservoir	Emajõgi River	Other inland waters	Total inland waters
Perch	491.7	44.1	4.2	0.2	6.5	546.7
Eel	0.1	19.5		0.0	3.4	23.0
Pike	99.6	78.6	2.2	2.0	4.3	186.7
Ruffe	8.4				0.0	8.4
Pike-perch	1081.3	42.2	0.1	2.5	0.6	1126.7
Crucian carp		0.0	0.3	0.0	0.8	1.1
Bream	324.2	65.8	7.4	21.0	6.3	424.7
Tench		0.5	3.9	0.2	2.0	6.6
Burbot	18.1	2.8	0.0	0.0	0.0	20.9
Silver bream			0.1	0.0	0.2	0.3
Smelt (Lake Peipus)	83.4					83.4
Houting	0.6		0.0		0.2	0.8
Lamprey			35.7		7.1	42.8
Ide	0.4	0.1	0.3	0.4	0.1	1.3
Roach	217.6	0.3	5.6	4.2	28.9	256.6
Other	0.3	125.3	0.0	0.2	0.3	126.1
Total	2325.7	379.2	59.8	30.7	60.7	2856.1

Source: Ministry of Agriculture

Fishing fleet

In 2006 there were 70 vessels fishing on the Baltic Sea and 7 vessels on the Atlantic Ocean. The Fisheries Information System contained 800 coastal fishing vessels and 379 inland fishing vessels as of 2006.

Baltic Sea fishing is divided into open sea fishing and coastal fishing. Brisling, Baltic herring and codfish are caught on the open sea. Trawls are the main fishing gear. A great variety of species are caught in coastal waters; economically, the most important are Baltic herring, perch, flounder, smelt, garfish, as well as pike-perch, and to a lesser extent eel, sea trout, pike, Baltic vimba, and houting. Traps, nets and longlines are the main fishing gear.

Internal water fishing

Industrial fishing is carried out on a considerable scale on Lake Peipus and Lake Võrtsjärv. The main fish caught are pike-perch, perch, bream, pike, smelt, roach, eel, and lamprey (Table 23). Nets, traps, pound nets and demersal seines are the main fishing gear.

Deep-sea fishing

Estonia’s deep-sea fishing is carried out on the Atlantic Ocean. Shrimp is the main species caught. Other major species are: redfish, hake, squid, Greenland halibut, ray, round-nose grenadier and rough rattail. Fishing is carried out by trawlers.

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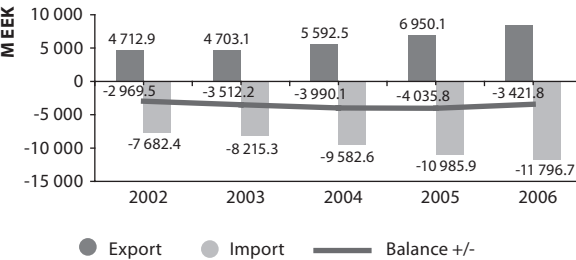
2.11. Trade in Agricultural products

Õrne Pill

1. Foreign trade²⁰

Foreign trade in agricultural products increased from MEEK 17 936.0 in 2005 to MEEK 20 171.6 in 2006. Export and import accounted for 41.5% and 58.5% of foreign trade, respectively. Foreign trade deficit decreased. If the deficit was MEEK 4035.8 in 2005, then in 2006 it was MEEK 3421.8, i.e. MEEK 614 less. Export and import of agricultural products (NC Chapters²¹ 01–24) amounted to MEEK 8374.9 and MEEK 11 796.7, respectively, in 2006. Agricultural products formed 7.0% of total exports and 7.3% of total imports of commodities.

Figure 51. Foreign trade in agricultural products, 2002–2006



Source: Estonian Statistical Office

²⁰ The Estonian Statistical Office's estimated volumes in terms of value have not been translated into quantities for the Chapters for 2005 and 2006, i.e. the actual quantities may be larger than specified here.

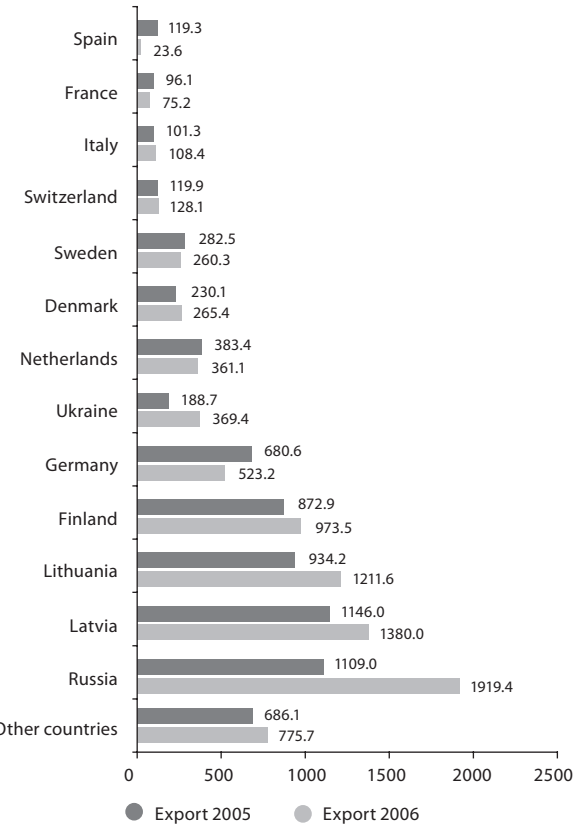
²¹ Nomenclature of Commodities.

Export and import increased 20.5% and 7.4%, respectively, compared to the previous year. Estonia has a positive trade balance with Russia, Latvia, and Ukraine, among the largest trade partners. Agricultural exports to the EU common market amounted to MEEK 5455.5 (65.1%) and exports to the markets of third countries amounted to MEEK 2919.4 (34.9%) in 2006; exports to Russia formed 66% of the latter. Commodities worth MEEK 10 522.7 (89.2%) were imported from the common market and imports from third countries amounted to MEEK 1274.0 (10.8%), including 27.6% from Russia and 10.6% from Ukraine.

Although Russia has now and then applied double customs duties, non-tariff barriers, certification of enterprises, etc. to goods of Estonian origin, it continued to be the main destination of Estonia's agricultural exports in 2006. Exports to Russia (MEEK 1919.4) increased 73.1% since last year. The export level was at its lowest in 2000, at 4.6% (MEEK 148). Upon Estonia's accession to the EU, most-favoured-nation treatment was applied to Estonia's trade with Russia under the Partnership and Cooperation Agreement between the EU and Russia, which abolished the double customs duties formerly applied to Estonian goods. However, exports to Russia increased substantially only in 2005 (doubling in comparison to 2004). The structure of exports has changed. While in 2002, Estonia's exports to Russia were composed mainly of fish and fishery products, which accounted for as much as 75.8% (MEEK 147.4), dairy products 4.8% (MEEK 9.3), and soft drinks and alcoholic beverages only 2.4% (MEEK 4.6), then in 2006 soft drinks and alcoholic beverages had the

largest share at 47.0% (MEEK 901.5). Fish and fishery products accounted for only 16.7% (MEEK 320.8), dairy products 12.2% (MEEK 234.9), and live animals, meat and meat products 8.0% (MEEK 153).

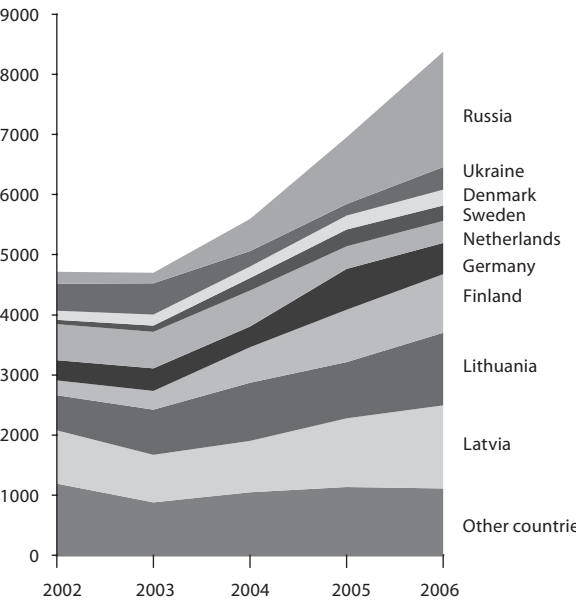
Figure 52. Export of agricultural products to the main trading partners (MEEK)



Source: Estonian Statistical Office

Latvia and Lithuania have so far been our main export partners for agricultural products (Figure 55). Exports to Latvia and Lithuania increased 20.4% and 29.7%, respectively, compared to the previous year. There was a large increase in the volumes of agricultural exports to Ukraine: 95.8%, Denmark: 15.3%, Finland: 11.5%, Italy 7.0%, and Switzerland: 6.8%. Exports to Saudi Arabia increased substantially: from MEEK 0.9 in 2005 to MEEK 96.5 in 2006. Among major partners, the volumes of export to Germany, the Netherlands, Sweden, and Spain have decreased.

Figure 53. Dynamics of export of agricultural products to the main trading partners, 2002–2006 (MEEK)



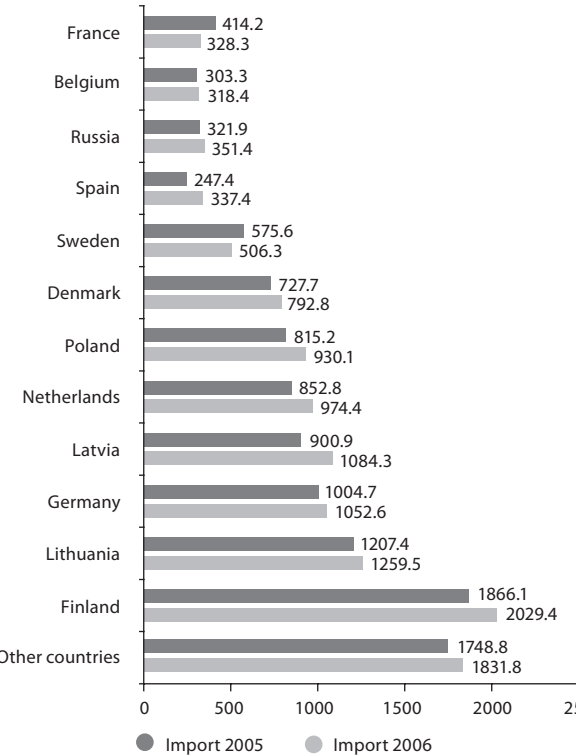
Source: Estonian Statistical Office

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If we compare exports to our main trading partners in 2002 and 2006, then export to Russia increased more than 5 times, Finland 4 times, Sweden 3.6 times, Lithuania 2 times, Denmark 1.7 times, and Latvia and Germany 1.6 times each. Exports to the Netherlands and Ukraine have decreased since 2002.

Figure 54. Import of agricultural products from main trading partners (MEEK)



Source: Estonian Statistical Office

Import of agricultural products (Figure 56) increased compared to the previous year by MEEK 183.4 from Latvia, MEEK 163.3 from Finland, MEEK 121.6 from the Netherlands, MEEK 114.9 from Poland, MEEK 65.1 from Denmark, MEEK 52.1 from Lithuania, and MEEK 47.9 from Germany. Import of agricultural products decreased by MEEK 85.9 from France, MEEK 69.1 from Sweden, and MEEK 35.3 from Austria.

Cereals and cereal products

Export of cereals, cereal products and flour confectionery (NC 10, 11, 19) increased 1.6 times compared to the previous year and reached MEEK 512.4, accounting for 6.1% of total agricultural exports; imports increased 15.6% to MEEK 956.8, i.e. 8.1% of total imports. Exports of cereals (i.e. cereal products as grain equivalent, except for rice) amounted to 184 300 t, which is 1.4 times more than in the previous year. Cereals in the form of grains formed a large part (84%) of this export. 112 300 t of cereals (as grain equivalent) were imported, which is 13.4% less than in the previous year. Level 1 processed products (flour, pearl grain, etc.) accounted for a large part of import (59.5%); cereals as grains formed only 25%.

154 800 t of cereals were exported as grains (except for rice) in 2006, mainly to the Netherlands (36.1%), Saudi Arabia (32.0%), Germany (17.0%), and Denmark (6.0%). Exports of cereals as grains increased 1.5 times by volume, and exports of cereal products (as grain equivalent) increased 2.8% compared to the previous year.

Cereals as grains were imported in a volume of 28 000 t, mainly from Latvia (56.8% of the total), Hungary (22.2%),

Lithuania (13.6%) and Germany (3.0%). Import of cereals as grains increased 50% by volume, and import of cereal products (as grain equivalent) increased 15.8% compared to the previous year.

Meat and meat products

Meat and meat products accounted for 6.3% (MEEK 530.8) of total agricultural exports and 9.2% (MEEK 1083.5) in 2006, whereas EU Member States accounted for 92.9% of exports and 98.9% of imports. Exports and imports of meat products (NC 1601–1602) amounted to MEEK 173.9 and MEEK 105.1, respectively.

Exports of beef amounted to MEEK 21.2, pigmeat: MEEK 234.6, edible by-products: MEEK 9.3, sheep meat: MEEK 0.3, and poultrymeat and its by-products: MEEK 63.3. Compared to the same period of the previous year, exports of beef and edible by-products decreased 15.0% and 23.1%, respectively (in terms of value), while exports of pigmeat and poultrymeat increased 3.4% and 8.9%, respectively. The main export destinations for poultrymeat were Finland: 52.4%, Latvia: 29.9%, and Lithuania: 14.3%. The average export prices of beef, pigmeat and poultrymeat increased 33.3%, 4.1% and 1.1%, respectively, while the export prices of by-products decreased 8.9%.

Imports of beef amounted to MEEK 111.5, pigmeat: MEEK 487.8, edible by-products: MEEK 29.2, sheep meat: MEEK 9.5, and poultrymeat: MEEK 225.4. Compared to the previous year, the import of beef, by-products, and poultrymeat decreased 8.6%, 27.0%, and 16.9%, respectively (in terms of

value), while the import of pigmeat increased 28.1%. The import prices of beef, poultrymeat and sheep meat were slightly lower than last year (10%, 14.7%, and 8.2%, respectively), while the prices of by-products and pigmeat were 6–7% higher.

The export of sausage products (NC 1601) reached 4964.6 t (31.0% growth compared to the same period last year). Export of preserves and other products (NC 1602) amounted to 2225.9 t (13.4% less than in the same period last year). Sausages and preserves accounted for 32.8% of the total export of meat and meat products in terms of value (23.5% last year). Latvia (36.2%), Lithuania (27.8%), Finland (16.9%) and Russia (5.6%) were the main markets for exported meat and meat products. The main sources of import of meat and meat products were Denmark (25.1%), Lithuania (11.9%), Latvia (8.9%), and Poland (7.1%).

62 600 live pigs (live weight 6 690 t) were exported in 2006, which is 2.9 times more than last year (in terms of the number of pigs). 92% of live pigs were exported to Russia and 2% to Latvia. The average live weight price (18 239 EEK/t) was 8.1% higher than last year. 36 live pigs (breeding pigs) were imported.

Exports of live cattle amounted to 16 064 bovine animals, which is nearly 60% more than last year. Poland and the Netherlands had respective market shares of 54.8% and 41.9% in 2006. Among live cattle, there were 304 pure-bred heifers and 13 409 bovine animals with a weight of up to 80 kg (NC code 0102 10 10). The number of heads of cattle exported for breeding was 546 in 2006 and 712 in 2005.

Dairy products

Exports of dairy products amounted to MEEK 1465.5 in 2006 (6.8% more than last year) and imports amounted to MEEK 270.8 (13.4% less than last year). Dairy products accounted for 17.5% of exports and 2.3% of imports of agricultural products. MEEK 1218.8 of dairy products (83.2% of the total exports of dairy products) reached the common market and MEEK 246.8 (16.8%) worth of dairy products were exported to third countries, including MEEK 234.9 to Russia. Of the whey products exported in 2006, 91.0% were exported to Russia (5437.3 t). MEEK 261.4 worth of dairy products (96.5% of the import of dairy products) were imported from the common market and MEEK 9.4 (3.5% of import) from third countries.

Compared to the previous year, the exported quantities of whey products and cheese increased 1.4 times and 1.2 times, respectively; the exported quantities of the following products decreased: skimmed milk powder 40%, whole milk powder 29%, other fermented milk and cream products 4.2%, butter and butterfat 50%, including butter 27.3%.

Table 24. Import volumes of some dairy products, t

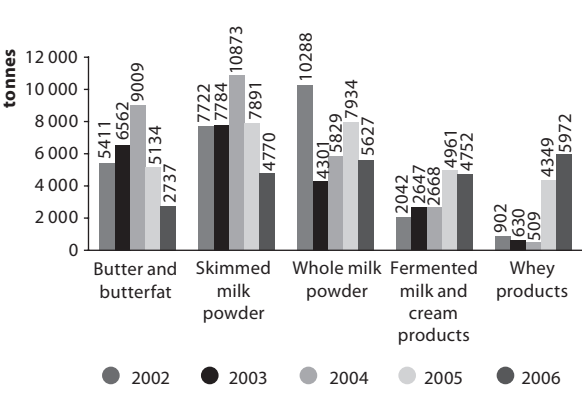
	2002	2003	2004	2005	2006
Butter and butterfat	3 509	9 023	3 000	117	129
Skimmed milk powder	2 203	6 693	1 108	101	131
Whole milk powder	1 960	2 203	256	143	419
Fermented milk and cream products	1 615	1 181	1 139	1 414	902
Whey products	139	321	580	1 636	1 886

The export volumes of some dairy products such as butter and butterfat, and skimmed milk powder (Figure 57) have fallen to their lowest level in the past five years. The lowest level for whole milk powder was 2003, followed by 2006. Although the export of fermented milk and cream products has grown over the past five years, there was a fall in 2006. There has been an increase in the demand for whey products, which are exported to Russia. The export volume of cheese and curds has reached from 6230 t in 2002 to 9243 t in 2005 and 9054 t in 2006. Export and import volumes depend on prices and market demand.

There was a rise in the export prices of cheese (3.7%), skimmed milk powder (7.4%), yoghurt (27.7%), and whey products (20.9%), and a fall in the export prices of butter and butterfat (8.9%), including butter (11.2%), whole milk powder (0.6%), and other fermented milk and cream products (21.9%). Import prices were higher than export prices this year, except for skimmed milk powder and other fermented milk and cream products.

The import quantities of whole milk powder increased 2.9 times in 2006, reaching 418.7 t; the import quantities of butter and butterfat increased 10.3% to 128.6 t, including butter 1.7 times to 124.6 t. The import volumes of skimmed milk powder and whey products also rose: by 30.1% (total import 131.1 t) and 15.3% (1886.1 t), respectively. The import volumes of cheese and yoghurt, however, fell by one-half and more than one-third, respectively (1935.2 and 281.6 t); the import volumes of other fermented milk and cream products and sour cream decreased 16% and 1%, respectively.

Figure 55. Export volumes of some dairy products, 2002–2006



Source: Estonian Statistical Office

The import prices of butter and butterfat (18.5%), including butter (9.3%), cheese (11.7%), whole milk powder (12.2%), whey products (37.1%) and skimmed milk powder (12.2%) rose and the import prices of yoghurt (8.1%) and other fermented milk and cream products (15.1%) fell.

The main export destinations of dairy products were Germany (22.5%), Latvia (19.6%), Russia (15.4%), Finland (12.5%), and Lithuania (7.6%). Dairy products were imported from Lithuania (23.0%), Finland (21.2%), Latvia (16.6%), Germany (14.0%), Poland (8.8%), Denmark (5.9%) and the Netherlands (2.8%).

Fish and fishery products

Fish and fishery products (NC 03, 1604–1605) with their positive trade balance have constantly taken first place in the export of food products. In 2006, their trade balance was +MEEK 635.6. Fish and fishery products formed 20.5% (MEEK 1713.2) of all agricultural exports (NC 01–24) in 2006 and 9.1% of all agricultural imports (MEEK 1077.6). 46.6% of the exported fish and fishery products were sold to the common market and 53.4% was sold to third countries' markets. Among imports of fish and fishery products, the common market accounted for 63.1% and third countries 36.9% in 2006.

The main export destinations for fish and fishery products were Russia (18.9%, MEEK 320.8), Ukraine (18.2%, MEEK 308.2), Denmark (7.6%, MEEK 129.6), Switzerland (7.5%, MEEK 126.6), and the Netherlands (7.0%, MEEK 119.0). Finland, Sweden, Lithuania, Germany, and Latvia had smaller shares in the export of fish and fishery products. The main sources of

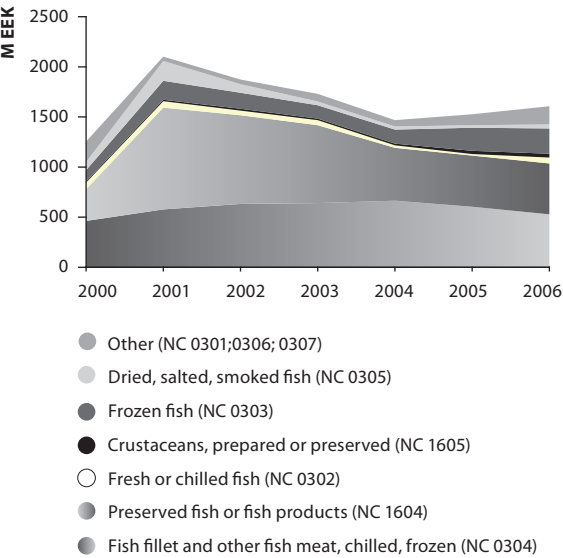
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imports of fish and fishery products were Lithuania (16.7%), Denmark (13.7%), Russia (11.7%), and Norway (10.3%).

The export of fresh and frozen fish broken down by category are as follows: frozen and chilled fillets of other freshwater fish (except for Pacific salmon and trout) (NC 0304 10 19, 0304 20 19) 35.9% (MEEK 414.1), frozen shrimp (NC 0306 13 10) 15.4% (MEEK 177.3), fresh and frozen sprat (NC 0303 71 80, 0302 61 80) 14.7 % (MEEK 169.6), chilled Pacific salmon and Atlantic salmon (NC 0302 12 00), and fillets of frozen Pacific salmon and Atlantic salmon (NC 0304 20 13) 5.8% (MEEK 66.8).

Figure 56. Dynamics of export volumes of fish and fishery products, 2000–2006



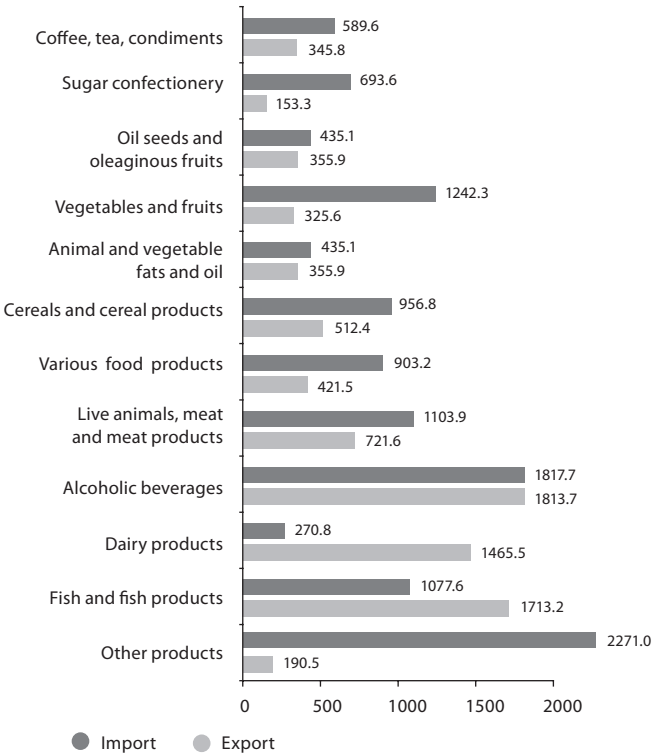
Source: Estonian Statistical Office

The main import articles were: chilled Pacific salmon and Atlantic salmon (NC 0302 12 00) 17.8% (MEEK 151.0), chilled or frozen shrimp (NC 0306 13 10) 16% (MEEK 135.3), other chilled or frozen freshwater fish (NC 0304 10 19) 9.2% (MEEK 78.4), fresh and frozen sprat 1.06% (MEEK 9.2).

Exports of fish (NC 03) amounted to 71 700 t in 2006, including 6800 t to the common market. The export of fish by volume decreased by 5400 t (7.0%) compared to the previous year. Export of fish products (NC 1604–1605) amounted to 46 900 t in 2006, including 8900 t to the common market.

29 200 t of fish were imported in 2006, including 17 500 t from the common market. The import of fish decreased by 5700 t (16.3%) compared to the previous year; 6600 t of fish products were imported in 2006, including 6300 t from the common market.

Figure 57. Trade in main agricultural products, 2006



Source: Estonian Statistical Office

In the trade in agricultural products, beverages, alcohol, and vinegar (NC 22) took first place in 2006: the import and export volumes of these products were MEEK 1817.7 and MEEK 1813.7, respectively; fish and fishery products were in second place and dairy products ranked third.

2. Domestic trade. Food product prices

According to the Estonian Statistical Office, the CPI changed 4.4% in 2006 compared to the average for 2005. Price changes were as follows: the prices of commodities rose 3.7%, including food products by 4.6% and industrial goods by 3.0%; the prices of services rose 5.7%.

According to the Estonian Institute of Economic Research, the retail prices of food products making up the Institute's basket rose from December 2005 to December 2006 as follows: fruits and vegetables 39.5%, cereal products 11.9%, meat products 5.5%, dairy products 4.6%, fishery products 3.8%, hen eggs 1.3%, and other food products 3.3%. The total price of the Institute's constant weight basket rose 8.3% from December 2005 to December 2006.

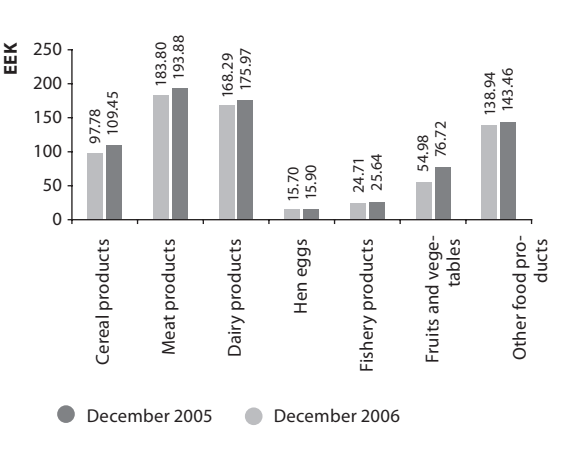
A comparison of the retail prices of December 2005 and December 2006 in the shops of Tallinn, as published by the Estonian Institute of Economic Research,²² shows that the prices of potatoes, carrots, headed cabbage and corm rose considerably (1.4–1.6 times). The prices of farm butter (7.9%), cheese (Edam or Gouda – 5.0%), wheat flour and toasting bread also increased. The prices of pork chops, low-fat curds, and sugar have dropped.

²² "Price Information" No 11, 2006.

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Figure 58. Prices of various product categories in the basket of the Estonian Institute of Economic Research, based on the shops of Tallinn (four-member family/one week)



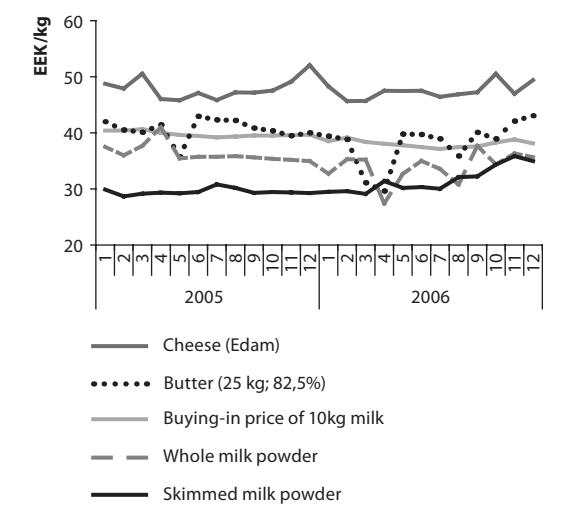
Source: Estonian Institute of Economic Research, "Price Information" No 11, 2006.

According to the Estonian Statistical Office, producers were paid an average of 3805 EEK/t for milk in 2006, which is 4.3% less than last year. The ex-works prices of dairy products changed as follows compared to the previous year: skimmed milk powder +7%, butter (small package) +3%, whole milk powder 7%, butter (82%, 25 kg) 6%. The ex-works prices of drinking milk have remained almost at last year's level.

Nearly 47% less butter was exported to the common market in 2006 (1145 t in total), and the average export price was 38 625 EEK/t, i.e. nearly 5.2% lower than last year. The export prices of the following products rose compared to last year:

cheese 3.7%, skimmed milk powder 7.4%, fermented milk and cream products 19.5%, ice cream 3.7%, and whey products 20.9%; the export prices of milk powder fell slightly.

Figure 59. Dynamics of ex-works prices of dairy products, EEK/kg



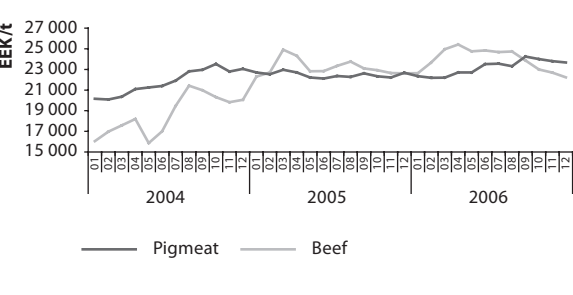
Source: Estonian Institute of Economic Research

In 2006, cheese was imported from Finland (25.0% of the total imported quantity) at the average price of 66 740 EEK/t, from Latvia (23.6%) at the average price of 42 060 EEK/t, and from Lithuania (18.7%) at the average price of 43 265 EEK/t. The average import price for 2006 was 54 989 EEK/t. Edam cheese was imported in 2006 at the average price of 36.03 EEK/kg. The retail price of Edam or Gouda cheese in the shops of Tallinn was 85.78 EEK/kg.

Processing industries paid an average of EEK 23 884 for a tonne of beef in 2006, i.e. 3.3% more than in the previous year. The export price of beef rose 33.3% and the import price fell 10% compared to the previous year.

Processing industries paid an average of EEK 23 179 for a tonne of pigmeat in 2006, i.e. 3.1% more than in the previous year. The price paid for pigmeat was almost the same as the EU average. The export price of pigmeat rose 4.1% and the import price fell 7.0% compared to the previous year.

Figure 60. Dynamics of the average buying-in prices of beef and pigmeat, 2004–2006



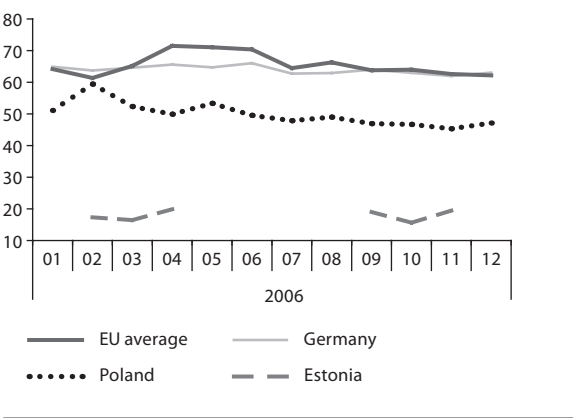
Source: Estonian Statistical Office "Monthly Bulletin No 12"

The average ex-works price of broilers was EEK 23 032 per tonne in 2006, which was almost the same as in the previous year. The average export price of poultrymeat (19 370 EEK/t) rose 1% and the import price (15 302 EEK/t) fell 14.7%. The ex-slaughterhouse price of broilers (25.14 EEK/kg in December) was equal to the average level in EU Member States, 16.23% lower than the Finnish average, 13.8% lower than the Ger-

man average, and 2.2% and 19.3% higher than the Latvian and Lithuanian averages, respectively.

The average ex-works price of hen eggs (300 eggs per tray) was EEK 0.84 per egg, which was nearly 10% higher than last year. The average (for M and L eggs) price of an egg in December 2006 was EEK 0.850 in Estonia, EEK 0.921 in Latvia, EEK 0.927 in Lithuania, and EEK 1.071 in the EU on average. The price of 10 (L) chicken eggs in the shops of Tallinn was EEK 15.37.

Figure 61. Buying-in prices of sheep (live weight over 25 kg) in the EU (EEK/kg in deadweight, exclusive of VAT, price for the last week of a month)



Source: Estonian Institute of Economic Research, "Price Information" No 1-11

The average export price of sheep meat was 58 412 EEK/t and the import price was 83 779 EEK/t, which was one-half

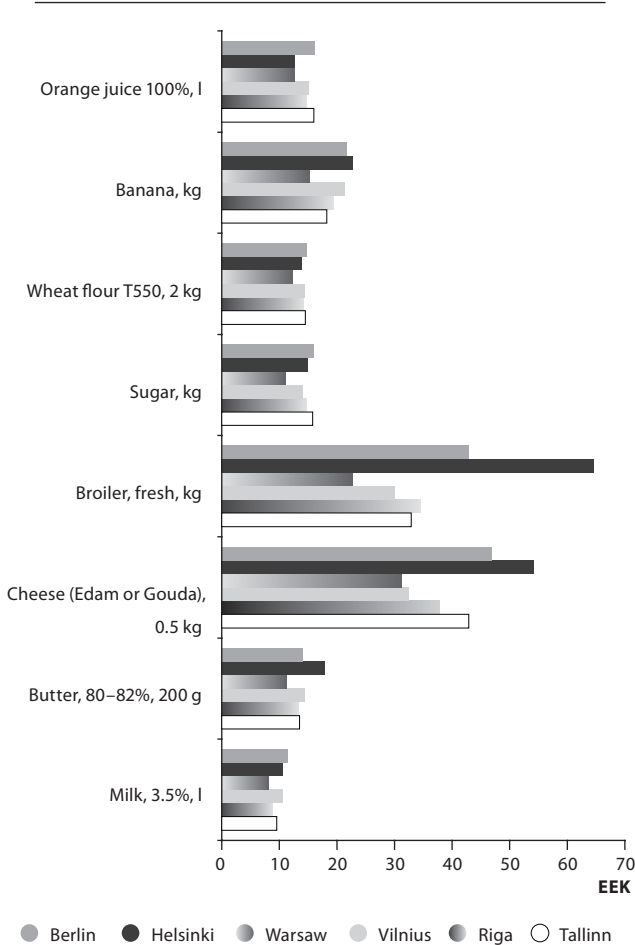
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of last year's export price and 8.2% lower than last year's import price. These average prices depend on which meat is bought/sold in larger quantities. The prices of carcasses, bone-in and boneless cuts are different. The price paid for sheepmeat is rather modest in Estonia. Domestic producers are paid EEK 16.46–19.89 for a kg of adult sheep (the actual price of 1 kg of chilled carcase) and EEK 30.09–47.67 for a kg of young sheep (carcase).

A comparison of the retail prices of some food products in supermarkets of European capitals is presented in Figure 62. Of the supermarkets, which are located in residential areas of capital cities, the food product prices are the lowest in Warsaw. As regards food prices in the supermarkets of Tallinn, Riga, and Vilnius, the prices of milk, butter and bananas are lower in Tallinn than in Vilnius, while the prices of broilers and bananas are lower in Tallinn than in Riga. The prices of sugar, wheat flour and orange juice are lower in the supermarkets of Helsinki – a city with a high standard of living – than those of Tallinn.

Figure 62. Retail prices of food products in supermarkets of European capitals (week 49 of 2006)



Source: Estonian Institute of Economic Research, "Price Information" No 11, 2006.

Ants Laansalu

The focal issue in agricultural policy in 2006 was the preparation of the Rural Development Strategy and Development Plan. The government approved the Rural Development Strategy on 13 July 2006 and the Development Plan on 8 February 2007. A Fisheries Development Strategy was also prepared and the government approved it on 1 March 2007.

The senior officials and specialists of the ministry participated in the work of the Council of Europe, its committees and working groups, and in the regulatory committees of the European Commission for the preparation and adoption of policy decisions relevant to Estonia.

Regulations of the European Parliament and Council establishing the "hygiene package" entered into force in all Member States from 1 January 2006. Amendments were made on this basis to the formerly applicable food hygiene regulations, which for the first time governed requirements for food production and handling on the level of primary production, and the direct marketing of certain own produced food products.

3.1. Preparation process of the Rural Development Strategy (RDS) and Rural Development Plan (RDP)

Anne-Liisi Kermas

Drafting of the Rural Development Strategy and Plan for 2007–2013 began on the initiative of the Ministry of Agriculture in cooperation with organisations related to rural development and representatives of other ministries in September 2004, when the European Commission started to discuss the draft rural development regulation with the Member States.

Working groups and the RDP Steering Committee, consisting of representatives of producers, rural and environmental organisations, and relevant ministries, were set up for the preparation of the RDS and RDP and for assessment of related proposals. The observations and proposals received concerning the RDS and RDP were thoroughly examined, analysed, and taken into account based on whether and to what extent they had regard to the objectives of the EU Common Agricultural Policy and the impact assessments of the selected measures. The RDS and RDP were repeatedly discussed at the Council for Agricultural and Rural Development (CARD) set up by the Ministry of Agriculture, the members of which are representatives of government authorities, agricultural producers, and other rural organisations. The ministry also consulted regularly with the RDP Steering Committee on the inclusion in or exclusion from the RDP of the observations and proposals received.

Proposals were also made by the environmental organisations related to the preparation of the agri-environmental support measure: Centre for Ecological Technologies, Body for Cooperation on Organic Farming, and the Estonian Semi-natural Community Conservation Association.

Simultaneously with the joint meetings of the RDS and RDP Steering Committee, regular meetings were held by the axis working groups with the involvement of various rural organisations and interest groups, as well as experts of various fields, for the preparation of the RDP. Based on the strategic goals, draft support measures were prepared and sent to the CARD members for observations and proposals. In addition to that, information was published in area-specific publications and the Ministry of Agriculture website, where everyone had the possibility to examine the materials and post opinions.

More than 100 pages in A4 format of proposals and comments were received on the RDP. Over 60% of them were taken into account in full or in part. The proposals and comments came from more than 30 organisations and individuals. The largest number of proposals — over 200 — was received concerning axis 1 (improving the competitiveness of the agricultural and forestry sector). Nearly 80 proposals and comments were received on axis 2 (improving the environment and the countryside), more than 40 concerning axis 3 (the quality of life in rural areas and diversification of the rural economy), and more than 20 concerning axis 4 (LEADER).

The allocation of funds between the four axes during the financing period 2007–2013 was the most discussion-provoking issue in the draft RDS. The minimum rates provided in the Council Regulation were taken into account when determining the relative share of financing each measure:

- Axis 1 (improving the competitiveness of the agricultural and forestry sector) 10%;
- Axis 2 (improving the environment and the countryside) 25%;
- Axis 3 (the quality of life in rural areas and diversification of the rural economy) 10%;
- LEADER 5%.

Social partners' proposals on the rates of funding varied greatly: 35–45% for axis 1, 30–45% for axis 2, 13–25% for axis 3. Despite the conflicting proposals from the interest groups, compromises were reached on most issues, including the rates of funding of the axes. The RDS was approved by the Government Decision of 13 July 2006, which established the following final rates of funding: 40% for axis 1, 39% for axis 2, 21% for axis 3 (including 10% for LEADER).

Compared to other EU Member States, Estonia has the greatest growth in axis 3 financing and its share is comparatively large.

The reasons why some proposals on the RDS and RDP were not taken into account were as follows:

- conflict with Council Regulation (EC) No 1698/2005 or its implementation regulation;
- conflict with the RDS and RDP objectives and priorities;
- significant exceedance of the funds allocated to the measures, if the proposals had been included.

Proposals from various organisations often conflicted with each other, so that compromises and balance needed to be found.

The proposal to include support for semi-natural communities (wooden meadows and coastal meadows) was taken into account and support is being planned for high nature value areas, especially semi-natural communities.

However, it was not possible to take into account the social partners' proposal to extend the period of application for support for young farmers (18 months after setting up as sole head of an agricultural holding), since this is laid down in the implementation regulation of Council Regulation 1698/2005. The European Commission's initial proposal was 12 months, but with pressure from the Member States, the deadline was extended to 18 months.

Neither was it possible to take into account the proposal to include the purchase of breeding animals as an eligible investment under support for investments in micro-enterprises, as this is prohibited by Commission Regulation (EC) No 1974/2006 laying down detailed rules for the application of Council Regulation (EC) No 1698/2005 on support for

rural development by the European Agricultural Fund for Rural Development (EAFRD). Article 55 (2) states that in the case of agricultural investments the purchase of agricultural production rights, animals, annual plants and their planting shall not be eligible for investment support. Based on the proposals, the target group for modernisation of agricultural enterprises was extended by cooperative forms of enterprise, which makes it simpler for cooperative members to meet the economic criteria required of applicants.

One interest group proposed not to support the implementation of best available techniques (BAT). The proposal was disregarded, as the Integrated Pollution Prevention and Control Act requires larger animal and poultry farms to hold an integrated environmental permit, and this entails the requirement of applying BAT. Further investments in large animal farms are therefore subject to the BAT requirement. Following these requirements must ensure better compliance with environmental requirements.

The proposal to extend the target group of support for organic farming to the former target group (natural persons engaged in agriculture) was disregarded, as the purpose of support is to promote organic farming and to contribute to having a larger volume of organic products available on the market.

As regards the diversification of economic activity measure, several proposals were made to increase the maximum rate of support; as a result, the rate of support was increased to 60% depending on the project location.

The proposal to extend the RDS target group to all micro- and small scale enterprises (up to 49 employees) operating or setting up in rural areas was disregarded, as it conflicts with the principles and criteria of the EAFRD. The European Regional Development Fund (ERDF), implemented by the Ministry of Economic Affairs and Communications, is targeted at non-agricultural activities in rural areas. An interest group’s proposal not to support the demolition of abandoned agricultural structures was disregarded, as it is important with regard to preserving cultural heritage and landscape diversity to facilitate the demolition of abandoned agricultural structures within the framework of support for non-productive investments, so as to contribute to preserving the scenic landscapes of Estonian rural areas.

Neither was there reason to consider the proposal concerning the LEADER axis to reduce the lower limit of the area of operation (5000 inhabitants). In addition to that, many proposals submitted to the RDS concerned the wording or were taken into account in the course of preparation of the RDP for 2007–2013.

On 8 February 2007, the Government issued a mandate for officially submitting the RDP to the European Commission and for related negotiations. Negotiations with the European Commission are under way and preparations are being made for implementing the support.

3.2. Support and state aid

Kristel Bankier, Kristel Maidre, Margus Palu

Single Area Payment and Complementary National Direct Payment

Pillar 1 of the EU Common Agricultural Policy (CAP) is made up of direct aids and market measures. Common rules for direct support schemes under the CAP and certain support schemes for farmers are established by Council Regulation (EC) No 1782/2003 and implementing Commission Regulations (EC) No 795/2004, (EC) No 796/2004 and (EC) No 1973/2004.

Estonia applies a simplified scheme of direct aids, under which the total sum of direct aids allocated from the EU budget is paid out as single area payments (SAP). In 2004, Estonian farmers were paid 25% of the level of EU direct aids from the EU budget, 30% in 2005, and 35% in 2006. The level of direct aids paid from EU funds has been calculated based on the aids applicable in the EU and the payment entitlements allocated to the Member States as of 30 April 2004; the amount increases year by year, reaching 100% in 2013.

In addition to SAP, a Member State may make complementary national direct payments to chosen sectors. As a general rule, a Member State may additionally pay up to 55% in 2004, up to 60% in 2005, and up to 65% in 2006.

The maximum rates and payment entitlements for SAP and complementary national direct payments for 2006 are presented in Table 1. If this scope of payment entitlements is exceeded, the unit rates are reduced pro rata for all producers.

Table 1. Allowed rates and valid payment entitlements for single area payments and complementary national direct payments in 2006

	Maximum rate of support in 2006	Payment entitlements
1) SAP	35%	800 000 ha
2) complementary national direct payment for growing agricultural crops	65%	364 330 ha for field crops, legumes, and certified hayseed
3) complementary national direct payment for suckler cow breeding	65%	13 416 suckler cows
4) complementary national direct payment for bovine animal breeding	65%	132 613 livestock units of cattle
5) complementary national direct payment for dairy cow breeding	95%	624 483 t of milk quota
6) complementary national direct payment for ewe breeding	65%	48 000 ewes

Source: Ministry of Agriculture, Agricultural Market Regulation Department

The RDP funds were used in addition to the Estonian state budget funds for complementary national direct payments in 2004–2006 on the condition that the share of such payments must not exceed 20% of the RDP budget; these funds

could cover not more than 40% of the EU direct aids level. MEEK 450.3 and MEEK 78.7 were allocated from the Estonian state budget and the RDP budget in 2006, respectively.

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Table 2. Sums of SAP and complementary national direct payments in 2004–2006 (EEK '000 000)

	2004	2005	2006
SAP	332.17	432.12	532.44
Complementary national direct payment for growing agricultural crops	206.14	160.76	292.32
Complementary national direct payment for suckler cow breeding	76.86	7.52	13.60
Complementary national direct payment for bovine animal breeding		55.25	59.27
Complementary national direct payment for dairy cow breeding	108.31*	109.66	157.51
Complementary national direct payment for ewe breeding	4.16	5.47	6.53
Total	727.64	770.78	1 061.67

*national scheme, paid before EU accession
Source: Agricultural Registers and Information Board, Ministry of Agriculture

MEEK 532.44 were paid as SAP in 2006, which is 23.2% more than in 2005. The amount of complementary national direct payments increased 45% in 2006 (to MEEK 492.65). Direct aids totalled MEEK 1061.67 in 2006, which is 37.7% more than in 2005.

The largest amount of SAP and complementary national direct payments were paid out in 2006 to applicants from Lääne-Viru (MEEK 138.53) and Järva (MEEK 110.36) counties. Also, the amounts paid in these counties increased the most in 2006 compared to 2005: by MEEK 41.88 or 43.3% in Lääne-Viru County and MEEK 30.38 or 38.0% in Järva County.

The smallest amounts were paid in 2006 in Hiiu County (MEEK 11.69) and Ida-Viru County (MEEK 26.16). The support amounts increased in these counties in 2006 by 13.0% and 32.5%, respectively, compared to 2005.

The unit rates of SAP and complementary national direct payments are presented in Table 3. SAP per ha increased 25% in 2006, and complementary national direct payment per ha for growing agricultural crops increased 78% compared to 2005. Complementary national direct payment per suckler cow increased 31% and payment per ewe increased 3% in 2006 compared to 2005. As opposed to 2005, complementary national direct payment for dairy cows was paid per kg of milk production quota in 2006. When re-calculated per average cow (yielding 6055 kg of milk), payment per dairy cow amounted to EEK 1574.3, which is 53% more than in 2005. Owing to a change in the bases for calculating the payments, the unit rate of complementary national direct payment for breeding bovine animals decreased 4%.

Table 3. Unit rates of SAP and complementary national direct payments, 2004–2006

	Unit	2004	2005	2006
SAP	EEK/ha	414	526.65	659.80
Complementary national direct payment for growing agricultural crops	EEK/ha	632.8*	470.2	836.90
Complementary national direct payment for suckler cow breeding	EEK/head	1084 (coeff. 1.4)	1364	1784.8
Complementary national direct payment for bovine animal breeding	kr/koef 1	774.3	791.8	759.9
Complementary national direct payment for dairy cow breeding	EEK/head	1085**	1029.34	0.26 EEK/kg
Complementary national direct payment for ewe breeding	EEK/head	219.3	214	221.3

*complementary national direct payment for growing certified hayseed: herbaceous grasses 752.32 EEK/ha, leguminous plants 1140.44 EEK/ha
**national scheme, paid before EU accession
Source: Ministry of Agriculture

Table 4. Number of approved applications and numbers of hectares and animals specified in the applications for SAP and complementary national direct payments in 2004–2006

		2004	2005	2006
SAP	Applications	18 597	18 687	17 884
	Area (ha)	803 715	824 396	811 603
Complementary national direct payment for growing agricultural crops	Applications	7849	7406	6749
	Area (ha)	324 342	341 259	349 453
Complementary national direct payment for suckler cow breeding	Applications	x*	704	855
	Number of bovine animals	x*	5523	7621
Complementary national direct payment for bovine animal breeding	Applications	6254	6920	6269
	Number of bovine animals	132 829	221 675	122 755
Complementary national direct payment for dairy cow breeding**	Applications	2627	x	1620
	Number of bovine animals	101 144	106 531	98 970
Complementary national direct payment for ewe breeding	Applications	729	879	888
	Number of ewes	18 945	25 616	29 551

* In 2004, payments for suckler cows were made as a component of complementary national direct payments for breeding bovine animals.
** In 2005, payments for breeding dairy cows were made as a component of complementary national direct payments for breeding bovine animals, and the number of applicants is not specified separately. In 2006, payments were made per kg of the milk production quota and the Table contains the number of dairy cows indicated in the applications.
Source: Agricultural Registers and Information Board

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A total of 18 254 applications were received in 2006 for **Single Area Payment**. Payments were made to 17 884 applicants for 811 603 ha of land in a total amount of MEEK 532. The number of approved applications decreased 4.3% and the area decreased 1.6% compared to 2005.

The largest number of applications was approved in 2006 in Võru County (2079), while the largest total amount was paid out to Lääne-Viru County (12.1%), similar to the previous year. The largest number of applications was rejected in Saare County (46); the least rejections were made in Ida-Viru County and Valga County (12 in each).

There was an average of 46.6 ha of land corresponding to SAP conditions per approved application as an aggregate for all the counties. This indicator has increased 2.8% since 2005, when the average area per application was 45.3 ha. Both in 2005 and 2006, the area per approved application was the smallest in Võru County (20.7 and 21.9 ha, respectively), and the largest in Järva County (84.9 and 86.2 ha, respectively).

6881 applications were received in 2006 for **complementary national direct payment for growing agricultural crops**. Payments were made to 6749 applicants for 349 500 ha of land in a total amount of MEEK 292.3. The amount paid increased 45% compared to the previous year, while the number of approved applications decreased 8.9% and the area covered by the applications increased 2.4%.

In 2006, the largest number of applications was submitted in Võru County (812); 803 of them were approved. The small-

est number of applications was submitted in Hiiu County (71), where 67 applications were approved. Võru County and Hiiu County were also the greatest and smallest applicants in 2005.

The largest share of total payments was made both in 2005 and 2006 in Lääne-Viru County. Farmers of Tartu County and Viljandi County received respectively 12.7% and 10.4% of the total amount of payments in 2006. The lowest complementary national direct payments for growing agricultural crops was paid to producers in Hiiu County – only 0.4% of the total amount. Compared to 2005, the approved area covered by the applications increased the most in Tartu County (6%) and decreased the most in Hiiu County (19%).

The area per approved application was the largest in Järva County (75.1 ha) and the smallest in Saare County (18.9 ha). The average area per approved application was 51 ha, which is 12% more than in 2005 (45.5 ha).

Complementary national direct payment for suckler cow breeding was granted in 2006 to 855 applicants for breeding 7621 suckler cows, in a total amount of MEEK 13.6. The number of suckler cows increased by 2098 or 38% compared to 2005. The total amount of payment increased from MEEK 7.5 to MEEK 13.6 or 81%. The number of applications increased by 151 or 21.4%. The largest numbers of applications were received in Saare County (127) and Lääne County (95), where the number of supported suckler cows was also the greatest – 809 and 1312, respectively. These counties also

received the largest proportion of the total amount of support – Saare County 11% and Lääne County 17%. The smallest number of applications was received in Jõgeva County (18). Järva County (90) and Tartu County (117) had the smallest numbers of suckler cows. The number of suckler cows was also the largest in Saare County (119) and the smallest in Järva County (48) in 2005.

Compared to 2005, the number of suckler cows increased the most in Ida-Viru County (1.4 times), Jõgeva County (92%), and Järva County (87.5%). The number of suckler cows increased the least in Harju County (16%).

Complementary national direct payment for bovine animal breeding was granted as follows:

- 1) at a unit rate of 1.0 per cow and bull or bullock at least 8 months;
- 2) at the unit rate multiplied by a coefficient of 0.7 per heifer at least 8 months;
- 3) at the unit rate multiplied by a coefficient of 0.2 per calf at least 1 month but not more than 8 months old.

6288 applications for complementary national direct payment for bovine animal breeding were received in 2006. Payments were made to 6269 applicants in a total sum of MEEK 59.3 for breeding 122 755 bovine animals. The total amount of payment increased 7.2% compared to the previous year.

The largest number of applications for complementary national direct payment for bovine animal breeding was

submitted in Võru County (706), where 704 applications were approved. The smallest number of applications was submitted in Hiiu County – 157, one of which was not granted. The largest total amount was paid out in Lääne-Viru County (MEEK 7.4 or 12.4% of the total paid in Estonia), and smallest amount was paid in Hiiu County – MEEK 0.8 or 1.3% of the national total.

The numbers of bovine animals for which payments were made were the largest in Järva County (15 658) and Lääne-Viru County (15 533), respectively 12.8% and 12.7% of the total number of bovine animals specified in the approved applications.

Both in 2005 and 2006, the number of recipients of payments for bovine animal breeding was the largest in Võru County, where 755 farmers received support for 8097 bovine animals in 2005 and 704 farmers received support for 5220 animals in 2006.

1635 applications were received in 2006 for **complementary national direct payment for dairy cow breeding**. Payments were made to 1620 applicants in a total amount of MEEK 157.5 for 605 759 tonnes of milk production quota. The approved applications covered 98 970 dairy cows.

In 2005, complementary national direct payment for dairy cow breeding was a component of direct payments for bovine animal breeding, but the total amount paid without considering reductions was MEEK 109.7. The total amount of payments thus increased 43.7% in 2006 compared to 2005.

The number of dairy cows (16 094) and the milk quota (109 500 t) were the largest in Järva County, which also received the largest share of payments – 18.1% (MEEK 28.5). The number of approved applications was the largest in Pärnu County (186) and the smallest in Hiiu County (32).

The number of dairy cows decreased in 2006 by 7561 animals or 7% compared to the year 2005. The decrease was the largest in Hiiu County – 173 animals or 21%.

905 applications were received for **complementary national direct payment for ewe breeding**. Payments were made to 888 applicants in a total sum of MEEK 6.5 for breeding 29 551 ewes. Compared to 2005, the number of applications increased 1%, the number of ewes increased 15.4% and the total amount paid increased 19.4%.

As in previous years, the largest share (21%) of total payments went to Saare County to support the breeding of 6070 ewes.

The fewest applications were submitted in Ida-Viru County (13), where the applications covered 416 ewes. This county received only 1% of the total amount paid for ewe breeding.

RDP 2004–2006 support:

Support for less favoured areas was applied for by 10 054 applicants for a total area of 344 185 ha. The decisions on granting support for 2006 were made at the beginning of 2007. After a review of earlier years' applications, it was decided to pay an additional EEK 8 (0.02 ha) for one application from 2004 and EEK 974 259 (2494 ha) for 135 applica-

tions from 2005. A total of MEEK 3.3 in support payments were made in 2006.

Applications for **agri-environmental support** were received from 2 to 22 May. Late applications were received from 23 May till 16 June.

6092 applications were received for **environment-friendly production support**. The applications covered a total area of 460 531 ha. The decisions on granting support for 2006 were made at the beginning of 2007. After a review of earlier years' applications, it was decided to pay an additional EEK 29 284 (79 ha) for two applications from 2004 and EEK 8 004 302 (13 421 ha) for 649 applications from 2005. A total of MEEK 286.1 of support payments were made in 2006. At the end of the year, there were 5474 outstanding commitments to pay environment-friendly production support (467 023 ha), of which 115 are new (8315 ha) and 5359 (458 708 ha) are old commitments.

Support for environment-friendly production was divided in 2006 into two groups of unit rates: land in agricultural use (714 EEK/ha) and grassland (331 EEK/ha). The areas of land for which support was requested were the largest for herbaceous grasses (201 296 ha), followed by cereals (171 053 ha) and oil crops (38 148 ha).

1153 applications were received for **organic farming support**. The applications covered a total area of 65 834 ha. The decisions on granting support for 2006 were made at the beginning of 2007. After a review of earlier years' applica-

tions, it was decided to pay an additional EEK 1 384 167 (935 ha) for 66 applications from 2005. In 2006, MEEK 67.8 was paid out; payments for the year 2006 are made in 2007. At the end of the year, there were 1043 outstanding commitments to pay organic farming production support (62 094 ha), of which 179 are new (10 583 ha) and 864 (51 511 ha) are old commitments.

Support for organic farming was divided into three groups of unit rates:

- permanent grassland and natural grassland, where at least 0.1 LU are grazed per hectare, and at least 50% of them are organically reared (EEK 1156/ha);
- cereals, legumes, industrial crops, potato, fodder vegetables, black fallow, and short-term grassland (1516 EEK/ha);
- open field vegetables, medicinal and aromatic herbs, and fruits and berries (3764 EEK/ha).

Herbaceous grasses, followed by cereals and leguminous plants, made up the largest areas for which support was requested.

285 applications were received for **support for breeding the Estonian horse**. Support was requested for breeding 1075 Estonian horses. The decisions on granting support for 2006 were made at the beginning of 2007. It was decided to pay an additional EEK 2550 per animal for one application from 2005. MEEK 2.3 of support for 2005 were paid out in 2006; payments for 2006 will be made in 2007. There were 251 outstanding support commitments for Estonian horses

at the end of the year (981 horses), including 33 new (59 horses) and 218 (922 horses) old commitments.

169 applications were received for **support for the Estonian cattle breed**. Support was requested for breeding 729 Estonian cattle. The decisions on granting support for 2006 were made at the beginning of 2007. MEEK 1.6 of support for 2005 was paid out in 2006; payments for 2006 will be made in 2007. There were 138 outstanding support commitments for Estonian cattle at the end of the year (656 animals), including 46 new (72 animals) and 92 (584 animals) old commitments.

43 applications were received for **support for breeding the Estonian draft horse**. Support was requested for breeding 114 Estonian draft horses. The decisions on granting support for 2006 were made at the beginning of 2007. EEK 243 000 of support for 2005 was paid out in 2006; payments for 2006 will be made in 2007. There were 40 outstanding support commitments for Estonian draft horses at the end of the year (110 horses), including 9 new (17 horses) and 31 (93 horses) old commitments.

223 applications were received for **support for breeding the Tori horse**. Support was requested for breeding 468 Tori horses. The decisions on granting support for 2006 were made at the beginning of 2007. EEK 974 000 of support for 2005 was paid out in 2006; payments for 2006 will be made in 2007. There were 199 outstanding support commitments for the Tori horse at the end of the year (433 horses), including 43 new (60 horses) and 156 (373 horses) old commitments.

Applications for **support for establishment, restoration and maintenance of stone walls** were received from 5 September till 14 October 2005. The decisions on granting support were made at the beginning of 2007. No applications were received in 2006.

Applications for **support for afforestation of arable land** were received from 14 to 31 March 2006. At the end of the year, there were 897 outstanding commitments to pay support for afforestation of arable land, including 391 new and 506 old commitments.

610 applications were received for **support for establishment of forest plantations** (for 1801 ha). Of these, 549 applications (1563 ha) were approved. A total amount of MEEK 19.67 was granted, plus accompanying support for maintenance in an amount of MEEK 1.88. After a review of earlier years' applications, it was decided to pay an additional EEK 69 152 (5 ha) for 3 applications from 2005 and EEK 6688 as the first year's maintenance support. MEEK 19.6 were paid out for support of establishment of forest plantations in 2006. MEEK 1.88 was paid as accompanying support for maintenance of the plantations.

381 applications were received for **support for maintenance of forest plantations** (for 947 ha). Of these, 359 applications (863 ha) were approved. Support was granted in a total sum of MEEK 1.04. No payments were made for maintenance of forest plantations in 2006.

38 applications were received for **support for supplemen-**

tation of forest plantations (for 69 ha). Of these, 29 applications (43 ha) were approved. A total of EEK 83 956 was granted and paid in 2006.

Applications for **subsistence farm adaptation support** were received from 9 October till 6 November 2006. A total of 3310 applications were submitted and were being processed as of the end of the year. 2843 applications for subsistence farm adaptation support from 2005 were approved in 2006; the total amount granted was MEEK 44.48 and MEEK 44.47 was paid out.

Applications for **support for bringing manure storage facilities into conformity with water protection requirements** were received from 9 October till 6 November 2006. A total of 929 applications were received in 2006, covering 135 093 livestock units. The applications submitted in 2006 will be approved and paid in 2007. Of applications submitted in 2005, 818 were approved and a total sum of MEEK 113.7 was granted. After a review of the previous year's applications, it was decided to pay an additional EEK 87 640 for one application from 2004. The sum of MEEK 114 was paid out.

The ARIB regional bureaux accepted applications for **support for areas with environmental restrictions (Natura support)** from 2 to 22 May 2006. Late applications were received from 23 May till 16 June. Support for areas with environmental restrictions is available for fields of at least 0.3 ha which are located in their entirety on a Natura 2000 network area. In 2006 there were 1486 applicants for Natu-

ra support (31 153 ha). The decisions on granting support for 2006 were made in 2007.

6978 applications were received for **complementary national direct payment for growing field crops**. The applications covered an area of 363 258 ha. 6580 applications (307 454 ha) were approved by the end of the year. MEEK 38.35 were paid out.

Support under the National Development Programme:

All eight measures of the **European Agricultural Guidance and Guarantee Fund (EAGGF)** were implemented as of the end of 2006. The last two measures were opened for the first time: measure 3.6 "Development of local initiative – LEADER measure", and measure 3.7 "Forest management". As regards the measures of the EAGGF Guidance Section, the applications received as of the end of 2006 cover 134% of the budget for the measures; applications have been approved and paid for 85% and 65% of the budget, respectively.

Under measure 3.1 "Investments in agricultural production", 640 projects in a total amount of MEEK 542.6 were approved in the course of three years; the budget is covered 100% by these projects. Over three years, 88% of the assumed commitments or MEEK 477.2 has been paid.

No applications were received under measure 3.1 in 2006, because the budget was exceeded in the previous two years. Approval was granted for applications submitted in 2005: a total of MEEK 43.8 was granted to 41 projects.

Under measure 3.2 "Investment support for improving the processing and marketing of agricultural products"

no applications were accepted in 2006 because of a shortage of budgetary funds. Three projects, with a total amount of MEEK 3.1, were approved. In 2006 MEEK 53.4 was paid out for 22 projects. Over three years, MEEK 175.2 has been granted for 56 projects under this measure. 99% of the budget has been used. A total of MEEK 146.7 has been paid out (82% of budget) toward investments amounting to MEEK 381.3.

The application round for **measure 3.3 "Diversification of economic activity in rural areas"** lasted from 25 September till 20 November 2006. A total of 158 applications for support in the amount of MEEK 45.8 were submitted. No support was granted under this measure in 2006. MEEK 18.1 was paid out for projects approved earlier, which was used to make investments totalling MEEK 37.5. In total, MEEK 76.7 (56% of the budget) has been paid out under this measure for 77 projects.

Applications for **measure 3.4 "Integrated land improvement"** were received from 3 to 21 July. A total of 61 projects for MEEK 123.9 were submitted, with the desire to invest MEEK 129.6 in land improvement. Support was available for the construction, reconstruction and renovation of land improvement systems and for improving access routes to agricultural land. Approval was granted for 70 projects in a total amount of MEEK 134.9. The largest amount was granted for the construction and reconstruction of drainage systems – 55.8% of the total support or MEEK 75.3. 40.6% of the

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support or MEEK 54.8 was granted for renovation of drainage systems. In 2006, MEEK 27.5 was paid out for 26 projects, with which investments totalling MEEK 31 were made. MEEK 193.6 has been applied for over the course of two years (the measure was implemented in 2005), but the budget can cover MEEK 135.5 of this. MEEK 27.5 has been paid out, which is 20% of the budget.

The application round for **measure 3.5 “Restoration and development of villages”** lasted from 15 December 2005 till 20 January 2006. 27 applications were received in 2005 and 262 in 2006. MEEK 219.4 was applied for, but the budget can only cover up to MEEK 100.2. Approval was granted for 115 projects totalling MEEK 38.9, which is intended for investments amounting to MEEK 49.9. MEEK 44.1 was paid out for 149 projects in 2006. Over the course of three years, 283 projects have been approved in an amount of MEEK 100.02, which covers 100% of the budget. MEEK 69.3 of the assumed commitments, or 69% of the budget, have been paid out.

Applications for **measure 3.6 “Development of local initiative – LEADER measure”** were received from 28 August till 22 September. A total of 24 applications for MEEK 31.1 were received, covering 108% of the budget. No support was granted or paid in 2006, since the processing continues.

The first application round for **measure 3.7 “Forest management”** lasted from 27 March till 21 April, and the second round from 9 to 29 November. A total of 613 applications for MEEK 26 were received for making investments amounting to MEEK 37.6. Approval was granted for 255 projects in a

total amount of MEEK 10.6. Purchases of forest management equipment and plant protection products proved to be the most popular activities under this measure, covering 39% of the total support. Other popular activities were maintenance of young growths – 23%, and restoration of forest – 22% of the support amount. During the accounting year, MEEK 2.5 was paid out for 91 projects for investments amounting to MEEK 3.9. 4% of the budget has been used.

Measure 3.8 “Support for advisory and information services” is divided into four sub-measures: measure 3.8.1 “Support for setting up advisory centres”, measure 3.8.2 “Advisory support”, measure 3.8.3. “Nationwide information day” and measure 3.8.4 “County information day”. The following application rounds were open under measure 3.8 for the following activities:

- nationwide information days from 13 to 27 March, and the second application round from 30 November to 13 December;
- individual advisory service from 3 to 26 March and the second application round from 27 July to 30 November;
- county information days from 18 to 31 July. A total of 673 applications for MEEK 9.4 were submitted.

Advisory support was granted for 262 projects in the amount of MEEK 1.4. Out of this, 41.5% was granted for plant cultivation advice, 21.9% for financial and economic advice, and 20.2% for livestock farming advice. MEEK 2.6 were granted for organising nationwide information days in 2006 and

MEEK 1.8 for county information days. MEEK 4.1 was paid out for 414 projects. A total of 1112 projects with a support amount of MEEK 16 were submitted during two years (2005–2006). Approval has been granted for 853 projects with a total support amount of MEEK 9.8, which makes up 19% of the budget. MEEK 5.5 have been paid out, covering 11% of the budget.

All the support from the **Financial Instrument for Fisheries Guidance (FIFG)** has been applied for, as of the end of 2006. The last two measures were opened for the first time: 3.12.1 “Social measures accompanying the restructuring of fisheries” and 3.12.2 “Finding new markets”. As of the end of 2006, applications had been submitted covering 149% of the budget for the measures; 96% of applications have been approved and 68% of the budget has been paid out.

No new applications were accepted under **measure 3.9 “Regulating the fishing capacity of the fishing fleet”** in 2006. Approval was granted for 17 projects in a support amount of MEEK 61.7. Payments were made for 16 projects in the amount of MEEK 58.8. 98% of the budget has been used.

Applications for **measure 3.10 “Modernisation and renewal of the fishing fleet”** were received from 10 April to 19 May at the Pärnu, Lääne, Saare, Hiiu, Harju, Lääne-Viru, Ida-Viru and Tartu county bureaux of the ARIB. A total of 23 projects were submitted.

MEEK 15.4 was paid out in 2006. Over the course of three years, MEEK 25.5 has been paid out for 54 projects.

Measure 3.11 “Measures to support investments in the fish processing chain”:

No new applications were accepted in 2006 for measure 3.11.1 “Support for investments in processing fish and aquaculture products” and no support was granted. MEEK 10.5 was paid out for five projects. Over the course of three years, MEEK 39.3 has been paid out (75% of the budget).

No new applications were accepted in 2006 for measure 3.11.2 “Support for investments in aquaculture” and no support was granted. Payments were made to 12 projects in an amount of MEEK 11.9. Over the course of three years, MEEK 30.2 has been paid out (73% of the budget).

No new applications were accepted under measure 3.11.3 “Modernisation of fishing ports” in 2006. One application which was not granted in 2005 was accepted for processing and approved based on a circuit court judgment. MEEK 24.9 were paid out for six projects. 57% of the budget has been used.

Applications for measure 3.11.4 “Support for investments in inland water fishing” were accepted from 10 April to 19 May. 12 projects were submitted for a total support of MEEK 1.4. Approval was granted for 11 projects in a total amount of EEK 928 000. The most supported activity was the purchase of vessels – EEK 786 000. MEEK 2.2 was paid out. Over the course of three years, MEEK 2.9 has been paid out (21% of the budget).

Measure 3.12 “Other fisheries related measures”:

Measure 3.12.1 “Social measures accompanying the restructuring of fisheries” was first opened in 2006. The support was intended for crew members who lost their jobs on fishing vessels which were scrapped or whose function was changed under the framework of measure 3.9. Applications were accepted from 13 February till 2 March 2006. A total of 49 applications were received from crew members of 13 fishing vessels. Approval was granted for 42 applications in a total amount of MEEK 6.6. MEEK 5.8 was paid out.

Measure 3.12.2 “Finding new markets” also opened for the first time in 2006. Support was granted for organising consumer and market surveys in the fisheries sector and for participating in fairs. Applications were received from 19 June to 7 July. A total of 32 projects were submitted, of which 22 were approved with a support amount of MEEK 16.2. The largest amounts under this sub-measure were granted for participating in fairs and exhibitions and for organising marketing campaigns: MEEK 7.1 and MEEK 7, respectively. 2006. MEEK 8.6 was paid out for 18 projects in 2006.

3.3. Issues discussed and decisions adopted in the Permanent Representatives Committee (COREPER), Special Committee on Agriculture (SCA), and the Agriculture and Fisheries Council

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Below is a selection of issues discussed and decisions made at the EU committees and Council which are of the greatest relevance to Estonia’s development. Heads of sections and specialists participated in preparing decisions in the committees and involved experts as necessary. Senior officials of the ministry participated in the Council’s decision making and also involved experts in the process.

Sugar sector reform

Political compromise concerning sugar sector reform was already achieved in November 2005. The European Parliament’s opinion was required for entering the reform package into force; the opinion was received in January 2006. The sugar reform package was approved by qualified majority at the Agriculture and Fisheries Council session of February 2006.

This is not a vital sector for Estonia, since sugar beet is not grown in Estonia and sugar is not produced. However, the reform is important as it influences product prices, which are in the interests of both end and industrial consumers. It also has relevance to the budget.

Protected geographical indications (PGI), protected designations of origin (PFO), and traditional speciality guaranteed (TSG) for agricultural products and food

Amendments to the framework regulations were discussed in the Council or agricultural attachés working group, after which the drafts were forwarded to the SCA and for adoption to the Agriculture and Fisheries Council. Community quality policy has an increasing role in Estonia, within the EU, as well as on the international arena (especially in the WTO context), although only a very limited number of PGIs, PFOs and TSGs have been registered in Estonia, so far. The drafts mainly concerned WTO requirements, which necessitated amendments to relevant regulations; the organisation of the quality marks system in the EU was somewhat simplified, and the competencies/obligations of the Commission and Member States were elaborated. A more thorough reform of quality policy is scheduled for the future.

Rural policy and financing 2007–2013

A new framework regulation on rural development was adopted as a policy decision in June 2005. This was followed by discussion on its implementation in the working groups, SCA and Council, where the EU rural strategy guidelines were processed. The Agriculture and Fisheries Council officially approved the guidelines in February 2006 after receiving the opinion of the European Parliament. In connection with the agreement on the financial perspective adopted at the December 2005 European Council, the processing of two

drafts on the working group and SCA level began in June: amendment to the rural development framework regulation 1698/2005 (amendment to the 4% ceiling for Structural Funds), and a draft Council regulation governing voluntary modulation (transfer of funds from the first to the second pillar of the CAP, i.e. from direct aid to rural development). In June the Agriculture and Fisheries Council adopted a draft decision specifying the amount of Community aid to be granted for rural development each year during 2007–2013. On the level of the Rural Development Committee and the Member States, work continues on the Member States’ rural development strategies and plans, as well as with the implementation regulations of the adopted framework regulation and with harmonising the indicators used for assessing the RDSs and RDPs. Highly important is the Commission’s decision on the allocation of rural development funds between the Member States during 2007–2013, which is based on a Council decision on the division of these funds, broken down by years.

The broader goal of Estonia, as a sparsely populated country with relatively low soil fertility, is to target its rural development policy at ensuring competitive agricultural enterprises in rural areas, maintenance and environmentally sustainable use of arable land and forest land, and encouraging alternative activities in rural areas. Simplifying the financing of rural development measures is another important aspect. All these objectives are incorporated into the Council’s adopted EU rural development framework regulation and the EU

rural development strategy guidelines. According to preliminary information, the funds designated for Estonia will increase in 2007–2013 compared to 2004–2006. This is a major achievement considering the overall reduction of the funds allocated to rural development in the EU.

Amendment of the regulation governing the definition, description, and presentation for sale of spirit drinks

In December 2005, the Commission published a draft regulation governing the definition, description, and presentation for sale of spirit drinks. In the first half of 2006, the draft regulation on spirit drinks was repeatedly discussed in the working group as well as on the SCA level. An agreement on the general approach to the draft was achieved at the Agriculture and Fisheries Council in October. According to the approach, separate categories are defined for spirits made from traditional raw material (cereals, potato, and, as a compromise, beet molasses) and other (agricultural) raw materials. For spirits made from other raw material, the raw material must be specified on the label. The draft sets out the rules for classification, definition, and presentation for sale, including labelling of spirit drinks. The key issue for Estonia is the definition and classification of vodka. Before the agreement was reached, any spirits regardless of the raw material could be defined as vodka (provided that the raw material was of agricultural origin).

Biomass Action Plan, Strategy for Biofuels, and energy crops aid scheme

The Commission completed the drafting of the Biomass Action Plan in December 2005, and the Commission Communication on a strategy for biofuels was presented in February 2006. Bioenergy has an important role in the EU rural strategy guidelines adopted in February 2006. On 25 September 2006, the Commission submitted a proposal to the Council for amending the energy crops aid scheme.

With these amendments, the area eligible for energy crop aid (45 EUR/ha) in the EU was increased from 1.5 to 2 million hectares and the scheme was extended to the new Member States (including Estonia). Member States are also allowed to pay national support to cover 50% of the expenses of setting up permanent crops intended for the production of biomass. These amendments are well in line with Estonia's interests.

Organic farming

The European organic farming action plan was drafted in 2004 and published as a Commission Communication on 14 June 2004. The work was completed with the adoption of a regulation on the importation of organic products and achieving an agreement on the overall approach to a framework regulation on organic products at the Agriculture and Fisheries Council in December 2006.

The agreement is important for Estonia, since the market in organic products is constantly growing, owing to increasing

consumer awareness and income. Estonia also has a relative advantage in organic farming, since our agricultural model is less intensive than that of Western Europe – we use less than average mineral fertilisers and plant protection products. The most important aspects for Estonia are the presentation of organic products and consumer information, research and training, and the preparation of rules for the co-existence of ordinary and organic products and genetically modified organisms. Another important aspect is the coordinated development of the various links of the food chain, so as to ensure the availability of organic products to interested consumers.

The future and simplification of the Common Agricultural Policy (CAP)

Another reform of the CAP has increasingly become an issue besides the Commission's negotiation mandate (and exceeding that mandate), which has been raised in connection with potential agreements at the final stage of the WTO Doha round. In December 2006, the Commission presented an initial overview within the framework of the Agriculture and Fisheries Council of the "common market organisations" draft, which consolidates the market organisation instruments of various sectors into a single legal framework, i.e. a framework regulation on common market organisations. Discussions over common market organisations continue in 2007. Proceedings of this draft and the decisions being prepared are highly relevant to the development of Estonian agriculture in the long run. Estonia's aim is to unify the levels of support (payments

per ha) across various areas of the EU, increase the share of indirect support, and reduce administration costs against the background of an overall rise in the competitiveness of EU agriculture. In October 2006, the Commission published an action plan on the simplification of the CAP, which was followed by a discussion at the Commission's group of experts. A high-level conference was held on 3 October on the topic of the simplification of the CAP, at which the Commission presented its vision of the main lines of simplification.

Reform of the fruits and vegetables sector

The Commission prepared a report on the fruits and vegetables sector in the autumn of 2004. Ministries of the Member States also discussed this subject in January 2006. After that, several Member States published a working paper containing proposals for the various elements of the forthcoming reform. Discussion of the Commission's reform proposals will continue in 2007. Although fruits and vegetables account for a relatively small share of Estonia's total agricultural output, the reform of the sector is still important. No approved producer organisations have been founded in Estonia that qualify as eligible for support, which is why it is important to simplify the procedure for payment of support and make the rules for the producer organisations more flexible.

Discussions over animal welfare strategies were completed in the first half of 2006. Based on this strategy, the Commission will complement specific action plans up to the year 2010.

Proposal for a Council Directive laying down minimum rules for the protection of chickens kept for meat production

In its ideological structure the directive is the first of its kind in the *acquis* – it is the first time that the management skills of production enterprises are improved via animal protection indicators, a worsening of which indicates shortcomings in management. The draft directive establishes minimum requirements for the protection of chickens kept for meat production (broilers), particularly the maximum stocking densities for broiler farms. The ministers’ political guidelines were obtained for the further proceeding of the draft in the second half of the year. According to the agreement, the directive will be entered into force gradually so as to reduce producers’ potential additional expenditures. The agreement is based on the fact that the broiler industry is at a low period in certain Member States due to the spread of bird flu in the spring. In addition to that, most Member States were of the opinion that maximum stocking densities are not to be established upon adoption of the directive – this should be done at a later stage when the Member States have submitted their initial reports and the Commission has submitted a new report on the socio-economic impact. Discussion of the draft will continue in 2007.

Proposal to amend the framework directives on fish diseases to establish a Council Decision amending the Council Decision on expenditures in the veterinary field. A final agreement and compromise was reached on fish disease

measures which are not common for the Community, but are vital for some Member States.

Amendment to Regulation of the European Parliament and of the Council amending the regulation laying down rules for the prevention, control and eradication of certain transmissible spongiform encephalopathies in connection with extension of transitional measures

This draft was partly adopted during the Luxembourg presidency, as the European Parliament did not consent to the adoption of the entire draft without the existence of a Community strategy. The purpose of the strategy is to lay down the principles of control and eradication of TSE so as to maintain consumer protection. The draft solved an important issue for Estonia – the use of fishmeal as a feedingstuff. The use of fishmeal as a feedingstuff had so far been completely banned, but the new draft makes it possible to lift the ban where supervisory measures have been developed.

Community Action Plan on Animal Welfare and Protection 2006–2010

This action plan was one of the priorities during the Austrian presidency and Austria held an international conference on the subject. The action plan ensures that animal welfare initiatives take account of their extensiveness, dimensions, and value in Europe and on the international level, and the scope of common and interrelated competencies currently divided between the Commission’s Directorates General.

The main lines of animal protection policy were discussed and the presidency’s conclusions on the Community Action Plan on Animal Welfare and Protection were adopted during the first half of the year.

Legislation adopted in the first half of 2006 concerning public health and food safety:

- Draft Regulation of the European Parliament and the Council on nutrition and health claims. The regulation sets out the procedure for recognising health claims made on foods (allowed only on the basis of scientific reasoning) and prohibits the attribution of health claims on alcoholic beverages. In addition to that, the use in the Community of the concept “low-fat”, etc. is regulated;
- Draft Regulation of the European Parliament and the Council on the addition of vitamins and minerals and of certain other substances to foods. The regulation harmonises the enrichment of food with the aforementioned additives and lays down the maximum limits of their contents.

Decisions concerning plant health and genetically modified organisms (GMOs):

Proceedings continued with the draft Council directive on the control of potato cyst nematodes. The draft lays down general measures to be taken within the Member States against potato cyst nematodes in order to determine their distribution, to prevent their spread and to perform control. The draft also changes the formerly applied principles: on the one hand, there is no longer the obligation to eradi-

cate potato cyst nematodes but to determine their distribution and prevent their spread and to perform control. It also establishes a new requirement for prior soil analysis in fields where certain species of propagating and planting material is intended to be produced. This is required because of the high risk of spreading potato cyst nematodes by contaminated plants for planting through the associated soil. Therefore certain plants grown in rotation with potatoes will be subject to control measures. As a result of an institutional agreement, proceeding of the draft will continue in 2007.

The Regulation on the European Fisheries Fund was adopted in June 2006

The objective of the draft regulation is to improve the financing of fisheries by adapting it to the changing needs in the enlarged EU. The Council agreed on the principles of reforming the common fisheries policy in December 2002. The new Fund, the framework for which is provided in the draft regulation, is intended for making changes in the sector in order to ensure the sustainability of fisheries and aquaculture.

Support to the fisheries sector will be financed from the European Fisheries Fund (EFF) in 2007–2013. Implementation of the EFF measures results in an additional administrative burden on the Ministry of Agriculture and an obligation to cooperate with various partners. Also, a national fisheries development plan setting out national priorities needs to be drawn up and approved. Mandatory co-financing of the EFF measures will have to be planned as a part of the state budget during 2007–2013.

From the legal aspect, the EFF regulation harmonises the system and makes it easier to understand. While the Financial Instrument for Fisheries Guidance was so far governed by four EU regulations, the new draft incorporates almost all of the EU legislation in this area so far. This makes the entire system legally more transparent. The draft regulation also gives the state more specific guidelines on the national coordination and administration of the fund.

Implementation of the regulation brings about new obligations for the Ministry of Agriculture. The largest and most important of them are the preparation of new programming documents in line with the requirements of the regulation, preparation of regulations for implementing the measures, and introduction of a management and control system for the measures. The new regulations make new types of support available for the sector, which improve the competitiveness and sustainability from the global aspect of the Estonian fisheries sector. Existing national implementation legislation needs to be amended and new legislation established once the regulation enters into force. The draft regulation on the EFF is based on the new approach to the policy of the European Structural Funds. The approach endeavours to facilitate the availability of aid from the European Structural Funds, to render strategic planning more transparent and simpler, and to impose greater liability on the Member States for implementation of support. The reform will simplify planning and implementation of aid schemes and processes, and focus aid on specific priorities. As regards defini-

tion and implementation of funding priorities, a significant change occurs toward strategic planning. The fundamental principles of the EU Structural Funds remain the same: multi-annual programming work, partnership, co-financing, subsidiarity principle, proportionality, and concentrating funding on less developed areas.

Economic difficulties in the fisheries sector

Communication from the Commission to the Council and the European Parliament on improving the economic situation in the fishing industry. The background of the communication lies in sharply risen fuel prices, which have caused economic tension in the fisheries sector. Belgium first raised the subject during the Luxembourg presidency and it was an AOB item in the Council during the UK presidency.

The objective of the Communication, which was published in March, is to set a framework for stakeholders, Member States and the Community institutions to participate in delivering both short-term rescue measures for fishing enterprises in difficulty and the structural adjustments in the fishing industry that are necessary for its long-term sustainability and prosperity.

In the Communication, the Commission introduces short and long term measures that should be taken within the framework of Community state aid to improve the situation. All available instruments and resources (including the existing state aid framework) must be mobilised to rescue and restructure fishing enterprises. The aim is that these enter-

prises should again become capable of being profitable. The Commission invites Member States to use the Community's structural instruments for fisheries to accompany the necessary adjustments and support fishing communities in the transition.

An exchange of opinions took place at the Council of the European Union in April, at which Estonia supported the Commission's initiative to propose solutions that would overcome the current and longer term difficulties of the fisheries sector. The opinions stated in the discussions are roughly the same as those expressed at the negotiations of the draft European Fisheries Fund. For example, it is important to reduce environmental impact and fuel consumption, while fishing efforts must, in no case, be increased.

Eco-labelling schemes for fisheries products

Communication from the Commission to the Council, the European Parliament and the European Economic and Social Committee – Launching a debate on a community approach towards eco-labelling schemes for fisheries products.

Quota regulations for 2007 (including for the Baltic Sea and deep-sea species)

Catch quota and conditions covering the water bodies that concern Estonia, both in the Baltic Sea and Atlantic Ocean, for 2007 are determined in the second half of 2006. Estonia wishes the decisions determining the catch quotas for 2007

and 2008 to be based on scientific advice. Fishing capacities and organisation should generally be planned for a longer term and the current quota allocation procedure should be revised. The established fishing capacities, time and technical limits on fishing, and other detailed fishing rules must ensure an effective protection of fish resources, while taking into account the socio-economic needs of Member States. Proposals on the allocation of the annual fishing quota should be published immediately after receiving the scientific advice, i.e. earlier than is currently done. More multi-annual management plans should be developed.

Commission's action plan on the simplification of the common fisheries policy

Simplification of the fisheries policy was discussed at the April 2006 Council. An overview of the progress of simplification is given during every presidency. An exchange of opinions takes place at the Council. Multiannual action plans contained in the draft, which would enable stability for the enterprises of the sector, are especially important for Estonia. Estonia also agrees to the presidency's position that the action plan should take into account and give an overview of how the simplification of the fisheries policy is monitored (constant monitoring).

Based on the experience of old Member States and the enlargement of the Community, the Member States and the Commission have reached a conclusion on the need to sim-

plify and update the common fisheries policy and legislation governing fisheries. The main problems are:

- the scope of legislation – the scope of existing regulations, doubling, and misunderstanding and interpretation;
- the reporting obligation – requirements for the collection and use of reported data are not always justified;
- differences arising from geographic peculiarities – disregard for such differences;
- great fishing capacity and over fishing – the low efficiency of existing measures.

Priorities are divided into two:

- Short-term priorities: data collection, consolidation, repeal of old and obsolete regulations, control and preservation measures, bulletins and books concerning fisheries that incorporate advice by the Regional Advisory Council (RAC);
- Long-term priorities: assistance with the simplification and clarification of important documents, consideration for regional differences and emphasising the role of RAC, more support.

Council Regulation concerning use of alien and locally absent species in aquaculture

The draft was discussed in a working group in the first half of 2006, and a summary reflecting the Member States' positions was prepared. Discussions toward the conclusion of a

political agreement followed. Estonia supports the objectives of the regulation and considers its adoption important for the defence of local diversity. The objective of the draft is to reduce the threat arising from alien species used in aquaculture to local diversity and ecosystems. Therefore, the use of alien species in aquaculture needs to be regulated in order to prevent such species from being introduced into native ecosystems where they become invasive and distort the balance of the native ecosystem. Implementation of the draft has a direct impact on aquaculture operators, mainly fish farms. The draft provides for the obligation to apply for a permit by submitting a large volume of data; preparing such an application, particularly assessing the risks and environmental impact of the introduction of a species, is relatively complicated and time consuming, especially at the beginning. The draft has a positive environmental impact, as its implementation will reduce the threat posed by alien species to Estonia's biodiversity.

Eel recovery plans

It turned out at the discussion of the draft regulation that most Member States made amendment and supplementation proposals, which were discussed in the fisheries working groups. The regulation governs eel fishing throughout the EU and provides for the preparation of national recovery plans. Because of the peculiarity of the life cycle and fishing of eel, the EU does not establish common measures for the Member States, but the latter have to ensure a 40% escape-ment of eel from each river basin to the sea.

Since this is a very important draft for Estonian inland water fishing, Estonia cannot support the adoption of the regulation in its current wording, as eel management in Estonian internal water bodies would have to be stopped if the proposed measures are implemented. Estonia wishes that eel fishing should be fully allowed in those river basins where eels have no escape to the sea (such as Lake Võrtsjärv and most Estonian internal water bodies) even after the adoption of the regulation. We are also applying for special status for the Narva River, which is a transboundary water body and where Estonia cannot unilaterally ensure a 40% escape-ment of eel. A minimum landing size should be established to protect eel stock. It would be allowed to catch eels smaller than the minimum landing size only for restocking their natural population areas. Neither does Estonia support the consumption of glass eels as food or its continued export to Asia, where eels have no escape to their spawning areas. Since conditions vary greatly across the Member States, the protection of eel resources should be governed not by a regulation but by a directive, which would leave the implementation of protective measures to the competence of the Member States. We wish that the peculiarities of Member States as well as socio-economic impacts be taken into account upon the adoption of eel recovery plans.

Financial measures concerning fisheries

Political compromise on the draft regulation was achieved in the first half of 2006. Rules and rates of complementary state support are established for the implementation of the

common fisheries policy in addition to funding via the European Fisheries Fund. Research in fisheries is financed under the 7th Framework Programme and marketing measures are financed from the EAGGF Guarantee Section. Specific amounts will be decided during annual budget discussions. The objective of the regulation is thus to grant state aid to fisheries in addition to the EFF funds.

State aid is planned to be granted in the following areas: supervision, conservation and management of fishery resources, collection of scientific data and advice based on it, international relations, and performance of the obligations arising from the Convention on the Law of the Sea. The measures set out in the regulation help improve control over financing conditions and to finance the performance of the tasks planned for each area.

The regulation establishes procedures for the essential preparation of national and Community programmes. These contain conditions for the submission of annual reports and financing by the Commission, including financing rates, approval procedures, and detailed rules. Since Estonia is under an obligation to implement the requirements of the common fisheries policy and this regulation allocates EU funds that guarantee EU financing for the implementation of the fisheries policy in the Member States, Estonia supports the draft. At the same time, Estonia needs to supply its own co-financing to meet the requirements.

3.4 Decisions taken in the Rural Development Committee

Marko Gorban

2006 was the last year when the Committee on Agricultural Structures and Rural Development met. The committee was set up to discuss issues relating to the rural development support granted from the EAGGF Guidance and Guarantee Sections. In connection with the adoption of a new rural development regulation²³ at the end of 2005, the Rural Development Committee started its work in parallel with the Committee on Agricultural Structures and Rural Development; the new committee is an analogue of the former for the period 2007–2013 and takes over the former committee’s duties relating to the previous period from the beginning of 2007. As the new period began on 1 January 2007, the Committee on Agricultural Structures and Rural Development primarily handled amendments to SAPARD and rural development programmes in 2006, which were necessary for completion of the programme, especially amendments to the financing plans of the Member States’ programmes.

The sessions of the Rural Development Committee in 2006 were mainly dedicated to discussing the three implementing regulations of the rural development regulation: the transition regulation,²⁴ control

regulation,²⁵ and implementation regulation.²⁶ The adoption of all these regulations followed lengthy discussions.

The rural development regulation was applied from 1 January 2007 together with the repeal of Council Regulation (EC) No 1257/1999 on support for rural development from the European Agricultural Guidance and Guarantee Fund (EAGGF), based on which support was granted under the RDP 2004–2006 and priority 3 of the NDP. The provisions of that regulation still apply to activities approved by the European Commission before 1 January 2007. Transition rules were adopted to facilitate transfer from the existing to new support schemes. These rules help integrate existing Community support from the EAGGF Guidance or Guarantee Sections with the support provided in the rural development regulation. The transition regulation helps simplify transition to the rural development regulation and avoid problems in the implementation of rural development support during the transitional period.

Control rules were established to detail the controls applied by the Member States. The control regulation covers control of rural development measures, reductions and exclusions, and cross-compliance. Cross-compliance means compliance with the requirements of Council Regulation (EC) No 1782/2003 establishing common rules for direct support schemes under the common agricultural policy and

establishing certain support schemes for farmers, detailed rules of modulation and the integrated administration and control system, and the mandatory requirements set out in Articles 4 and 5 and Annexes III and IV. These requirements also apply to certain axis 2 rural development measures.

The implementation regulation lays down detailed rules specifying the legal framework established with the rural development regulation. These cover complementarity with other Community support instruments, strategy and programming, amendments to rural development programmes, requirements for rural development measures, verifiability and controllability of measures and eligibility rules, state aid, information and publicity, monitoring and evaluation, electronic exchange of information and documents, and development plan structure.

Agricultural policy decisions adopted by working groups and management committees

The **Management Committee for Direct Payments** held 15 sessions during the year.

In the first calendar quarter, the committee focused on drafting the provisions of implementation regulations pertaining to changes in sugar market organisation and on practical additions to regulations governing the administration of payment entitlements and direct aid. The most acute problem was keeping records of own-produced feedingstuffs, concerning which the representative of the Member States proposed that records should be kept for each category of

origin: more exact definitions for purchased or sold feedingstuffs and more general definitions for feedingstuffs produced on the farm for the farm’s own animals.

Three Commission working documents were discussed:

- increasing the sample for area-related aid if the number of infringements is large;
- increasing the sample for cross-compliance if the number of infringements is large;
- performance of on-the-spot checks.

The Commission explained that although a working document is binding only on the Commission and advisory for the Member States, everyone has to make their own decisions. The Commission stated that it is the format of the working document that implies flexibility of application, as a regulation would have a mandatory nature, while a working document merely provides guidance. At the discussion over the guarantee system, the Commission found that the system was working and fulfilling its aims. However, the Member States were allowed to prepare an alternative scheme – with the prior approval of processors and at the Member State’s responsibility – yielding the same result, guarantees, and sanctions.

The **Management Committee for Cereals** meets every week. Since the cereal harvest was quite modest in many Member States due to the poor weather conditions of 2006 (extremely dry and hot June and July and rainy August), the world market prices of cereals increased in the autumn of 2006.

²³ Council Regulation (EC) No 1698/2005 on support for rural development by the European Agricultural Fund for Rural Development (EAFRD).

²⁴ Commission Regulation (EC) No 1320/2006 laying down rules for the transition to the rural development support provided for in Council Regulation (EC) No 1698/2005.

²⁵ Commission Regulation (EC) No 1975/2006 laying down detailed rules for the implementation of Council Regulation (EC) No 1698/2005, as regards the implementation of control procedures as well as cross-compliance in respect of rural development support measures.

²⁶ Commission Regulation (EC) No 1974/2006 laying down detailed rules for the application of Council Regulation (EC) No 1698/2005.

While Australia exported 20 million tonnes of cereals in the marketing year 2005/2006, the estimation for 2006/2007 is only 5 million tonnes. Such a situation last occurred ten years ago. There was a drought in Australia, which is the world's third-largest exporter; the harvest was poor and the rains following the drought damaged the cereal quality. Ukraine had problems meeting its export quotas. Few licenses were granted to enterprises because the domestic stocks were too small.

Many certificates were issued for importing wheat, and wheat prices rose everywhere in the world, while barley prices dropped. The prices were higher in the USA than in the EU – another phenomenon that has not occurred for a long time. Maize prices rose significantly due to the great demand for bioenergy production. Member States that are suffering a shortage of cereals are trying to solve the situation by importing. Since market prices are higher than the intervention price, not many cereals are expected to be sold to intervention buying-in. As regards maize, bioenergy production has caused tensions, as many biogas plants mainly use maize as raw material. Those Member States that harvested cereals before the rainy season received higher quality produce. The quality of cereals harvested after the rains suffered especially.

The Commission took the view that the internal market situation should be monitored and readiness for support should be maintained. The Commission decided to open tenders for the sale of intervention cereals on the internal market. Trade

in food wheat was highly active in October 2006 – wheat was exported and imported all over the world.

In summary, the EU internal market need for cereals was covered owing to intervention. At the beginning of the marketing year 2006/2007, there were 14 million tonnes of cereals in intervention stocks. By the end of December, 5.4 million tonnes of intervention stocks had been sold and 8.6 million tonnes was left in intervention stocks. Maize (52%), wheat (33%), and barley (10%) make up the largest shares of the intervention stocks. It was stressed at the Committee that every Member State has the right to constantly sell up to 5000 t of cereals without the Commission's approval. For larger quantities, the market situation as well as the potential consequences of one's proposals and decisions needs to be assessed.

Legal simplification of the selling of intervention stocks was discussed at several meetings of the group of experts. The Commission explained that the system is legally complicated, since each tender is opened and, if necessary, extended, with a separate regulation. Therefore, the Committee adopted Commission Regulation (EC) No 990/2006 opening standing invitations to tender for the export of cereals held by the intervention agencies of the Member States. The regulation also opened the export of the 30 000 t of barley held by the ARIB from 6 July to 20 June 2007.

Management Committee for Fresh and Processed Fruit and Vegetables

The Management Committee for Fruit and Vegetables handled changes in export subsidies and the trigger levels for additional duties in 2006. The most important points were the following:

- 1) The Committee started to provide overviews of the fruit and vegetable market situation within the EU and worldwide.
- 2) The Committee's efforts focused on preparing proposals for reforming the fruit and vegetable sector in 2007.
- 3) The Court of Auditors published a special report titled "The effectiveness of European Union support for fruit and vegetable producers' operational programmes" (8/2006). The special report includes the audit results of eight Member States' (EU-15) approved operational programmes of producer organisations in the fruit and vegetable sector.
- 4) All those interested were able to make proposals concerning the fruit and vegetable sector reform from the end of May till mid-July.
- 5) An overview of the berry market situation was prepared; according to the Commission, the main problems of the sector may be summarised as follows: increased competition from third countries; considerable growth of production compared to consumption; fragmentation of the sector (poor cooperation).

In summary, it was stated that the problems can be solved by market organisation and rural development plan measures.

The **Management Committee for Milk and Milk Products** met mainly to discuss the current issues arising from the implementation of the market schemes. 22 sessions were held during the year. The EU industries bought in a total of 1% less milk in 2006 compared to 2005, while growing cheese production siphoned off the milk required for other dairy products. This is why the supply of butter and especially skimmed milk and milk powder decreased and prices rose. While the price increase of powders was constant, butter prices actually fell slightly in the first half, but rose considerably in the second half of the year. As the situation on the market of milk and dairy products improved considerably in 2006 and the intervention prices of butter and skimmed milk powder fell again from 1 July as a result of the CAP reform decisions, the rates of various types of support for the use of such products were reduced. For example, the support rates in the "bakery butter" scheme decreased gradually from EUR 35 to 14 (per 100 kg, or from EEK 548 to 219 per 100 kg) for 82% butter not containing tracers, and from EUR 15 to 6 for cream (per 100 kg, or from EEK 235 to 94 per 100 kg) compared to the beginning of the year. Release of quantities from the special restructuring reserve for eight new member states was approved in May, based on reports. The milk production quota approved for Estonia thus increased by 21 885 t from 1 April 2006.

The **Management Committee for Pigmeat** met once a month (except August), i.e. 11 times during the year. The work of the Commission and the Management Committee was facilitated in 2006 by the very good situation and stability of the market in pigmeat. The 2006 average price of a pig carcase EUR 145.34/100 kg (EEK 2274/100 kg) was the best in recent years and 4.5% higher than in 2005 (EUR 139.12/100 kg). In the second quarter of the year, the average price of pig carcasses in the EU was even higher than predicted, as demand for pigmeat was great. While the price of pigmeat in EU-25 was EUR 144.03/100 kg (EEK 2254/100 kg) and EUR 134.13/100 kg (EEK 2098/100 kg) in Estonia at the beginning of April, then by 9 August the price had risen to a peak level of recent years in the EU. The average price in August was EUR 162.78/100 kg (EEK 2547/100 kg); in August 2005 it was EUR 145.53/100 kg (EEK 2277/100 kg), i.e. the yearly price rise was 11.8%. The average price of pigmeat in Estonia was EUR 141.59/100 kg (EEK 2215/100 kg) in August 2006. In the EU as a whole, the price of pigmeat was the highest during the past four years in the summer of 2006, which was caused by great demand and export.

Export refund rates were not changed during the year, as the pigmeat prices in 2006 were the best and the most stable in recent years. 2098 million tonnes of pigmeat was exported from the EU in 2006, i.e. 7% more than in 2005 (1959 million tonnes). The Commission states that the new Member States (Poland, Hungary) have been very active exporters of pigmeat.

The **Management Committee for Beef and Veal** met ten times during the year. Sheepmeat and goatmeat issues were discussed on three occasions. 2006. The situation on the EU beef market was stable in 2006 and the producer prices continued to be good. The producer price for category D (cows) was EUR 237.80/100 kg (EEK 3721/100 kg) against EUR 228.18/100 kg (EEK 3570/100 kg) in 2005 – it has thus risen more than 4% during the year. The EU average producer price for young bulls was EUR 315.82/100 kg (EEK 4942/100 kg) and rose more than 8% during the year (from EEK 4567/100 kg in 2005).

The high price level was caused by gradually decreasing beef production and the increasing demand caused by the bird flu threat on the poultry market. The producer prices of beef are still the lowest in Estonia, Latvia, and Lithuania. The relative share of beef from dairy cows increased again in several Member States, since the reform of direct aid reduced producers' interest in beef cattle.

In June and October, the beef export subsidy rates were reduced for all supported products and destinations, since the EU as a whole produces less beef than it consumers; also, beef prices rose and there was no need to facilitate beef export.

Approval was granted to the draft codification of the procedure for the buying-in of beef (Commission Regulation (EC) No 562/2000) and the draft codification of the regulation laying down detailed rules for the application of granting of assistance for the export of beef and veal products which

may benefit from a special import treatment in a third country (Commission Regulation (EC) No 2973/79).

Pre-financing of export subsidies was terminated from the beginning of 2007, but pre-financing will be maintained in the beef sector. Commission Regulation (EC) No 1741/2006 relating to continued pre-financing of export refunds (conditions for granting the special export refund on boned meat of adult male bovine animals placed under the customs warehousing procedure prior to export), and Commission Regulation (EC) No 1731/2006 (special detailed rules for the application of export refunds in the case of certain preserved beef and veal products) were adopted.

The **Management Committee for Poultrymeat and Eggs** met 15 times in 2006. One of the main topics discussed was the traditional market review. The average EU price of hen eggs was, since the beginning of 2006, at the average level for the past 5 years (the Management Committee compared prices for the past five years).

Export subsidies for hen eggs were decreased three times in 2006. In December the export subsidy was EUR 0.40/100 hen eggs and EUR 0.85/100 turkey and goose eggs.

The **Advisory Committee on State Aid** met four times (in May, September, and October) and two working group meetings were held (in June and October). The discussions concerned the new Community guidelines for state aid in the agriculture and forestry sector 2007–2013²⁷ (hereinafter

guidelines) and the new block exception regulation (hereinafter *BER*) for agricultural producers, which is also applicable in 2007–2013.²⁸ Both instruments govern the conditions of payment of agricultural support. The new regulations have been prepared, taking into account the basic positions of the Commission's rural development policy and the WTO conditions. The guidelines also state that the use of state aid is justified only if the CAP objectives are taken into account. The guidelines, which became applicable from 1 January 2007, replace the former guidelines for State aid in the agriculture sector 2000–2006. The BER replaces Commission Regulation (EC) No 1/2004. The new rules are a part of the simplification procedure initiated with the Commission Communication "Simplification of the Common Agricultural Policy and better regulation".

In connection with changing the conditions of aid, amendments to Annex I to Commission Regulation (EC) No 794/2004, which lays down the forms of notification of aid²⁹, were discussed at the Committee in November. Both the guidelines and the BER apply to all EU Member States. Below is an overview of the links between the guidelines and the BER.³⁰

²⁸ Commission Regulation (EC) No 1857/2006 on the application of Articles 87 and 88 of the Treaty to State aid to small and medium-sized enterprises active in the production of agricultural products and amending Regulation (EC) No 70/2001. OJ L 358, 16.12.2006, p 3–21.

²⁹ Annex I to Commission Regulation (EC) No 794/2004 was amended by Regulation (EC) No 1627/2006 of 24 October 2006. OJ L 302, 1.11.2006, p 10–28.

³⁰ Council Regulation 994/1998/EC gives the European Commission the powers to adopt resolutions ensuring the application of an exception to certain categories of state aid, i.e. certain types of state aid are *a priori* deemed to be compatible with the common market and are not subject to the notification requirement. Block exemption regulations determine the conditions to be applied to such exemptions and their scope, and provide for the procedure for ensuring transparency and monitoring of the aid.

²⁷ Community guidelines for State aid in the agriculture and forestry sector 2007 to 2013. OJ C 319, 27.12.2006, p 1–33.

Where a Member State wishes to give financial aid from its budgetary resources, an analysis should first be made to decide whether the aid is compatible with the conditions of the BER. If so, the state can grant aid pursuant to a simplified procedure, i.e. at least ten working days before the entry into force of the aid scheme, the Commission is to be sent summarised information in the format provided in an annex to the regulation; the Commission's approval is not required and the aid may be granted at once. Aid exactly complying with BER conditions is considered to be

transparent – its impact can be assessed without a prior risk analysis. Granting aid under the BER is thus quicker than under the guidelines, which is especially necessary e.g. when it comes to weather damage or animal and plant diseases.

When the intended aid is not consistent with the BER conditions, such aid must be granted under the guidelines. Guidelines provide broader possibilities for aid but require the Commission's permission and approval – aid must not be paid out before approval is obtained. For example, BER aid can be granted only to small and medium-sized enterprises (except for Article 9), but certain types of support may also be paid under the guidelines to large-scale producers.

The guidelines apply only to activities related to the production, processing, and marketing of agricultural products, i.e. those listed in paragraph 6 of the guidelines for state aid in the agriculture and forestry sector 2007–2013. The guidelines

for state aid in the agriculture sector do not apply to measures related to processing of Annex I products into products not listed in Annex I – the latter are subject to regular competition rules, which are common for all sectors. From the Commission's viewpoint, agricultural and non-agricultural processing and marketing undertakings are similar, e.g. in the food processing sector, and that is why the state aid guidelines applicable to agricultural processing and marketing undertakings should be harmonised with those applicable to their non-agricultural counterparts.

A completely new area of the guidelines is the forestry chapter, which does not apply to forest management (timber, energy production, etc.). The measure is intended to promote the ecological, protective and recreational functions of forests. Aid can be granted to forest management activities based on regular competition rules.

Restrictions were imposed on state aid for advertising. It was clearly stated that the provision of general information about food products (for example, fruit) not aimed at encouraging consumers to buy the product is not considered to be advertising. The conditions for investment aid were also amended. It was provided that technical aid must not be paid directly to producers, but producers should benefit from aid via subsidised services, etc.

For Estonia, the new state aid rules mean that the agricultural aids paid from the state budget under the Rural Development and Agricultural Market Regulation Act must be

brought into conformity with EU law. Paragraph 196 of the guidelines states that member States should amend their existing aid schemes to conform to the new guidelines by 31 December 2007.³¹ The new Member States are made once exception in this respect: when the EU enlargement took place on 1 May 2004, all new Member States were given a three-year transitional period (the "sunset clause") to bring their existing agricultural state aid measures into conformity with the applicable procedure; the transitional period will end on 1 May 2007, meaning that the agricultural measures must comply with the guidelines by that date. As both new and old guidelines will be effective at that time, the Member States have two options:

- 1) bring the measures into conformity with the new state aid guidelines for 2007–2013 by 1 May 2007;
- 2) bring the measures into conformity with the old state aid guidelines by 1 May 2007 – in such case, payments can be made under the old guidelines until 31 December 2007. However, this means that the measures need to be reviewed again during 2007 and brought into conformity with the new guidelines by 31 December 2007.

The following regulations are repealed by the new guidelines: Community guidelines for State aid in the agriculture sector 2000–2006; Community guidelines for State aid for advertising of products listed in Annex I to the EC Treaty and of certain non-Annex I products; Community guidelines for State aid concerning TSE tests, fallen stock and slaugh-

terhouse waste; Commission on State aid: subsidised short-term loans in agriculture.

The **Standing Committee for Agricultural Statistics** met on five days. Its attention was mainly focused on the agricultural census of 2010 and the agriculture structure surveys to be conducted after 2010. Work is continuing with the draft Regulation of the European Parliament and of the Council establishing the obligation to conduct an agricultural census in 2010 and structure surveys in 2013 and 2016.

The **FADN Committee** met on five days. The April session granted Belgium an exceptional extension of the deadline for submitting 2005 data to 18 months in connection with a reorganisation of their IT system. The remaining Member States have to submit their data within 12 months. If a Member States requires an extension of the deadline for submitting information, a relevant reasoned application is to be submitted to the Commission at least one year in advance.

Since some old Member States use sampling frames based on very old information, the Commission required all Member States to submit by October 2006 new sampling frames based on the newest available data, i.e. the 2005 structural survey on the size of the population, and SGM 2003 coefficients regarding standard gross margin.

The sampling frames submitted by the Member States were introduced at the November meeting. Only 14 Member States (including Estonia) had submitted their sampling

³¹ Existing aid schemes for investments in connection with processing and marketing of agricultural products that have to be eliminated by 31 December 2008 at the latest, and for investments concerning land purchase in agricultural holdings, that have to be amended to conform to these guidelines by 31 December 2009.

frames in due course. Other Member States were admonished and asked to send their sampling frames immediately. Thorough discussion was dedicated to depreciation accounting under the FADN (2006–2007), i.e. the recording of profit and loss from sale of fixed assets. The Commission took the view that varying rules may apply to recording depreciation depending on the purpose why FADN data is used. The Commission uses FADN data to take agricultural policy decisions; on the national level, FADN data may serve for the preparation of individual analyses in an enterprise. The rules must be in line with the purpose of using the data and relevant amendments should therefore be made to the instructions on how to fill in the data. It was revealed during

discussion that this principle might not be the most correct, as FADN data is used by the Member States for both political decision-making and on the enterprise level. Problems arise when small and large enterprises are compared, because large enterprises use their fixed assets more intensively and should apply different depreciation accounting. It was agreed that it is essentially incorrect to record income from the sale of fixed assets under other income in the production table. In addition to that, depreciation accounting varies from state to state, while the aggregate data must be comparable on the EU level. The question remained undecided and the Commission will have to use the results of earlier surveys in this area.

4.1. Economic situation in agriculture

Urve Valdmaa, Kristel Maidre, Liisa Kähr

General economic indicators in agriculture

The share of the value added by agriculture and hunting (in current prices) relative to the total value added in Estonia decreased by 0.1% in 2005 compared to 2004 (Table 1). The value added in agriculture and hunting in the 1st through 3rd calendar quarters of 2006 was EEK 2 608 000 000.80 in current prices; it exceeds the indicator for the same period of 2005 by MEEK 237.7 or 10%.

Employment in agriculture and hunting has decreased constantly over the past three years and accounted for only 3.9% of total national employment in 2005.

Preliminary economic results of the agriculture sector for 2006 based on EAA

The economic results of the agriculture sector are assessed on the macroeconomic level by Economic Accounts for Agriculture (EAA), prepared in accordance with Commission Regulation (EC) No 138/2004. The first assessment of the results for 2006 was made in November 2006 and the second assessment was completed in January 2007. The

Table 1. Relative share of agriculture in value added and employment, 2001–2005

	2001	2002	2003	2004	2005
Value added by agriculture and hunting in current prices (MEEK)	2 756.1	2 732.4	2 773.7	3 224.9	3 453.8
Relative share in value added (%)	3.0	2.6	2.5	2.6	2.4
Value added by agriculture and hunting in year 2000 fixed prices (MEEK)	2 466.8	2 351.0	2 397.3	2 545.5	2 539.4
Relative share in value added (%)	2.8	2.5	2.4	2.4	2.1
Employed in agriculture and hunting ('000)	29.0	30.1	25.9	24.2	23.4
Employment (%)	5.0	5.1	4.4	4.1	3.9

Source: Estonian Statistical Office

4. ECONOMIC SITUATION IN THE AGRICULTURE AND FOOD INDUSTRY

economic results for 2006 were assessed based on the preliminary data of the Estonian Statistical Office concerning the total output of agricultural products³² and the expert opinions of specialists of the Ministry of Agriculture. Producer

prices were calculated using the Estonian Statistical Office's producer price index for agricultural products, and intermediate consumption is based on the purchase price index for capital equipment.

Table 2. Economic Accounts for Agriculture indicators in 2000–2006 (MEEK)

	2000	2001	2002	2003	2004	2005	2006*
Crop production	2 413.8	2 328.0	2 524.7	2 646.6	2 607.6	3 039.9	2 792.3
including subsidies on crop production	124.8	112.3	112.6	117.1	206.1	160.6	292.3
Livestock production	2 934.3	3 694.1	3 418.1	3 405.3	4 066.3	4 253.1	4 335.7
including subsidies on livestock production	115.0	114.8	116.6	146.4	189.3	177.9	236.9
Agricultural contract work	102.0	92.7	106.5	139.8	138.1	177.4	180.7
Inseparable non-agricultural secondary activities	517.4	605.8	631.5	559.5	593.1	767.3	761.7
Output of the agricultural industry in base price	5 967.6	6 720.6	6 680.8	6 751.1	7 405.1	8 237.7	8 070.4
Intermediate consumption	3 527.6	3 953.1	4 077.0	4 024.3	4 287.1	4 982.5	5 014.2
Gross value added	2 440.0	2 767.4	2 603.8	2 726.8	3 118.0	3 255.2	3 056.2
Depreciation of fixed assets	650.4	669.8	661.7	699.2	716.6	766.7	840.2
Net value added	1 789.6	2 097.6	1 942.1	2 027.6	2 401.4	2 488.5	2 216.0
Other subsidies	108.1	88.2	189.8	124.3	822.0	1063.9	1260.9
Factor income	1 826.3	2 111.5	2 108.8	2 121.6	3 199.2	3 504.6	3 428.6
Undertaking income	1 265.7	1 350.9	1 102.5	1 041.1	1 944.7	2 49.5	1 795.8

*preliminary data, January 2007

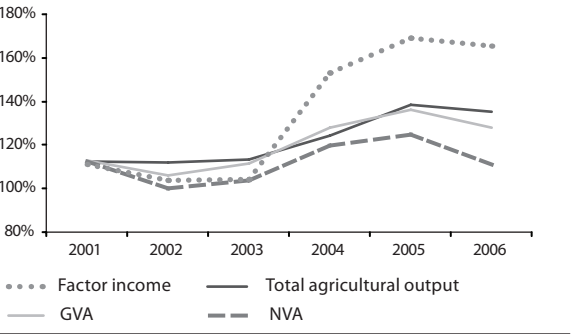
Source: Estonian Statistical Office, Ministry of Agriculture

³² Estonian Statistical Office's news releases No. 12 "Livestock Farming, 2006" and No 13 "Crop production, 2006" (26.1.2007)

4. ECONOMIC SITUATION IN THE AGRICULTURE AND FOOD INDUSTRY

Intermediate consumption amounted to BEEK 5 in 2006, or 62.1% of the output of the agricultural industry. Intermediate consumption increased 0.6% compared to 2005 and its share in the output of the agricultural industry increased by 1.6 percentage points. Owing to the decrease in overall agricultural production and the small rise in the value of intermediate consumption, gross and net value added decreased 6% and 11%, respectively. As other production subsidies³³ (less-favoured areas, agri-environmental support, subsistence farm adaptation support, single area payment, state support) increased from MEEK 1063.9 in 2005 to MEEK 1260.9 in 2006 or 18.5%, factor income (net value added including other subsidies and excluding other taxes), which measures the remuneration of all factors of production (land, capital, labour), decreased only 2% compared to 2005, according to preliminary data.

Figure 1. Indices of changes in agricultural output, net value added, factor income, subsidies, and entrepreneurial income in 2001–2006 (the year 2000 = 100)



Source: Estonian Statistical Office, Ministry of Agriculture

³³ The subsidies have been accounted for using the accrual principle in line with Commission Regulation (EC) No 138/2004.

Figure 1 shows how agricultural output, net value added and factor income changed during 2000–2006. The changes were relatively modest until 2003, although in 2004 the economic results were greatly influenced by increased support and higher selling prices, e.g. the buying-in price of milk rose 33.2%, giving agricultural producers significant additional income. Development slowed down in 2005.

The quick rise of input prices, especially fuel and electricity prices also increased expenses on feedingstuffs and slowed down the rise of profitability indicators. According to preliminary results for 2006, profitability indicators decreased due to the average 3% increase in input prices and a decrease in the value of production, although subsidies continued to grow.

Assessment of the economic sustainability of agricultural holdings (based on FADN)

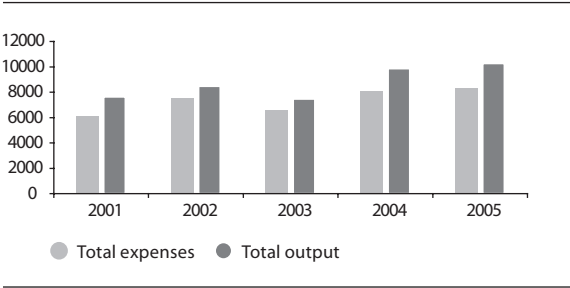
According to the compilation "Economic Indicators of Agricultural Producers 2005" published by the Rural Economy Research Centre in 2006, the average size of an Estonian agricultural holding in 2005 was 14.4 ESU. Pig and poultry farms were the largest (72.8 ESU). An average agricultural holding had 109.1 ha of agricultural land (61% of it rented). More than a half of the land (53%) was used for fodder crops; one-third was under cereals. On average, 2.9 annual units of labour were used in a holding (1 annual unit equals 2200 working hours), of which the unpaid labour of the owners formed 50%. Pig and poultry farms were the most labour intensive: they employed 14.2 persons on average.

4. ECONOMIC SITUATION IN THE AGRICULTURE AND FOOD INDUSTRY

Agricultural producers received an average of EEK 190 000 of support in 2005. The amount of support per hectare of agricultural land was EEK 1741 in 2005, which is EEK 190 or 12% more than in 2004. Total output (including support) per hectare of agricultural land was EEK 10 349 in 2005, which is EEK 402 or 4% more than in 2004. Total expenditure amounted to EEK 8338 per ha, which is EEK 297 or 4% more than in 2004 (Figure 2). EEK 1212/ha or 6% more than in 2004 was thus left for investments and production development.

Gross value added per labour unit was EEK 154 052 in 2005, or EEK 7928 (5%) more than in 2004. Support accounted for 38% of gross value added in both 2004 and 2005. Average gross value added per labour unit was EEK 124 965 in 2005, or EEK 11 432 (10%) more than in 2004. Crop producers using more than 400 ha of agricultural land yielded the highest net value added per labour unit: EEK 300 000 on average.

Figure 2. Total expenses and total output per hectare of agricultural land in 2000–2005, EEK



Source: Rural Economy Research Centre

Producer price index of agricultural products and purchase price index of means of production

The producer price index of agricultural products characterises the change in the selling prices of agricultural products produced in Estonia.

Table 3. Change in the producer price index of agricultural products in 4Q 2006 compared to 4Q 2005

Agricultural product	Percentage	Change %
Plant production	17.7	26.7
Cereals (including seeds)	7.6	19.7
Industrial crops	3.8	21.5
Vegetables and horticultural products	5.2	9.1
Potato (including seeds)	0.7	72.8
Livestock farming	82.3	1.3
Bovine animals for meat	4.7	-3.1
Pigs for meat	21.2	5.4
Milk	45.8	-1.7
Eggs	7.7	8.1

Source: Estonian Statistical Office

4. ECONOMIC SITUATION IN THE AGRICULTURE AND FOOD INDUSTRY

The producer price index of agricultural products changed 5.3% in 4Q 2006 compared to 4Q 2005 (26.7% in crop production and 1.3% in livestock farming). The producer price index increased the most (in 4Q 2006 compared to 4Q 2005) for potato (72.8%), industrial crops (21.5%) and cereals (19.7%), and decreased for bovine animals (for meat; -3.1%) and milk (-1.7%).

Table 4. Change in the purchase price index of means of production of agricultural products in 4Q 2006 compared to 4Q 2005

	Percentage	Change %
Seed	2.2	-0.9
Energy, fuel, lubricants	20.3	3.7
Fertiliser and soil improver	4.4	5.9
Plant protection products	1.8	2.2
Veterinary costs	1.8	0.8
Feedingstuffs	43.4	5.4
Maintenance and repair of equipment, materials	19.6	0.2
Maintenance and repair of buildings	1.5	13.7
Other goods and services	5.1	2.6

Source: Estonian Statistical Office

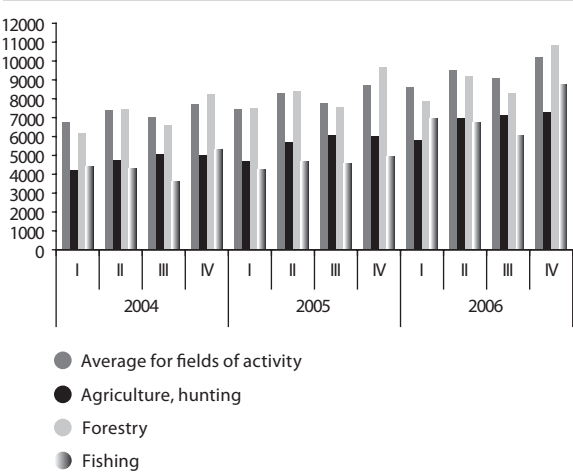
The purchase price index of means of agricultural production, which characterises changes in the prices of expense for agricultural items of expenditure, increased 3.8% in 4Q 2006 compared to 4Q 2005. The index rose the most in regards to the maintenance and repair of buildings (13.7%) and fertilisers and soil improver (5.9%).

According to the Estonian Statistical Office, the **average monthly gross wages** in agriculture and hunting were EEK 7259 in 4Q 2006, which is 71% of the national average (EEK 10 212). Wages in agriculture and hunting were EEK 118 or 1.7% higher in 4Q 2006 than in 3Q 2006, and EEK 1228 or 20.4% higher than in 4Q 2005.

If we compare gross monthly wages in agriculture and hunting across the calendar quarters of 2004–2006 with other sectors of the economy prevailing in rural areas (Figure 3), we can see that wages in forest management and timber production have been 30–40% higher than in agriculture and hunting. Gross monthly wages in fishing are slightly lower than in agriculture and hunting, but in 4Q 2006 the average wages in fishing were EEK 8745, which is 20% higher than in agriculture and hunting.

4. ECONOMIC SITUATION IN THE AGRICULTURE AND FOOD INDUSTRY

Figure 3. Average gross monthly wages across calendar quarters in 2004–2006, EEK



Source: Estonian Statistical Office

Taxes and arrears of agricultural producers

Agricultural producers declared MEEK 661 of taxes in 2006, of which MEEK 430 (65%) was social tax, MEEK 191 (29%) was personal income tax withheld, and MEEK 48 (7%) was refundable VAT. Legal persons declared 88.5% and self-employed persons declared 11.5% of total taxes.

MEEK 149 (29%) more in taxes were declared in 2006 than in 2005. The average legal person engaging in agriculture declared EEK 355 000 and the average self-employed person declared EEK 4000 of taxes. Legal persons declared an average of EEK

89 000 (33%) more taxes and self-employed persons declared EEK 3000 or three times more taxes in 2006 than in 2005.

Table 5 shows that VAT refund claims for legal persons and self-employed persons decreased by MEEK 42 and MEEK 17, respectively, in 2006 compared to 2005.

The payment of all taxes increased in 2006 except for unemployment insurance premium, the rate of which was lowered. The Estonian Unemployment Insurance Fund had reached a sufficient level of reserves and therefore the Government of the Republic decided to reduce the premium rate³⁴. The rates of unemployment insurance premiums were lowered from 1% for insured persons and 0.5% for employers in 2005 to 0.6% and 0.3%, respectively, in 2006.

The income tax rate was also lowered from 24% in 2005 to 23% in 2006.

³⁴ The rate of unemployment insurance premium is 0.5–2% for insured persons and 0.25–1% for employers; the Estonian Unemployment Insurance Fund submits a proposal for the establishment of premium rates to the Government of the Republic every year.

4. ECONOMIC SITUATION IN THE AGRICULTURE AND FOOD INDUSTRY

Table 5. Taxes declared by agricultural producers in 2005 and 2006, EEK '000

Type of tax	2005			2006		
	Legal persons	Self-employed persons	Total	Legal persons	Self-employed persons	Total
VAT	-49 004	-58 858	-107 862	-6 341	-42 052	-48 393
Social tax	323 950	44 671	368 621	365 121	64 434	429 555
Personal income tax withheld	167 821	8 555	176 376	181 508	9 228	190 797
Self-employed person's income tax ³⁵	-	1 981	1 981	-	12 255	12 255
Corporate income tax	10 894	31	10 925	13 741	31	13 772
Unemployment insurance premium	13 495	924	14 419	10 347	690	11 037
Contribution to mandatory funded pension	8 961	578	9 538	11 267	728	11 995
Heavy goods vehicle tax	1 005	1 329	2 334	995	1 569	2 564
Land tax	8 155	27 121	35 276	8 319	28 860	37 178
Total	485 277	26 332	511 609	584 957	75 743	660 700
Number of agricultural producers	1 821	20 834	22 655	1 649	18 835	20 484
Average per agricultural producer	266.5	1.3	22.6	354.7	4.0	32.3

Source: Tax and Customs Board, Agricultural Market Regulation Department of the Ministry of Agriculture

³⁵ Based on § 32 (4) of the Income Tax Act, a self-employed person may additionally deduct up to EEK 45 000 during a period of taxation from his or her income derived from the sale of unprocessed self-produced agricultural products – this reduces the income tax paid by self-employed persons.

4. ECONOMIC SITUATION IN THE AGRICULTURE
AND FOOD INDUSTRYD

1649 legal persons and 18 835 self-employed persons engaged in agriculture in 2006; there were thus a total of 20 484 agricultural producers. As of 31 December 2006, 7704 of them owed tax arrears in a total amount of MEEK 165. The number of persons owing arrears increased by 409 during the year, while the total arrears decreased by MEEK 26 (14%).

Table 6. Breakdown of tax arrears³⁶ and total arrears in 2005 and 2006 (EEK '000)

	Income tax	VAT	Personal income	Social tax	Other taxes	Total
31.12.2005						
Legal persons	2 794	41 352	21 035	57 507	4 623	127 312
Self-employed persons	19 387	18 435	791	20 130	5 630	64 376
Total	22 181	59 787	21 826	77 637	10 253	191 688
31.12.2006						
Legal persons	2 108	35 540	16 302	42 109	4 063	100 122
Self-employed persons	16 415	19 845	758	22 071	5 863	64 952
Total	18 523	55 385	17 060	64 180	9 926	165 074

Source: Tax and Customs Board, Agricultural Market Regulation Department of the Ministry of Agriculture

³⁶ Arrears consist of overdue tax liabilities and interests on these taxes.

4. ECONOMIC SITUATION IN THE AGRICULTURE
AND FOOD INDUSTRY

The structure of tax arrears did not change significantly compared to 2005 (Table 7). It is notable that the total arrears of all taxes have decreased since last year. Social tax arrears continue to be the largest: 41% of total arrears in 2005 and 39% in 2006.

Table 7. Structure of tax arrears in 2005 and 2006 (%)

	Income tax	VAT	Personal income	Social tax	Other taxes	Total
31.12.2005						
Legal persons	2	32	17	45	4	100
Self-employed persons	30	29	1	31	9	100
Total	12	31	11	41	5	100
31.12.2006						
Legal persons	2	35	16	42	4	100
Self-employed persons	25	31	1	34	9	100
Total	11	34	10	39	6	100

Source: Tax and Customs Board, Agricultural Market Regulation Department of the Ministry of Agriculture

4. ECONOMIC SITUATION IN THE AGRICULTURE AND FOOD INDUSTRY

4.2. Economic situation in the food industry

Eha Niinepuu, Merle Saaliste, Martin Pretke

The profit of the food industry totalled MEEK 968, i.e. 5.1% of turnover on average. Food industries are characterised by the fact that increased turnover has not resulted in increased profits, so far (Figure 4). Enterprises have been forced to make great investments to meet hygiene requirements and modernise production. Profits have somewhat increased in 2006.

Value added has increased at a slower pace in the food industry compared to the processing industry as a whole, which is why the food industry's contribution to GDP has also slowly decreased.

Table 8. Value added and relative share in the GDP of the food industry, 2000–2004

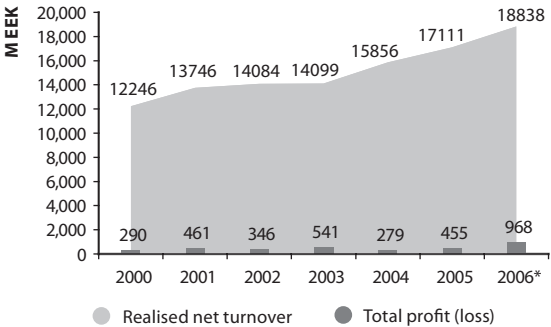
	2000	2001	2002	2003	2004	2005*	2006*
GDP in current prices (MEEK)	95 491	108 218	121 372	132 904	146 694	173 062	**
Value added, MEEK							
All fields of activity	49 327	57 188	66 212	73 731	85 547	84 080	107 143
Processing industry	13 393	15 468	17 848	19 978	21 792	23 070	26 678
...food and beverages industry	2 322	2 495	2 584	2 846	2 752	2 770	3 222
Relative share in the GDP of value added by the food and beverages industry, %	2.4	2.3	2.1	2.1	1.9	1.6	**

* preliminary data

** data not yet published

Source: Estonian Statistical Office

Figure 4. Realised net turnover and total profit of food and beverage business operators in current prices, 2000–2006



* according to short-term statistics

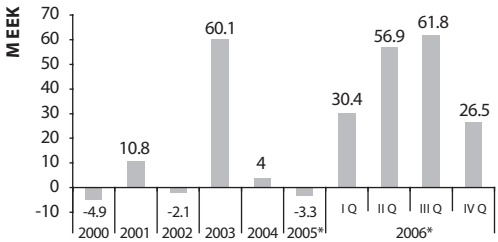
Source: Estonian Statistical Office

4. ECONOMIC SITUATION IN THE AGRICULTURE AND FOOD INDUSTRY

Profit and value added by the dairy industry

The year 2006 was favourable for the dairy sector. According to short-term statistics of the Estonian Statistical Office (Figure 5), the total profit of dairy enterprises was MEEK 175.6. The dairy industry has been favourably influenced by the trend of producing and exporting more, including a wider range of higher value added products. Profits show that previous years' large-scale investments, necessitated by Estonia's accession to the EU, were made in due course and have justified themselves.

Figure 5. Total profit in current prices, 2000–2006

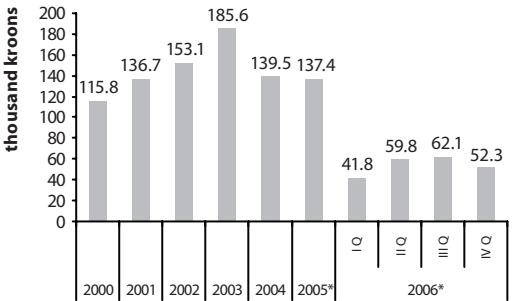


* according to short-term statistics

Source: Estonian Statistical Office

Value added per employee (Figure 6) was EEK 216 000 in 2006, which is EEK 78 600 more than in 2005. Value added is a seasonal indicator, since it is related to the procurement of raw material.

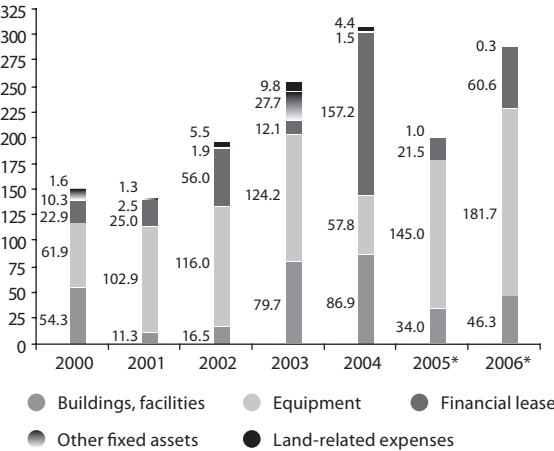
Figure 6. Value added per employee, 2000–2006



* according to short-term statistics

Source: Estonian Statistical Office

Figure 7. Investments in fixed assets



* according to short-term statistics

Source: Estonian Statistical Office

4. ECONOMIC SITUATION IN THE AGRICULTURE AND FOOD INDUSTRY

5. RURAL DEVELOPMENT

During the last few years before EU accession, very large investments were required of Estonian processing enterprises to meet the production and hygiene requirements. As most producers did not have sufficient resources, Estonian dairy industries were among those who benefited greatly from the pre-accession aid programme SAPARD (2001–2003) and measure 3.2 of the Estonian National Development Plan for 2004–2006 (NDP).

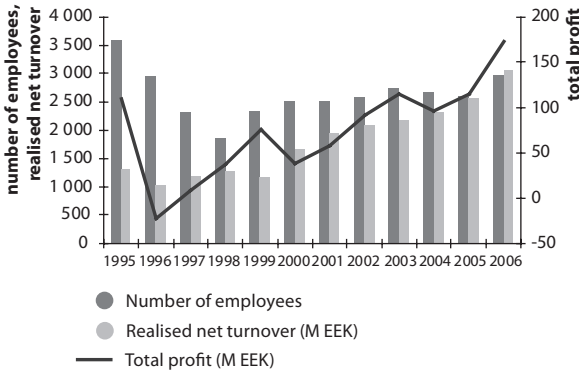
The overall objective of NDP measure 3.2 “Support for investments in improved processing and marketing of agricultural products” was to improve the competitiveness of agricultural producers on both the domestic and foreign markets. The budget of the NDP measure for 2004–2006 was EEK 177 857 140, of which EEK 50 729 202 was approved for investments in the dairy industry. Since the overall amount of support decreased in connection with non-eligible expenses (EEK 108 000) and the cheapening of projects (EEK 20 320), EEK 50 600 882 or 29.5% of the approved NDP 3.2 support (EEK 171 543 356) were actually paid out.

MEEK 228.29 were invested in fixed assets in the dairy industry in 2006. The scope of investments grew by MEEK 48.35 since last year. MEEK 46.3 of investments (Figure 7) were made in structures. In order to improve competitiveness and ensure more stable product quality, the bulk of investments – MEEK 181.7 or 79.6% – were made in equipment in 2006. Great attention is also paid to increasing the share of products with a higher value added and to extending the shelf-life (packaging in a protective atmosphere). Small packaging of cheeses (varied weights; sliced and grated products) has become more common.

Turnover and profit of the meat industry

The turnover of the meat industry increased quite well in 2006 compared to the same time a year ago (Figure 5). Profits relative to turnover have also increased. The sector's total turnover in 2006 was BEEK 3.074, which is 20% more than in 2005 and as much as 31.6% more than in 2004. Profits accounted for an average of 4.5% of turnover at the end of 2005 and 5.6% in 2006. The sector earned a total profit of MEEK 173 in 2006.

Figure 8. Realised net turnover and total profit, 1995–2006



Source: Estonian Statistical Office

5.1. Rural enterprise

Tõnu Taat

The number of rural enterprises has been relatively stable (23 000–24 000) in recent years, according to the Centre of Registers. 75–80% of the rural undertakings are economically active (operating). Large urban centres and the surrounding rural municipalities are the most viable. Tallinn's influence reaches beyond Harju County to the northern parts of Rapla County and Järva County. The sphere of influence of the cities of Tartu and Pärnu is smaller and covers the surrounding rural areas within a radius of 20 km.

Surveys have shown that the third year of operation is one of the critical points in the life cycle of Estonian companies and self-employed persons; accommodation and catering enterprises have a critical point in the fifth year of operation. A clear critical point has not been revealed for agricultural undertakings. The percentage of survival of enterprises is relatively small (53%) and their ability to make additional investments from equity capital is poor. According to the commercial register and register of taxable persons, 2177 companies were founded and 1019 companies were liquidated in rural areas in 2005.

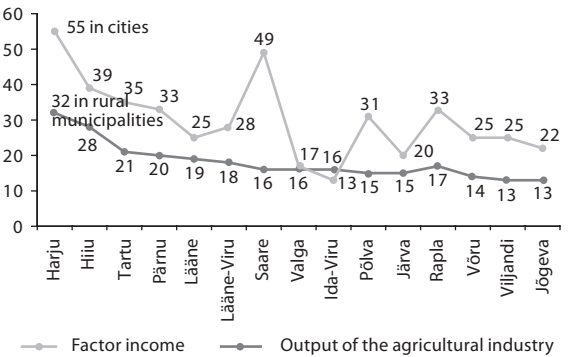
Enterprise activity and structure of enterprises

Following is an overview of companies (general partnerships, limited partnerships, private limited companies, commercial associations and public limited companies) included

in the statistical profile of the Centre of Registers, i.e. economically active companies. Rural companies account for 47% of the total number of companies, but yield the bulk of total output.

The enterprise activity of the population is characterised by the number of companies per one thousand inhabitants. This indicator was 22 in rural areas in 2005, while the variations between the counties were up to 2.5 fold. Enterprise activity was the lowest in Jõgeva County and Viljandi County (13) and the highest in Harju County (32), Hiiu County (28), and Tartu County (21) rural municipalities.

Figure 1. Companies per 1000 inhabitants by county, 2005



Source: Estonian Statistical Office

5. RURAL DEVELOPMENT

5. RURAL DEVELOPMENT

Table 1. Economically active companies per 1000 inhabitants, 2005

County	Companies per 1000 inhabitants	
	Rural municipalities	Cities
Harju	32	55
Hiiu	28	39
Ida-Viru	16	13
Jõgeva	13	22
Järva	15	20
Lääne	19	25
Lääne-Viru	18	28
Põlva	15	31
Pärnu	20	33
Rapla	17	33
Saare	16	49
Tartu	21	35
Valga	16	17
Viljandi	13	25
Võru	14	25
Average	22	38

Source: Cities and Rural Municipalities in Figures, 2006

Data analysis leads to the conclusion that the economically active undertakings are very unevenly distributed across the regions: the undertakings of Harju County, Lääne-Viru County, Pärnu County, Rapla County and Tartu County form 65% of all rural undertakings. The concentration of enterprises near Tallinn (30.9% of all rural enterprises) is also noticeable.

Table 2. Companies of counties by sector of the economy, 2005

County	Total companies	Sector I	Sector II	Sector III	Companies per 1000 inhabitants	Realised net turnover per company, MEEK
Harju	2784	169	725	1890	32	8.8
Hiiu	128	28	28	72	20	5.2
Ida-Viru	334	67	94	173	16	15.5
Jõgeva	322	93	92	137	13	4.8
Järva	323	74	88	161	15	11.4
Lääne	310	53	77	180	19	4.5
Lääne-Viru	656	146	164	346	18	7.5
Põlva	379	66	116	197	15	3.4
Pärnu	785	122	208	455	20	4.4
Rapla	790	86	219	485	21	8.4
Saare	317	61	90	166	16	9.9
Tartu	858	144	250	464	21	5.5
Valga	289	54	74	161	16	4.8
Viljandi	403	101	115	187	13	5.4
Võru	325	70	116	139	14	5.5
Total/average*	9003	1334	2456	5213	22*	7.2*

Source: Cities and Rural Municipalities in Figures, 2006006

The number of primary sector companies is larger in Harju County (169), Lääne-Viru County (146), Tartu County (144), Viljandi County (101) and Jõgeva County (93), accounting for 49% of all companies in that sector. 57% of all processing industry enterprises of the counties operate in Harju County, Lääne-Viru County, Pärnu County, Rapla County and Tartu County. Most service enterprises (70%) are also concentrated in the counties of Harju County, Lääne-Viru County, Pärnu County, Rapla County and Tartu County.

The average realised net turnover of a rural company was MEEK 7.2 in 2005. The differences between counties are great: the average for Ida-Viru County and Järva County companies was MEEK 15.5 and MEEK 11.4, respectively, but only MEEK 3.4 and MEEK 4.4 for Põlva County and Pärnu County companies, respectively.

Some rural areas, especially those near the borders, more sparsely populated areas, and areas largely dependent on agriculture, will have difficulties with economic growth, jobs, and viability in forthcoming years. The difficulties are:

- insufficient income;
- unfavourable demographic situation;
- lower employment and higher unemployment rates;
- slower development of the services sector;
- shortage of skills and human capital;
- a lack of necessary skills for some parts of the agricultural sector and food industry.

In counties where the employment rate in agriculture is higher, management of the reorganisation process plays a remarkable role in the broader rural economy. At the same time, the growth potential of rural areas offers good possibilities for new sectors of the economy and for tourism, as an attractive working and living place, and as an asset of natural resources and valuable landscapes.

To meet the growing market demand of Europe and the whole world, agriculture and the food industry have to make use of the possibilities offered by new approaches, technology and innovation. This requires development of skills, enterprise, and capacity to adapt to the provision of new types of services.

Rural undertakings have a positive attitude and foresight. Support by the state is crucial for developing enterprises in conditions of intensifying competition.

Estonia's economic growth accelerated to 6.2% in 2004. The processing industry, transport, warehousing, communication, and mainly domestic market orientated areas of activity such as real estate and other business services, domestic trade and construction had the largest impact on economic growth. These five areas contributed 84% of the annual growth of value added in the fixed prices of 2000.

In 2005 and 2006 economic growth reached 10.5% and 11.5%, respectively, exceeding the average growth for 2004. Economic growth was based on domestic demand, which in turn was favoured by good borrowing and leasing con-

ditions, low interest rates and positive labour market developments. The continued rapid growth of domestic demand was confirmed by the increased growth figures of domestic trade, an even more active real estate market, and the continuously favourable situation on the construction market.

The growth of private consumption was supported by the increased number of employed persons, the reduced number of unemployed persons, and the acceleration of the real growth of average wages, which boosted the growth rate of available income. Private consumption expenditure increased mainly on account of the consumption of goods and expenditure on the acquisition of dwellings.

Productivity of workforce per employee was three times lower than the EU-25 level in 1996. In 2000, productivity increased to 42%, in 2005 to 57%, and is expected to reach 65% in 2007. GDP *per capita* has increased pro rata with the productivity growth, exceeding the latter by 1–2 percentage points.

The Agricultural Registers and Information Board (ARIB) plays an important role in developing rural enterprises and implementing the EU Structural Funds – it offers various types of investment support to agricultural holdings, processors, and alternative rural undertakings. Environmental projects are financed to a limited extent by the Environmental Investments Centre.

Enterprise Estonia has become one of the main implementing agencies of EU Structural Funds for enterprise, economic growth, innovation, and local development

programmes. KredEx offers loan guarantees in three areas: investment loans to small enterprises, export loans, and housing loans. KredEx surety is intended for SMEs that do not have sufficient security to obtain bank loans or are starting up a business.

To improve the situation in the processing industry and service enterprises, the focus is on developing micro-enterprises. Preference is given to non-agricultural production based on local resources, rural tourism, handicraft and services directly related to improving the quality of life in rural areas. As a result, employment in the secondary and tertiary sectors will increase and jobs vacated by agriculture are compensated.

Rural employment

The economic status of rural inhabitants has changed greatly during the years 1989–2004. There was virtually no unemployment at the beginning of the 1990s, but in the year 2000 there were 28 500 unemployed persons and 144 300 inactive persons in rural areas (13.8% and 41.2% of the working-age population, respectively). Unemployment decreased over the following years to 8.1% in 2003. The number of unemployed persons decreased in rural areas by 13 800 during 2001–2003. In 2004, the number of the unemployed increased again by 1100 and the unemployment rate was 8.6%, which was 0.5% more than in the previous year. The number of the unemployed decreased significantly (by 2700) in 2005, when the unemployment rate was 7.0%. Unemployment had fallen to 6.3% by 2Q 2006.

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Table 3. Rural inhabitants aged 15–74 by economic status, 1998–2005 (annual average, '000)

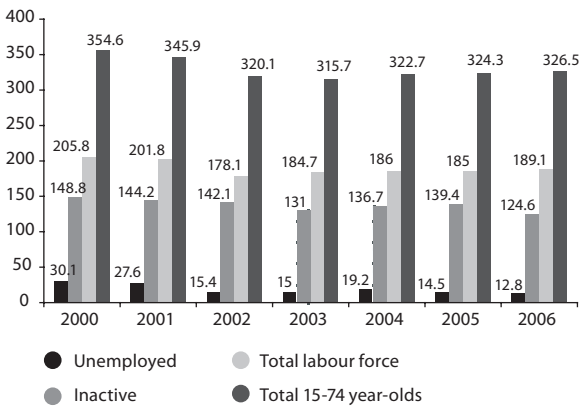
Period	Workforce			Inactive	Total	Employment rate %	Unemployment rate %
	total	employed	unemployed				
1998	205.0	183.5	21.5	138.9	343.9	53.4	10.5
1999	207.9	181.0	26.9	143.9	351.8	51.5	12.9
2000	205.9	177.4	28.5	144.3	350.1	50.7	13.8
2001	189.5	164.2	25.3	134.7	324.2	50.6	13.4
2002	180.4	163.3	17.0	139.3	319.7	51.1	9.4
2003	182.6	167.9	14.7	135.5	318.1	52.8	8.1
2004	184.9	169.1	15.8	137.9	322.8	52.4	8.6
2005	185.9	172.8	13.1	139.3	325.2	53.1	7.0

Source: Labour Force Survey data 1998–2005

The relative share of inactive persons decreased in 2001 (0.3%) and in 2003 (1%), but grew 2.1% in 2002; in the three-year total, the number of inactive persons decreased by 8800. In 2004 the number of inactive persons increased by 2400 and in 2005 by another 1400.

The average unemployment rates in Estonia and the EU-15 were 7.0% and 7.9%, respectively, in 2005 and the EU-25 average was 8.7%. The situation was the best in Ireland (4.3%), United Kingdom (4.6%) and the Netherlands (4.7%), and the worst in Poland (17.7%), Slovakia (16.4%) and Greece (10.0%).

Figure 2. Working age rural population by economic status, 2000–2006 (2Q, '000)

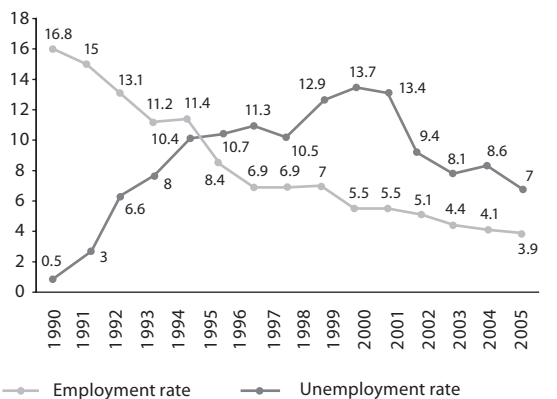


Source: Labour Force Survey 2000–2006

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The role of the primary sector (agriculture, hunting, forestry and fisheries) in employment has decreased more than four-fold in rural areas since 1989 (from 55.9% to 13.2%).

Figure 3. Share of agricultural employment and unemployment, 1999–2005 (%)



Source: Labour Force Survey

On average, the primary sector accounted for 3.9% of total employment in the EU-15 and 5.0% in the EU-25. The trend is similar in Estonia: the indicator was 5.3% in 2005 and 4.8% in 4Q2006. The share of the primary sector in Lithuania, Latvia, and Finland, was 17.8%, 15.1%, and 5.3%, respectively. In countries of established agricultural traditions such as the UK and Germany, the primary sector employed only 1.6% and 2.4% of the total labour force, respectively.

The share of the tertiary sector (services) in rural areas has increased 1.9 times during the same period, and that of the secondary sector (processing industry, mining industry, construction, energy, gas and water supply) has increased 1.7 times. The number of employed persons in rural areas has decreased from 246 300 in 1989 to 172 800 in 2005 (-29.8%). The working-age population has decreased by 8700 persons during the same period (-2.6%).

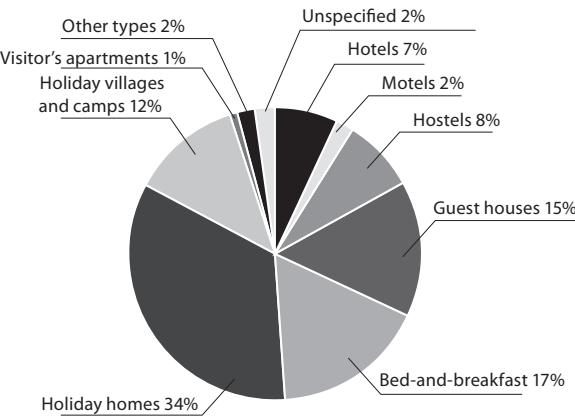
A detailed survey of rural employment and enterprise is available at the website of the Estonian Ministry of Agriculture under the section “Rural Life”.

5.2. Rural tourism

Kristine Hindriks

Rural tourism has become a considerable business in Estonia and is constantly gaining popularity among both domestic and foreign tourists. As of February 2007, there were 607 different accommodation facilities in rural areas with a total of 16 600 beds (the number of enterprises was somewhat smaller, as some enterprises offer more than one type of accommodation facility). Bed-and-breakfast, holiday homes, guest houses, holiday villages and camps are the most common types of rural accommodation. Most accommodation establishments are located in Southern and Western Estonia and on the islands. Compared to earlier years, a large number of new accommodation facilities have opened in Ida-Viru County.

Figure 4. Accommodation establishments in rural municipalities, 2007



Source: Register of economic activities

Figure 5. Rural accommodation establishments broken down by county, 2007



Source: Register of economic activities

Support

The support measures provided in the “Estonian National Development Programme for Implementation of EU Structural Funds – Single Programming Document for 2004–2006” cover tourism. Support was available to tourism undertakings in 2004 and 2006 under measure 3.3 “Diversification of economic activities in rural areas”. Processing of the applications received in 2006 has not yet been finished, but the support granted in 2004 was actively used for construction and acquisition of equipment. Thirty projects approved in 2004 were completed by the spring of 2007. The total investments made in the course of these projects amounted to MEEK 71, of which MEEK 35 was support.

NPO Estonian Rural Tourism

Rural tourism operators are united by the umbrella organisation **NPO Estonian Rural Tourism**, which has 334 members. 78% of these are accommodation enterprises, 10% are active holiday enterprises, and 12% are other enterprises (travel companies, schools and other organisations). Operators are advised to specialise in various target groups. The packages that the NPO advertises via its website are presented by speciality: farm holidays, nature and culture tourism, active tourism, family vacation, health and rehabilitation holiday, seminars and parties, catering, and “something different”.

The rural tourism organisation organises advising, training and marketing for tourism farms and applies measures to improve the quality of services. For example, operators of bed-and-breakfast, holiday houses and holiday camps and villages who have registered with the national register of economic activities can apply for a quality ranking from NPO Estonia Rural Tourism. A web-based booking system has been developed where holiday-makers can also pay for their bookings via the Internet.

In a cooperation project with Ireland, members of the organisation were trained in e-marketing, marketing of rural tourism, customer service, and local food promotion; the trainers themselves also received training. Twenty rural tourism operators visited Ireland in the course of the project to acquaint themselves with Irish rural tourism facilities. Visits have also been made to Latvian rural tourism operators.

More visits to Latvian and Lithuanian rural tourism operators are scheduled for 2007.

Great emphasis was placed on catering in 2006. A survey of Estonian national and traditional foods was conducted; the results will be published in the rural tourism marketing publication “Estonian Travel Guide – Holiday in the Countryside”, which will include a map of catering establishments offering national cuisine. Training has been conducted in the preparation and serving of national and local food, Estonian and English DVDs have been reproduced (the English DVD also teaches traditional Wales cooking), and preparation of local recipes has begun.

In addition to the national food survey, a survey of the ethnographic potential of rural small businesses was conducted. The publication “Estonian Travel Guide – Holiday in the Countryside” contains a mapping of the areas where larger numbers of ethnographic farms can be found. The Guide includes other maps such as a camping and caravan map, water hiking map, fishing and hunting map, bird observation areas, ethnographic areas, horseback riding, and bicycle trips. This represents a qualitative leap forward in marketing.

5.3. Agricultural environment

Jaana Konist

Estonia has favourable conditions and natural resources for developing environment-friendly agriculture and forestry and for preserving our typical agricultural landscapes and biodiversity. Agricultural enterprises impact species richness, soils, water, and air, depending on production intensity. The heritage of traditional cultured landscapes can only be preserved through constant maintenance – cutting and grazing. The preference of only economic interests may therefore lead to irreversible damage to the environment.

Water

Agricultural production is one of the main influences on water resources in rural areas. Most of our water bodies are rather shallow and sensitive to pollution. Most of the upper aquifers are also insufficiently protected. Leachate from manure storage facilities and silos which do not comply with environmental requirements, and the use of large quantities of organic fertilisers, may cause pollution and the eutrophication of water bodies.

The main agricultural point sources of pollution are non-compliant or missing manure storage facilities and silos, as well as fertiliser and fuel storage facilities. Under the compliance measure of the Estonian Rural Development Plan for 2004–2006 support was available for reconstructing manure storage facilities, so that the greatest problems should be solved by now.

Plant nutrients from diffuse sources of pollution end up in water bodies mainly through mineral and organic fertilisers. Although the use of fertilisers has decreased by several times compared to the 1980s and 1990s (for example, 3–5 times less nitrogen is applied with mineral fertilisers), the quantities of fertilisers used per unit of fertilised land have gradually increased since 2000. Groundwater status is good in Estonia’s natural, sparsely populated and extensively used areas. However, more fertile soils, which are in more intensive agricultural use, are often located in areas where the groundwater is weakly protected (karst areas and the Pandivere water protection area). The uppermost aquifer is currently in poor condition in certain areas where the soils are thin and the feeding conditions of groundwater are unfavourable (such as the Adavere–Põltsamaa area). The average nitrate concentration in the area as a whole is below 50 mg/l, but the water is not fit for consumption in problematic wells due to nitrates.

Soil

The main problem with Estonian soils is a decrease in organic matter and nutrient supply, caused primarily by insufficient crop rotation, monocultures, and little use of organic fertilisers.

Acidification of soils is a problem, especially in Central and Southern Estonia. More than one-third of agricultural land (more than 300 000 ha) is acidic. It is impossible to avoid the acidification process mainly due to the qualities of the par-

ent rock, as calcium and magnesium carbonates are constantly washed out from the soil in the Estonian climate. To keep the reaction of soils in Estonian arable lands at a level suitable for crop production and to prevent soil quality from deteriorating, soils can be neutralised.

Eroded soils and soils threatened by erosion account for 3.1% of Estonia’s total arable land, while in the EU-25 they account for 17%. In Estonia, 0.11 t/ha/year of soils are threatened by erosion (EU-25 – 1.64, EU-15 – 1.94). In the fields of the Otepää and Haanja hilly areas, soil particles are easily carried away by running water after cultivation and therefore water erosion occurs. In the large fields of Central Estonia and in coastal areas, wind erosion can occur in dry springs and in areas without vegetation, as well as in areas where the tilth of soils is light.

Air pollution

The main polluters of ambient air in Estonia are energy undertakings, means of transport and, to a lesser extent, agriculture. Overall ambient air pollution has notably decreased in recent years; the same applies to greenhouse gases from agriculture. In 2002, the emissions of greenhouse gases from agriculture were 702 CO₂ eq Gg (416 413.48 CO₂ eq Gg in the EU-15). NH₃ emissions from livestock farming in Estonia account for a little less than 70% of the total NH₃ emission. Implementation of the compliance measure (RDP 2004–2006) contributed positively to the reduction of nitrogen compounds.

Biological and landscape diversity

Before 2004, 12% of Estonia’s land territory was covered by nature conservation restrictions. Another 4% was added by areas of the Natura 2000 network. The Natura 2000 network areas consist of 66 bird sanctuaries and 509 nature conservation areas.

The biodiversity of agriculture is mainly represented by semi-natural or heritage communities (wooded meadows, wooded pastures, coastal meadows, flooded meadows, paludified meadows, alvars, juniper shrublands, heathers, and grasslands on mineral soils), which are considerably more diverse than natural areas owing to constant cutting or grazing. When the impact of human activities ceases, heritage communities slowly return to their natural state.

Until the mid-20th century, grass forage was mainly obtained from semi-natural grasslands. According to the agricultural census of 1939, cultured grasslands accounted for a mere 3.4% of all grasslands. The area of wooded meadows has decreased nearly 100 times over the past 70 years; there are currently 1500 ha of cut wooded meadows. Up to 9000 ha of alvars are in a relatively good condition. There are about 15 000 ha of managed flood meadows and 3000 ha of wooded pastures.

In addition to a high aesthetical value, the diversity of fauna and flora in Estonia’s semi-natural communities is among the worlds greatest compared to other areas north of the 57th parallel. This is why the Ministry of Agriculture together with the Ministry of the Environment is develop-

ping a scheme to support the maintenance of semi-natural communities in the Natura area.

Valuable natural areas and diverse landscapes also play a great role in tourism development. Agricultural landscapes are vivified by stone walls, the establishment, restoration and maintenance of which was supported under the RDP 2004–2006. RDP support was also granted for afforestation of agricultural lands which were less suitable for agricultural production and had been abandoned. The measures do not yield immediate environmental benefits, but the diversity of landscapes and the quality of forest resources will improve over time.

Genetic diversity and species richness

Genetic diversity relates to plant breeding in crop production and animal breeding in livestock farming. There are two recognised native breeds in Estonia – the Estonian horse and the Estonian cattle breed. These breeds have become accustomed to the local flora and climate over the course of hundreds of years and are part of our cultural heritage. Both native and local breeds – the Tori horse, Estonian draft horse, and Estonian quail – have been designated as endangered, as their numbers have decreased significantly.

In order to preserve cultural heritage and genetic diversity, endangered breeds must be supported until their numbers increase and the risk of becoming extinct is diminished. This has been done during the previous period of the RDP and will be continued in 2007–2013.

Estonia also has various endangered varieties, which are valuable from the aspect of genetic and species richness, such as ‘Sangaste’ rye.

The state’s roll in ensuring a good agricultural environment

The agricultural policy under which support was based on the principle “more production, more support” has caused grave environmental problems in the EU-15 countries: increased water pollution, reduced species and populations, etc.

Transfer from unit-based support to single direct payments, where holdings are paid based on the area of the farm and regardless of the type of production or economic activity, is more environment-friendly. This gives producers greater freedom to decide which animals and crops to produce, and the quantity of production is no longer decisive in granting support. Another important principle in the EU’s and hence Estonia’s current agricultural policy is the dependence of support on compliance with environmental and animal welfare requirements and good agricultural and environmental conditions.

The methods of agricultural production applied under axis 2 measures of the Estonian RDP for 2007–2013 also help ensure good environmental status and the preservation of agricultural land use in areas where there is a risk of abandonment of agricultural lands. Forest management and protection is guided by the principles of sustainable forestry.

5.4. Development of villages

Sille Rähn

The survey “Joint social activities common in villages” was commissioned by the Ministry of Agriculture and conducted in 2006. The objective was to study the social environment of villages and the impact of investment support on it. The respondents of the survey were three interest groups: representatives of non-profit organisations, local governments, and rural inhabitants. The survey covered 30 rural municipalities.

The general situation in joint social activities and regional differences in development

The non-profit sector is considerably represented in Estonian rural areas; the number of associations and their role in society are increasing and vary depending on the size and location (distance from cities) of the rural municipality. The number of NPOs and their role in rural municipalities also depend on the attitudes of the local government and on the initiative and skills of the inhabitants (the combined effect of these factors), but do not always depend on whether the rural municipality is rich or poor, close to or remote from a city. The survey showed that 23% of inhabitants are members of an NPO. People are interested in the development of their region – this means that the need to participate and a social capital reserve are entirely present.

NPOs vary a great deal and some of them promote the devel-

opment of their locality. Some NPOs have a large number of members covering a significant part of the community, while others are hobby clubs specialising in narrower areas. There are quite a lot of NPOs whose formal list of members is considerably longer than the list of active participants.

Members of NPOs are relatively old – their average age among respondents was 51 years. The first reason for this is the fact that older people have more time; secondly, there are relatively few young people in rural areas and their modes of communication are less formal – they do not found associations or societies to do something.

Financing of NPOs has gradually increased owing to awareness and the availability of support schemes. There is a great variety of sources of financing. Sponsorship plays a relatively great role, meaning that non-profit activities are eagerly supported. Because of complicated requirements and borrowing needs, EU and other foreign resources have a rather limited role in financing. This is why there are few NPOs who have any borrowing experience. However, it turned out that receiving a loan was easy rather than difficult. The main obstacle is the lack of collateral; collateral by private persons would be required, but would imply disproportionate risk. The scope of EU sources of financing is in fact sharply increasing.

Mutual networks and cooperation between NPOs

There is cooperation between local governments and the third sector – 80% of NPOs have received support and 54% consider themselves included. Local governments consid-

er NPOs to be very active. At the same time, there is still a reserve – the third sector is ready to assume a greater role. As a rule, local governments and NPOs have differing views. Each of them sees a problem in the other’s motivation. 54% of NPOs consider themselves sufficiently involved in local government activities. Local governments believe that NPOs are not interested in involvement.

There is much room for development in the mutual cooperation between NPOs. On the one hand, the number of cooperation partners is relatively small. On the other hand, little cooperation is under way in areas requiring joint liability – joint use of premises, equipment, services, and joint projects. There is also little cooperation when it comes to influencing long-term processes – acting as pressure groups and participating in the drafting of development plans and strategies.

As regards factors hampering cooperation, it is evident that cooperation is not valued sufficiently and it is perceived to take too much money and time. NPOs have not acknowledged that cooperation is the prerequisite for access to greater resources in the longer term and for saving time by optimised distribution of work. However, it is admitted that there is need for cooperation. There is thus a clear contradiction in attitudes – cooperation is necessary, but inconvenient.

Role of village development plans

Village development plans are appreciated – they are considered to be important and not only for involving external

resources. Representatives of local governments appreciate the development plans most. There are no local governments where each village has a development plan. Neither can it be expected, considering the great number of villages. However, there is considerable reserve for village development planning in those villages where the population is sufficient. Local government representatives believe that the existence of development plans depends on the initiative of the inhabitants. This has no relation to the economic status of the local government, as both passive and active rural municipalities have their leaders, fallers, risers, and losers when it comes to the village movement.

Awareness of rural inhabitants of RDP measure 3.5 “Restoration and development of villages and its correspondence to the needs of rural inhabitants”

The measure for restoration and development of villages is well-known. 29.3% of NPOs have received support from other Structural Funds (other than 3.5 of the RDP). 29% of respondents plan to apply for support from Structural Funds measures in the near future. Local governments are better informed and up-to-date on the measure. In summary, it may be said that people are satisfied with the village restoration and development measure and expect support for village community activities to continue in the future.

Support to rural areas via the measure for restoration and development of villages

Only 20% of Estonia’s population live in its 4433 villages. Tallinn is the most attractive place for residents, with 30% of the entire population. In a situation where the population is small and enterprise, as a rule, little rewarding, the strength of the local community is important. Rural inhabitants have organised — about one-fourth of the 4000 Estonian villages have elected village elders to coordinate local activities; about 700 associations are involved in village development.

Support for investments for restoration and development of villages was still very popular among applicants. 289 applications were received in the application round that ended at the beginning of 2006. Support was divided between three submeasures: 92% for buildings (community or cultural centre or sports facility), 5% for furnishing the buildings, and 3% for information points (construction, reconstruction, and furnishing). MEEK 44.1 were paid out for 149 projects in 2006. MEEK 69.4 have been paid out over the two years of implementation of the measure, i.e. 69% of the budget.

It is important for improving the social infrastructure of villages that the restoration of buildings and facilities intended for joint activities of the village community, which was initiated under previous programmes, continues. This will improve the people’s cooperation possibilities and help organise joint events, enable access to information, and improve the appearance and overall quality of the physical and social environment of villages.

In 2007–2013 investments contributing to the preservation, restoration, and improvement of the quality of the physical and social environment of villages, i.e. the historically established places of joint activities, will be supported via axis 3 of the RDP. Cultural heritage and its appreciation are an important priority. Many cultural phenomena that have been lost elsewhere in Europe – ancient fields, historic villages and building traditions – are still there on the Estonian cultural landscape; many handicraft skills are still viable. Appreciation for cultural heritage improves the attractiveness of the physical and social environment and encourages the community to make a contribution. It is important to preserve cultural objects by respecting their historical appearance.

LEADER

All the specific features and needs of local life cannot be assessed or solved from the state level or following a single model. In certain cases, it is better to solve local problems via local initiative by promoting cooperation between various sectors to that end. This ensures that the needs of the region are served and local potential is used. Measures relating to rural life in the broader context therefore need to be supported.

This is why the LEADER initiative programme has been implemented in the EU. The LEADER approach is characterised by regionally based local development strategies, local public and private sector partnerships, a bottom-up approach where action groups have decision-making powers in the preparation and implementation of local development strat-

egies, planning and implementation of strategies based on interaction between various sectors and projects of the local economy, implementation of cooperation projects, and creation of local partnership networks.

The LEADER was applied in Estonia via measure 3.6 of the NDP (“Development of local initiative – a LEADER type measure”). The measure is applied to two areas of activity: acquisition of skills and integrated rural development strategy. Local development strategies are prepared under the first area and implemented under the second.

24 local action groups applied for support under the LEADER measure. Out of 194 local government units, 181 have local action groups, which now cover nearly 93% of rural areas.

A survey entitled “Development of local initiative – LEADER-type measure” was commissioned by the Ministry of Agriculture and conducted. The goal of the survey was to identify the internal development potential of rural municipalities for implementing local initiative based LEADER-type activities. The survey gave an overview of cooperation, trust, and readiness to become applicants under measure 3.6. The survey also reveals that local governments, the non-profit sector and undertakings have started to trust each other in rural areas. The survey showed that 75.6% of NPOs, 77.5% of local governments, 62.7% of undertakings and 51.7% of inhabitants are ready to participate in the implementation of the regional strategy. Awareness of LEADER is quite high – 59.3% of NPOs and 56.4% of local government representatives are

informed. Thus, it may be expected that all parties will be involved in deciding on local development as community cooperation is strengthened.

Seminars and information days have been held for a more seamless application of LEADER principles. The LEADER information centre operates as a support structure for potential local action groups.

5.5 Private forestry

Monika Lublo

Forest inventory continued in 2006. State forest inventories have been performed in the traditional ten-year cycle since 1992, but in private forests inventories have been made only upon their entry into the land cadastre and insofar as allowed by the state’s financial resources. Private forest inventories have been made to the greatest extent in the counties of Viljandi and Pärnu. One of the reasons for this is that there are better forests in these areas. The least inventories have been made in Saare County and Hiiu County. Forest inventories are necessary to give the state an overview of the country’s forest stock, but also for private owners’ management activities in their own forests (particularly cutting). To improve the situation and promote forest inventories, the Forest Act of 2006 provides that in addition to the state’s forest planning within the framework of public procurement, private forest owners can order a forest inventory and prepare a forest management plan with the help of national support.

The land market was active until 2004 and the number of transactions with forest land was increasing. Land transactions have decreased 10% in the past two years. The average market price of forest property has been EEK 16 000–18 000 per ha.

Regeneration cutting continues to prevail among types of cutting (about 70%). Other types of cutting represent less than 30% each (improvement cutting 27%). Compared to the mid-1990s, the prescribed cut of private forests has

increased more than five times, while the scope of cleaning has increased the most (12 times). The most forest was cut in Pärnu County, Viljandi County, Rapla County, and Ida-Viru County. The least forest has been cut in Hiiu County, Saare County, and Lääne County.

No great changes have occurred in the scope of regeneration activities over the past few years. Planting of forests (82%) and establishment of forest plantations on clear cut areas (95%) continue to be the main methods of regeneration. Regeneration has re-accounted as young growths on 9313 ha.

Support for private forest owners

Support was available for private forest owners in 2006 from both national and EU funds. EU support was available under the RDP 2004–2006 and the NDP 2004–2006. The RDP supported the afforestation of arable land, i.e. land which had not been used for agriculture for up to five years. Support under measure 3.7 “Forest management” became available under the NDP. From national funds, support was granted for private forestry from the state budget and via the Environmental Investments Centre.

Support under the RDP measure “Afforestation of arable land” was available for the second year. Under this scheme, both natural and legal persons could apply for support for the establishment, maintenance and supplementation of forest plantations. Each applicant could apply for support for a total of 30 ha of agricultural land owned by the applicant throughout the programme.

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Applications for the establishment of forest plantations covered 1801 ha in 2006. Support was granted for 1563 ha in a total amount of MEEK 19.67. Applications for support for maintenance of forest plantations covered 947 ha and supplementation applications (concerning forests established in 2005) covered 69 ha. MEEK 1.04 was granted for maintenance and EEK 83 956 for supplementation.

Under the NDP, support became available for five activities of the forest management measure: restoration of forest damaged by natural disasters and fires, maintenance of young growths, acquisition of forestry machines and plant protection products, establishment of forest associations and implementation of development projects. There were two application rounds in 2006. A total of 613 applications for MEEK 26 were received for making investments amounting to MEEK 37.6. The largest number of applications was

received from Viljandi County (128 projects), followed by Jõgeva County (63) and Võru County (61). In the first round, 255 projects were approved (support amount MEEK 10.6). As approval of the second round applications is still continuing, no final data is available.

The most popular activity under the measure was the acquisition of forestry machines and plant protection products – 39% of the total amount of support. Maintenance of young growths received 23% (1005.7 ha in the first round) and restoration of damaged forests received 22% (200.2 ha in the first round) of the total amount of support.

Among national budgetary funds, the main emphasis was on types of support that directly contributed to improving the economic value of forests and supported the development of joint activities in private forestry.

Table 4. Consolidated data on supported activities, 2006

Supported activity	Scope	Financing, EEK
Preparation of soil and assisted forest regeneration	463.80 ha	494 212.00
Regeneration of clear cut areas	597.02 ha	2 339 504.42
Maintenance of young forest	661.89 ha	1 214 047.50
Afforestation of arable land	46.76 ha	408 440.80
Forest improvement	29 projects	1 709 098.01
Prevention of and compensation for damage	6 projects	244 429.70

Growing forestry plants	20 nurseries	396 847.10
Support for accounting services	17 associations	91 314.00
Neighbourhood Watch for private forests	5 projects	134 035.60
Forest management cooperation projects	29 projects	1 004 356.80
Establishment of and support for school forests	4 projects	96 000.00
Preparation of forest management plans	14520.88 ha	1 912 702.90
Regional support persons	21 support persons	1 380 000.00
Individual advising of private forest owners	1498.5 hours	446 100.00
Group advising of private forest owners	59 päeva /1653 persons	360 445.67
Training courses for private forest owners	6 koolitust /122 persons	226 528.49
Training for advisers	3 trainings	72 040.00
Demonstration areas, study trails	2 projects	32 980.00

Source: Private Forest Centre

Preparations for the new financing period 2007–2013 began in 2006 in order to receive support not only for forest management activities, but also for forest lands in the Natura 2000 areas and for the establishment of protection forests.

5.6. Land improvement

Mati Tõnismäe

The area of the Republic of Estonia is 4 522 700 ha, of which 3 704 265 ha (81.9%) had been entered in the cadastral register by 31 December 2006. Of the registered land, 1 200 680 ha is agricultural land (arable land and natural grassland), 1 909 429 ha is woodland, 64 642 ha is under water, and 529 514 ha is other land.

Land improvement is understood as work toward improving the cultivation value of land by drainage, irrigation, bilateral regulation of the soil's water regime, liming of acid soils, and management of land improvement systems.

More than 727 000 ha or slightly over one half of Estonian agricultural land is drained (including 646 000 ha by subsurface drainage); about 600 000 ha of woodlands have drainage networks. Drainage systems include polders on 7600 ha; there are 21 polder pumping stations. The length of subsurface drainage networks (mostly clay pipes) on agricultural land is 320 000 km and there are 45 000 km of artificial recipients and ditches. There is more than 1360 ha of sprinkler irrigated land and 17 sprinkler irrigation pumping stations.

There are 2.20 million ha of woodlands in Estonia, of which 1.06 million ha is state-owned forest and 1.14 million ha is private forest. Of all forest lands, 1.06 million ha are excessively wet. 92% of excessively wet state woodlands and only 20% of excessively wet private woodlands have been drained.

Two-thirds of the functioning land improvement systems on agricultural land were established earlier than the 1980s. The results of a land improvement survey conducted in 2005 showed that about two-thirds of drained agricultural lands are in use; nearly 11% of them are in a good state of drainage, about 63% are in a satisfactory state and 26% are in a poor state of drainage. More than one half of the artificial recipients are in need of repairs. As the useful life of land improvement systems is considered to be 25–30 years, there is now an urgent need for reconstruction so as to prevent the complete deterioration of the systems. If no land improvement is carried out, well-drained agricultural land may disappear after ten years and all drained agricultural land may become useless after 20–30 years. This would aggravate rural unemployment and pose a burden on the social sphere.

Since most land improvement systems have been established by large-scale farms, they are now spread across the lands of many owners, which makes it difficult to organise land improvement activities. The renovation and maintenance works of shared land improvement systems should be carried out jointly; non-profit land improvement associations have been established for this purpose. As of 31 December 2006, 166 land improvement associations had been founded (31 of them founded in 2006), of which 82 have updated their articles of association to comply with or were originally established in compliance with the Land Improvement Act. These associations with their 3715 members (including 315 legal persons) continue to act as land improvement associations on the basis of the Land Improvement Act. Seven

regional federations of land improvement and water associations and the Estonian Confederation of Land Improvement and Water Associations have been founded.

The working area of the aforementioned 82 associations is 70 000 ha of drained land. In 2006, the land improvement associations cleaned sludge from 74 km of ditches (78 km in 2005), cut grass on 449 km of ditch sides (292 km in 2005), repaired 174 culverts (243 in 2005), and repaired damage caused by beavers in 148 places (116 in 2005). In addition to that, 708 drainage wells (598 in 2005) and 1797 drainage mouths (1819 in 2005) were repaired and cleaned, and more than 40 km of roads were repaired.

As a result of land restitution or privatisation in the course of ownership and land reform, the land improvement systems or their parts belong to the person who owns the land. According to the Land Improvement Act, the state hands over the documents of the land improvement systems to the land owners via the regional land improvement bureaux. 46.4% of the area covered by land improvement systems had been handed over by the end of 2006.

The maintenance of artificial recipients (27 000 km), which is vital to the functioning of land improvement systems, is in most cases practically and technically impossible for single land owners. The state maintains 5600 km of artificial recipients, but they have been maintained only at the technically satisfactory level because of insufficient funding. Renovation and maintenance works for MEEK 8.2 were carried

out on these artificial recipients in 2006 (MEEK 8.6 in 2005), including renovation on 79 km (89 km in 2005) and maintenance on 349 km (344 km in 2005).

Support for maintenance of land improvement systems

The payment of maintenance support for land improvement systems continued in 2006. This support is available to agricultural producers who are in possession of land improvement systems established on profit yielding land or residential land used for agricultural purposes. The applicant must be a self-employed person, company (or association of these), or a state or local government agency whose business entity engages in agricultural production, or a non-profit association whose statutory activity is land improvement.

Support was paid for the following maintenance works: cutting grass on water conduits, cutting woody plants on water conduits, removing obstacles from water conduits, removing sludge from water conduits, cleaning of drainage mouths, repairs of drainage mouths, cleaning sludge from culvers, cleaning sludge from drainage wells, repairs of drainage wells, polder maintenance, and the removal of beaver dams.

Table 5. Applications for and payment of support for maintenance of land improvement systems, 2006

County	Number of applications		Amount of support	
	Submitted	Paid	Submitted	Paid
Harjumaa	18	13	359839.56	152677.10
Hiiumaa	14	13	146750.82	135367.92
Ida-Virumaa	6	4	225254.32	112115.28
Järvamaa	30	25	716408.68	549189.73
Jõgevamaa	50	35	1044785.27	469859.34
Lääne-Virumaa	28	22	357191.94	279674.96
Läänemaa	23	17	347494.91	257765.63
Pärnumaa	111	88	1152233.37	842481.47
Põlvamaa	67	51	684237.29	513614.21
Raplamaa	32	29	659868.25	467580.45
Saaremaa	41	32	377765.80	241988.54
Tartumaa	84	59	2502359.20	1591259.87
Valgamaa	19	18	204137.21	198771.51
Viljandimaa	44	35	842298.77	538673.66
Võrumaa	134	121	1067687.65	898338.43
Total	701	562	10688313.04	7249358.10

Source: Agricultural Registers and Information Board

Support for maintenance of land improvement systems will no longer be paid, as it is not eligible.

Integrated land improvement (measure 3.4)

In order to reduce the threats arising from an unfavourable water regime to agricultural production, improve the productivity of forests, create conditions for the purposeful use of lands, ensure the good status of bodies of surface water covered by land improvement systems, and improve access to agricultural lands, MEEK 135 has been allocated as EU agricultural state aid under measure 3.4, “Integrated land improvement”, of the Estonian National Development Programme. The payments were made on the basis of the Estonian NDP 2004–2006.

Measure 3.4 covers land improvement systems shared by several land owners. Investment support was available for land improvement associations and undertakings. The rate of support was up to 90% of the eligible cost of the investment in the case of land improvement associations and up to 75% in the case of undertakings.

In 2005 and 2006, 109 applications for MEEK 193.7 were received under measure 3.4. ARIB assigned MEEK 134.9 for investment support. The maximum amount of support allowed for all the activities of one applicant was MEEK 7 in a calendar year and MEEK 12 under the entire measure.

Support was available for the erection of buildings or facilities that formed a part of a land improvement system or the establishment of a road serving the land improvement system or for the reconstruction or renewal of these on the conditions and pursuant to the procedure provided in the

Land Improvement Act. The construction or reconstruction of private roads was also supported if this was necessary for access to agricultural land. Support for these activities will continue in 2007–2013.

Liming support

State aid for the liming of agricultural land is available for those applicants who use agricultural lands with soil acidity (pH) of up to 6.0 and who have not received liming support for fertilising this land parcel with soil amendment during the previous four years. EEK 14 059 067.13 of liming support was paid out under 298 approvals in 2006.

No liming support will be paid in 2007.

Table 6. Applications for and payment of support for liming of agricultural land, 2006

County	Number of applications		Amount of support, EEK	
	Submitted	Paid	Applied for	Paid
Harjumaa	11	10	500350.02	316799.96
Hiiumaa	1	0	139973.40	0.00
Ida-Virumaa	6	6	372855.49	274427.59
Järvamaa	29	28	2571753.40	1400654.25
Jõgevamaa	33	29	2471548.60	1279786.08
Lääne-Virumaa	27	27	1780870.73	1269755.73
Läänemaa	2	2	66082.20	65973.33
Pärnumaa	22	22	2152087.85	1191129.86
Põlvamaa	49	47	6078653.52	2353754.64
Raplamaa	10	10	897602.56	519931.38
Saaremaa	3	3	186975.75	123963.45
Tartumaa	42	36	3355695.29	1629294.66
Valgamaa	18	18	1189776.12	853449.60
Viljandimaa	33	33	2950607.40	1781977.80
Võrumaa	28	27	1201084.20	998168.80
Total	314	298	25915916.53	14059067.13

Source: Agricultural Registers and Information Board

5.8 Organic Farming

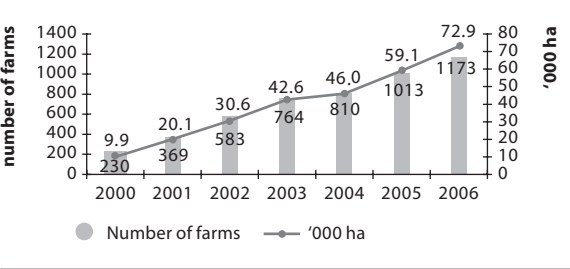
Eve Ader

Although organised ecological farming began in Estonia in 1989, at the initiative of the Biodynamic Association, the term ‘organic farming’ was defined in Estonia’s first Organic Farming Act, which entered into force in 1997. The scope of organic farming and the minimal requirements are laid down in Regulation (EEC) No 2092/91 on organic production of agricultural products and indications referring thereto on agricultural products and foodstuffs, which is directly applicable to the Member States. Requirements not established by EU regulations are laid down in the Organic Farming Act. The Organic Farming Act has been amended many times. The version which entered into force on 1 January 2007, and the implementing legislation, was drafted in 2006.

Organic production

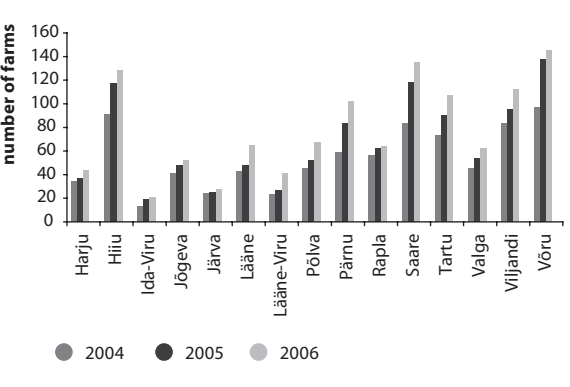
More than 8% of all agricultural land in use in 2006 was organically cultivated. Both the number of organic producers and the area of organic farming land have increased relatively rapidly (Figure 6).

Figure 6. Development of organic production from 2000–2006



As in the previous year, the number of organic farms was the largest in the counties of Võru, Saare, and Hiiu, in 2006 (Figure 7).

Figure 7. Number of organic farms in 2004–2006 by county



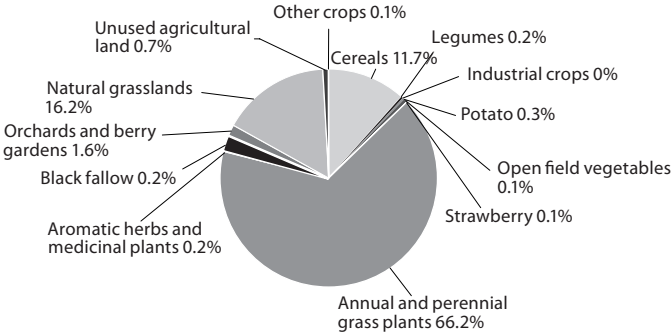
Crop farming

While at the end of 2005, the register of organic farming included 1013 producers and 59 066 ha of organic farming land (plus 119 ha of non-cultivated areas where plant products were gathered, and 675 ha of non-agricultural land where animals were grazed), then on 31 December 2006 the register contained 1173 producers (16% more than in the previous year), 72 887 ha of organic farming land (a 23% increase compared to the previous year), plus 883 ha of non-agricultural land for grazing, and 221 ha of non-cultivated areas where plant products were gathered.

In 2006, there was a total of 44 879 ha of agricultural land (62% of all organic farming land) in Estonia which had passed the period of transition to organic farming; 15 506 ha (21%) of such land is in the first year of transition, and 12 502 ha (17%) is in the second or third year of transition. In the agricultural land use of organic farmers, natural grasslands (16%) and perennial grass plants (66%) make up the largest share – a total of 82% (the same as in 2005), see Figure 8. Cereals were grown on 8 520 ha (11.7% of organic farming land), mostly oats (3396 ha) and barley (2277 ha). The growing areas of other cereals were less than a thousand hectares: summer wheat 883 ha, winter wheat 448 ha, rye 652 ha. Potatoes were grown on 241 ha (0.3%), which is a slightly lower than in the previous year. Strawberry growing decreased – its growing area was 37 ha in 2006 (44 ha in 2005). Orchards and berry gardens made up 1146 ha (1.6% of land use), including 150

ha of apple trees and 523 ha of sea buckthorn. The growing area of sea buckthorn increased 52% compared to the previous year. Aromatic herbs and medicinal plants were grown on 151 ha or 84% more than last year. Black currant was grown on 90 ha, but only on 7 ha of land which had passed the transitional phase. There were 497 ha of unused agricultural land (0.7%). A survey conducted in 2006 showed that about 2000 t of potato, 190 t of vegetables, 600 t of fruits (mainly apples), and 55 t of strawberries were organically produced. 17 undertakings gathered herbs from a total of 221 ha of non-cultivated areas in 2006. More than 80 species have been entered in the list of herbs gathered.

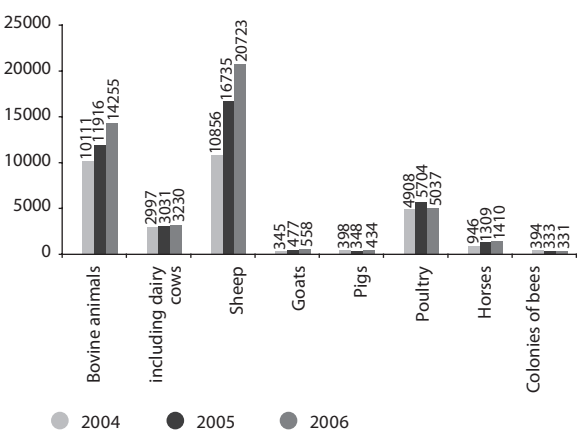
Figure 8. Use of organic farming land in 2006



Livestock farming

The agri-environmental support granted to producers has brought about an extension of organic livestock farming (Figure 9). The number of holdings engaged in organic livestock farming accounted for 62% of all holdings in the register of organic farming, as of 2006. Only the produce of animals that have passed the transitional period may be sold with reference to organic farming. The length of the transitional period depends on the animal species. At the end of December 2006, there were 14 255 bovine animals (20% more than in 2005), including 3230 dairy cows (6% more than in 2005) that were organically kept. The number of organically kept bovine animals and cows was 5.8% and 3.0%, respectively, of the number of bovine animals and cows kept non-organically. The number of sheep and goats kept organically increased 24% compared to 2005, accounting for 35% of the number of sheep and goats kept non-organically. The number of organically kept poultry has decreased; apiculture has remained on the same level as in previous years.

Figure 9. Organic livestock farming in 2004–2006



Organic processing

Organic processing has developed in Estonia very modestly. Under Estonian conditions, it is mainly micro- and small enterprises that process organic food, as the quantities of produce are small and organic farmers are located unevenly across regions. In 2005, the register of organic farming included ten enterprises with the following areas of activity: OÜ Ökosahver (packaging of fruits and vegetables), AS Saaremaa Liha- ja Piimatööstus (slaughter of pigs, bovine animals and sheep, meat cutting, preparation of chilled and frozen meat products), OÜ Maarjaõli (cold-pressing of oil seeds), AS Pere Leib Tootmine Pärnu Department (production and export of kama meal), AS Viljaveski (production of cereal products and processing of legumes), OÜ Sildest (packaging

and storage of nuts, dried fruit and seeds), FIE Mait Rõõmusaar Raismiku Farm (production of cereal products), FIE Arvo Veidenberg Pajumäe Farm (production of curd and yoghurt), AS Saidafarm (production of curd, yoghurt and cheese), AS Pärnu Laht (freezing of berries, packaging of frozen berries). OÜ Mahetalu (processing, packaging and storage of vegetables), OÜ Elujõud (drying of herbs, preparation and packaging of tea mixtures), OÜ Vändra Leib (preparation of bakers' or pastry-cooks' wares such as black and white bread, buns, and powdered prepared products, i.e. dry mixtures) and MTÜ Saare Mahe (production of apple juice) were recognised as complying with the requirements for organic farming in 2006.

The register of organic farming contained a total of 14 organic processing undertakings as of 31 December 2006.

According to the Veterinary and Food Board, undertakings engaged in organic processing produced 6.9 t of processed (packaged) fruits and vegetables, 2.5 t of processed cereal products (wheat, rye, spelt, barley), 8.2 t of kama meal, and 3.9 t of processed dairy produces in 2005. The VFB's preliminary data for 2006 is as follows: 5.3 t of ordinary bakers' wares, 6.0 t of kama meal, 18.5 t of frozen berries, 23 kg of frozen fruits, 500 kg of juice, 11.1 t of cereal products, 1.9 t of dried medicinal plants, 1.8 t of herbal teas, 18 475 l and 25.8 t of dairy products, 0.5 t of meat (beef and sheep carcass meat combined), 0.2 t of minced meat, 0.1 t of unboned and boneless fresh beef.

State supervision

State supervision over organic farming has been conducted since 2001 by the Plant Production Inspectorate, Veterinary and Food Board, Health Protection Inspectorate, and Consumer Protection Board, within the limits of their respective competences. Inspectors of the Plant Production Inspectorate prepared 2128 inspection reports in 2006 (1943 in 2005). 48 injunctions were made (6 in 2005). 15 control samples were taken to determine the content of pesticide residues (12 in 2005) and one violation was detected. Out of the 13 control samples of feedingstuffs, five contained GMOs (6 out of 10 in 2005). More than 800 consents were given in response to producers' applications for applying the exceptions allowed by production requirements. Five misdemeanour proceedings were instituted concerning violations (three in 2005). Inspectors of the Veterinary and Food Board prepared 26 inspection reports in 2006 (17 in 2005).

Undertakings whose holdings have been recognised in accordance with the Organic Farming Act are entered in the national register of organic farming, the chief processor of which is the Ministry of Agriculture and the authorised processor of which is the Plant Production Inspectorate. The register data is published on the website of the Plant Production Inspectorate, www.plant.agri.ee.

Marketing

Estonian consumers were offered about 150 different local organic products in 2006, but the quantities produced and sold are very small for most of these products and their availability to consumers is relatively poor. Estonian organic producers mostly sell their organic products to local customers or to large industries as ordinary raw material. A few domestic organic products (mainly dairy products, vegetables, apples, potatoes, honey, aromatic herbs, kama, flakes and flour) also reach the consumer via retail outlets, including markets and direct marketing, but even this is limited to a few areas and sales points in Estonia. Positive developments have occurred in the marketing of organic products in recent years. The marketing of organic products is organised by OÜ Ökosahver (retail and wholesale trade), TÜ Eesti Mahe (sale to retail outlets, in markets, fairs, sale of raw material to processors), and OÜ Austan Loodust (own shops). In addition to Tallinn, local organic food can be bought in eco-shops in Tartu, Kuressaare, Kärdla, and Viljandi. Some local organic products are sold at the Tallinn Department Store, Stockmann, and the Selver supermarket chain. No organic products have been exported.

Cooperation

Cooperation between organic farmers has somewhat improved. Various associations and societies have been founded to unite organic farmers; currently active are the Estonian Organic Farming Foundation, MTÜ Ökoloogiliste

Tehnoloogiate Keskus (NPO Ecologic Technologies Centre), Viljandimaa EBÜ Seltsing (Viljandi County organic farmers' partnership), TÜ Eesti Mahe (Estonian organic farmers' commercial association), MTÜ Läänemaa Mahetootjate Selts (NPO Läänemaa Organic Farmers' Association), MTÜ Saare Mahe (NPO of organic farmers in Saare County) and MTÜ Hiiumahe (NPO of organic farmers in Hiiu County). In order to enhance cooperation and represent the interests of the organic farming sector vis-à-vis with state agencies and the public, eight organic farming organisations united to form the Organic Farming Body of Cooperation in 2006.

6. AGRICULTURAL EDUCATION, RESEARCH, ADVISING, AND MUSEUMS

6.1. Agricultural education

Liina Kaljula, Külli Kaare

Agricultural vocational education

A total of 11 935 students were admitted to vocational education in the academic year 2005/2006, including 6952 to studies following basic education (SFBE) and 4983 to studies following secondary education (SFSE). This is 12% less than in the academic year 2004/2005 (13 617). Agricultural vocational education is characterised by the Tables below.

Table 1. *Agricultural vocational schools, study programmes, and numbers of students*

	Educational institution	Study programmes	Level	Students
1.	Maritime School of the Estonian Maritime Academy	Navigation	SFSE	84
		Navigation of Inland Vessels	SFSE	25
		Shipping Trade and Fishing	SFBE	215
		Marine Engineering	SFSE	61
				385
2.	Kuressaare Vocational School	Farm Economics	SFBE	10
		Rural Enterprise	SFSE	29
				39
3.	Luua Forestry School	Landscape Engineering	SFSE	109
		Forwarder Operator	SFSE	10
		Harvester Operator	SFSE	22
		Harvester Operator	SFBE	7

6. AGRICULTURAL EDUCATION, RESEARCH, ADVISING, AND MUSEUMS

		Forest Management	SFBE	93
		Landscape Gardening	SFBE	28
		Forest Management (Arborist)	SFBE	8
		Forest Management (forest Worker)	SFBE	9
		Forest Technician	SFSE	37
		Timber Trade	SFSE	17
		Timber Trade (Saw Conveyor Operator)	SFBE	12
				352
4.	Olustvere School of Service and Rural Economics	Rural Economics	SFSE	32
		Nature Management	SFBE	63
		Agriculture	SFBE	79
		Agriculture (Livestock Farmer)	SFBE	10
				184
5.	Põltsamaa Farming and Household School	Farm Economics	SFBE	10
		Agriculture	SFBE	56
				66
6.	Pärnu County Vocational Education Centre	Forest Management	SFBE	53
				53
7.	Rummu Special Vocational School	Gardening (simplified study programme)		26
				26

6. AGRICULTURAL EDUCATION, RESEARCH, ADVISING, AND MUSEUMS

8.	Räpina Gardening College	Landscape Engineering	SFSE	321
		Garden and Nature Management	SFBE	12
		Horticulture	SFBE	100
		Horticulture	SFBE	31
		Landscape Gardening	SFBE	64
				528
9.	Suuremõisa Technical School	Landscape Gardening	SFBE	10
		Fisher-Boatmaster	SFBE	20
				30
10.	Türi School of Technology and Rural Economy	Horse Breeding	SFSE	22
		Agriculture	SFBE	191
				213
11.	Vana-Antsla Vocational Secondary School	Farm Economics	SFBE	4
		Farm and Home Economics	SFBE	67
		Farm and Home Economics	SFSE	20
		Agriculture	SFBE	12
				103
		Total		1979

Source: Estonian Education Information System as of 10.11.2006

6. AGRICULTURAL EDUCATION, RESEARCH, ADVISING, AND MUSEUMS

Table 2. Numbers of students broken down by agricultural specialisation

Horticulture	701
Fisheries	405
Forestry	268
Agriculture, forestry and fisheries	206
Crop and livestock farming	399

Source: Estonian Education Information System as of 10.11.2006

Compared to the year 2005, the basic funding of vocational schools per student has been increased 6% from EEK 14 577 to 15 489. The coefficient of funding for students in agricultural specialisations has been increased from 1.5 to 2.0.

Attitudes toward vocational education, including agricultural education, have gradually become more positive and flexible year by year. Beginning with the 2006/2007 academic year, the Vocational Educational Institutions Act allows schools to provide vocational education for students without basic education. This form of study is based on programmes corresponding to the vocational education standard and the national curriculum for the profession or specialisation, where the level of education obtained is not a prerequisite for admission and the nominal duration of the programme is up to two and a half years.

Another new type of education is vocational education for persons without basic education who have passed the minimum school-leaving age.

Table 3. Numbers of students broken down by study programme

Garden and Nature Management	12
Horticulture	157
Forwarder Operator	10
Landscape Gardening	102
Harvester Operator	29
Horse Breeding	22
Fisher-Boatmaster	20
Navigation	84
Marine Engineering	61
Nature Management	63
Rural Enterprise	29
Rural Economics	32
Landscape Engineering	430
Shipping Trade and Fishing	215
Forest Management	154
Forestry	9
Forest Technician	37
Timber Trade	29
Agriculture	348
Navigation of Inland Vessels	25
Farm and Home Economics	87
Farm Economics	24

Source: Estonian Education Information System as of 10.11.2006

The new flexibilities of vocational education and their application in the Estonian vocational education system are based on the fundamental principles of lifelong learning, according to which there should be no dead ends on the path of education and there should always be a possibility to continue studying.

To promote agricultural vocational education, the Ministry of Agriculture has paid a state benefit for field training to agricultural producers who conduct field training in production operations for vocational students and students of the Estonian University of Life Sciences in their enterprise. In 2006 the Rural Development Foundation continued to pay scholarships to agriculture students.

In cooperation with the non-profit association EUROPEA Estonia, the Ministry of Agriculture has initiated an international project titled "Development of Cooperation with Agricultural and Rural Economics Organisations and Schools in European Union Countries," which will be pursued till the year 2010. In its promotion of agricultural education, the Ministry of Agriculture continues to support professional competitions and participation in the Youth Information Fair "Teeviit". Vocational educational institutions are involved in the implementation of the development plan "Estonian Food".

The merger of the Õisu School of Food Technology with the Olustvere School of Service and Rural Economics has made it possible to establish a study facility for teaching food processing – this will become the competence centre for the entire food chain, which will develop in-service training and advice in addition to regular food production teaching.

Higher education

More than 5000 new students were admitted to the Estonian University of Life Sciences in 2006. The number of students has increased mainly on account of students paying for their tuition, but the number of state-sponsored students has also increased. A total of 2557 applications were received for the 435 state-sponsored places in the University; the average competition was thus 5.8 persons per student place.

Economics and Enterprise, which was previously not sponsored by the state, now has 12 state-sponsored student spaces. More than 1300 new students were admitted to Bachelor's, Master's, and Doctoral studies.

The most popular specialisations were Landscape Protection and Maintenance, Landscape Architecture, Real Estate Planning, and Utilisation and Protection of Natural Resources. Competition was the toughest (22.3 per place) for Economics and Enterprise, the specialisation which regained state-sponsorship. Competition was also higher than average in the specialisations of Forest Management, Rural Engineering, and Forest Industry.

A total of 1460 applications were received for self-sponsored Bachelor's studies, which is several hundred more than in the previous year (1197). Various new specialisations, such as Nature Tourism, proved to be attractive for young people.

As of November 2006, the Estonian University of Life Sciences has a total of 4809 students, including 1691 in state-sponsored places, 822 in self-sponsored places, 1171 in distance learning, 1 in teacher training, 749 in Master's studies, 24 in

self-sponsored Master's studies, 100 in distance learning, and 167 in Doctoral studies. There are 84 foreign students.

In 2006, 55 years had passed from the foundation of the Estonian Agricultural Academy, the predecessor of the Estonian University of Life Sciences. As with all institutions of higher education, the Estonian University of Life Sciences has to help implement the EU economic growth and employment strategy (Lisbon strategy), a central aspect of which is the preparation of highly qualified researchers and engineers. The focus is on educated persons who can create and develop new knowledge and technologies.

The Estonian University of Life Sciences has prepared a development plan till the year 2015. Its leading objective is to help create European common values and preserve culture and science in the native language, to improve the competitiveness of university education and to promote R&D and innovation.

On 26 May the Ministry of Agriculture and the Estonian University of Life Science signed a memorandum of understanding for 2006–2010 in order to promote agricultural higher education and agricultural applied research. The parties are continuing their cooperation to improve the current study programmes and develop new ones. It is planned to develop a field training organisation system and create assessment criteria for field training facilities and supervisors. Attempts are also being made to popularise agricultural higher education among young people and develop a motivation system for agriculture students.

On 16 May, the Estonian University of Life Sciences and the Agricultural Research Centre signed a cooperation agreement. It covers the development of laboratory analysis methods, organisation of field trials, and the extension of field training facilities for the university's students, as well as other areas.

6.2. Agricultural research and development

Külli Kaare

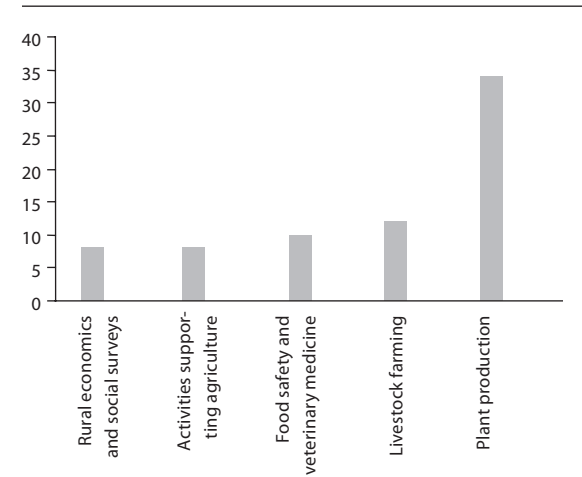
The national programme "Collection and Conservation of Plant Genetic Resources for Food and Agriculture 2002–2006" was declared successfully completed in December 2006. A total of MEEK 11.5 was used for the implementation of the programme over a period of five years. All the criteria for assessment of the efficiency and success of the programme were fulfilled:

- long-term preservation of reserves was ensured in accordance with international standards;
- electronic databases were created containing the main characteristics of all reserves;
- more than 30 articles were published, information on which is available at the website of the Jõgeva Plant Breeding Institute at <http://www.jpbi.ee>;
- international projects were actively participated in and international recognition was gained;
- the genetic resources of Estonian agricultural crops are freely available to plant breeders of other countries.

In 2006, 70 project proposals were submitted to the competition under the national programme "Agricultural Applied Research and Development in 2004–2008", of which 13 projects were financed with a total of EEK 8 070 480.

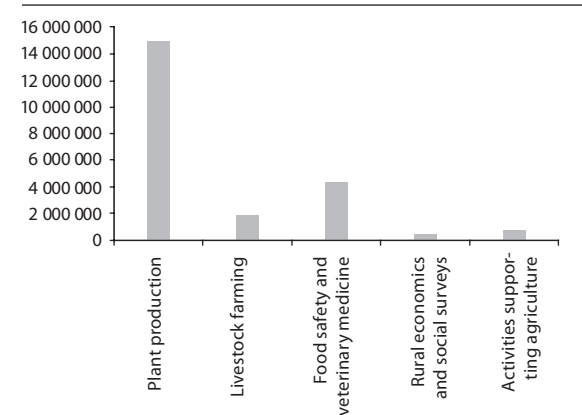
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Figure 1. Project proposals received in 2006



Source: Ministry of Agriculture

Figure 2. Distribution of the national programme funds



Source: Ministry of Agriculture

In addition, the Ministry of Agriculture financed 40 continuing projects totalling MEEK 14 538 476 in 2006.

Collection and conservation of plant genetic resources for food and agriculture must not be discontinued in the future, since the work done for the conservation, description, collection and use of these resources help maintain biodiversity. A draft of the development plan “Collection and Conservation of Plant Genetic Resources for Food and Agriculture 2007–2013” has been prepared.

The draft “Agricultural Research Development Plan 2007–2013” was prepared at the Agricultural Research Council’s initiative, defining the overall objectives of agricultural research and the activities that would ensure long-term stable and targeted development. The Memorandum of Understanding for 2006–2010 between the Estonian University of Life Sciences and the Ministry of Agriculture also contributes to the high quality of agricultural higher education and research.

In 2006, Estonia participated for the first time in the EU Standing Committee on Agricultural Research (SCAR), at which the development of the Member States’ organisation of research is introduced. The objective is to map the structure, organisation, and future plans of agricultural research. Greater coordination and better cooperation between the EU Member States is crucial.

Estonia participated in the European Agricultural Research Initiative (EURAGRI), which is the European platform for the political and executive organisations in the fields of food and agricultural policy and research.

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Jõgeva Plant Breeding Institute

The institute employs 120 people, including 23 research workers whose average age is 46. Nine researchers have a Doctoral level degree, eight have a Master’s level degree, seven are in the Doctoral study and two in the Master’s study program at the Estonian University of Life Sciences.

The institute’s activities are variety breeding of agricultural crops and breeder’s seed production, basic and applied research in crop production, development activities, innovation, and conservation of genetic resources.

The new barley varieties ‘Viire’ and ‘Leeni’, the potato variety ‘Reet’ and the kidney bean variety ‘Lemmik’ were registered. National comparative trials continue with the summer wheat varieties ‘Mooni’ and ‘Trappe’, the winter wheat variety ‘Ebi’ and the oat variety ‘Eugen’. The red clover varieties ‘Ilte’ and ‘Varte’ were included in the Norwegian Variety List. The institute has implemented plant tissue culture methods and market breeding in cereal variety breeding in cooperation with the Gene Technology Institute of the Tallinn University of Technology. Research in the introduction of new field crops, oil hemp and soya bean was commenced.

Maintenance breeding and breeder’s seed production of the 85 field crops on the Estonian Variety List continued. 4613 tonnes of seeds of Jõgeva cereal varieties and 199 tonnes of grass plant seeds were certified in Estonia.

The Institute participated in the national programme “Collection and Conservation of Plant Genetic Resources for

Food and Agriculture 2002–2006” as the Estonian coordinator of the agricultural crops gene bank on *ex situ* preservation. The number of units preserved in the gene bank was increased to 1900.

The information portal on the control of cereal diseases *I-Taimekaitse* was supplemented. A new web-based module for the estimation and control of late potato blight was implemented. The first prototype of the plant protection products information system was created.

Agrometeorological summaries have been very important for deciding on compensation for crop failure.

Seven follow-up projects and one cooperation project were implemented in 2006 under the national programme “Agricultural Applied Research and Development from 2004–2008”.

Estonian Research Institute of Agriculture

The Estonian Research Institute of Agriculture celebrated its 60th anniversary on 16 November 2006. The structure and staff of the institute have been changed and supplemented many times during the institute’s history. With the latest changes in 2006, the Plant Biotechnological Research Centre EVIKA was merged with the institute. The new R&D objective of the institute is to reduce the production costs of agricultural products and to improve the quality and competitiveness of such products on the domestic and foreign markets.

In cooperation with the Agricultural Research Council, the institute continues to develop an optimal structure in order

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to minimise doubling and make more efficient use of financial and human resources. The institute employs 70 people, including 39 researchers: 5 D.Sc. (Agr), 2 D.Sc.(Eng), 9 Ph.D.(Ag), 3 Ph.D.(Eng), 1 Ph.D.(Biol), 1 Ph.D.(Econ), and 9 M.Sc.

The keywords of R&D activities are:

- sustainable agriculture and rural life;
- resource saving technology;
- food, feed, and environmental safety;
- precision farming technology;
- bioenergy;
- production economics.

A research conference was held on the occasion of the institute’s jubilee. “Research Compilation 71” was published, containing articles summarising the R&D activities carried out over the past five years, and the book “EMVI 1946–2006”, which summarises R&D activities from 1946–2006.

Seven follow-up projects, one start-up project and two cooperation projects were implemented in 2006 under the national programme “Agricultural Applied Research and Development from 2004–2008”. The four applied research projects completed in 2006 give producers and others plenty of new knowledge and advice on how to choose farming machines and technologies, including on the introduction of precision farming technology.

Table 4. State financing of the research institutions within the Ministry of Agriculture’s area of government

Source of income	Estonian Research Institute of Agriculture	Jäneda Plant Breeding Institute
Targeted financing	309 000	1 356 000
Base-line funding	731 400	671 300
Estonian Science Foundation grants	831 600	159 600
Applied research	8 357 582	5 469 274
Ministry of Agriculture’s genetic resources project	818 000	430 000
Enterprise Estonia project	367 330	
Environmental Investments Centre project	260 000	

Source: Ministry of Agriculture

6.3. Advisory activities and dissemination of information

Hanna Kreen, Merje Tammsaar

Support in 2006

There were 15 advisory centres in Estonia in 2006 and 55 advisers providing advisory services eligible for support; 11 of these advisers offered ten or more such advisory services. Less than 600 agricultural holdings used advisory service support in 2005 and 2006. Financing of advisory activities under NDP measure 3.8 “Support for advisory and information services” continued in 2006.

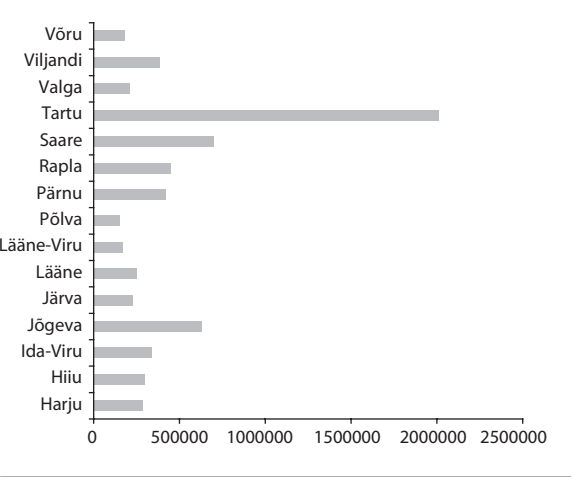
A total of 645 applications were submitted in 2005 and 2006. Individual advice is for companies that can afford the most expensive type of advice. Smaller undertakings are also offered group and mass advice, as well as brief advice (up to two hours) free of charge. As regards information events, approval was granted for applications for organising 469 information days. Forestry advice and group events are mostly offered by forest association advisers; the activities are coordinated and supported by the Private Forest Centre foundation (since 2001); there are 15 active advisers.

A total of 428 applications for advisory support were received in 2006 (217 applications in 2005), of which 262 were granted during the year. Agricultural producers were able to apply for covering up to 75% of the eligible costs of the advisory service, but not more than EEK 12 000 per applicant per

calendar year and not more than EEK 525 per hour of advisory service. The advisory service had to be provided at an approved advisory service by an adviser in the relevant area. Out of the advisory support granted, 41.5% was for plant cultivation advice, 21.9% for financial and economic advice, and 20.2% for livestock farming advice.

MEEK 2.6 were granted for organising nationwide information days in 2006 and MEEK 1.8 for county information days. MEEK 4.1 were paid out for 414 projects.

Figure 3. Approved investments broken down by county, EEK



Source: Agricultural Registers and Information Board

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The objective of the measure, which will end in 2007, is to achieve 3000 supported projects (including 2500 individual advice contracts and 500 information events). Applications will continue to be received in 2007 for individual advice and for nationwide and county information days.

Changes in the advisory system

The Estonian agricultural and rural advisory system must meet the needs of a majority of rural undertakings (especially agricultural undertakings); advisers have to offer the services that undertakings actually need. Estonia needs a single, powerful and professional advisory system capable of acquiring and disseminating state-of-the-art advice as well as basic advice, of training more advisers and serving both large-scale and smaller undertakings.

In October 2006, the Ministry of Agriculture started to reorganise the agricultural advisory system in cooperation with the Estonian Chamber of Agriculture and Commerce. The changes are necessitated by the small number of undertakings receiving advice and the dissatisfaction of those acting within the system with the support services offered.

Approved advisory services offer their clients basic information on national measures and production principles, as well as advice and other services. A coordination centre for advisory activities will be launched in 2007, which will ensure not only compliance of the advisory with requirements, but also the uniform quality of the information offered by the advisory centres and training and in-service training of advisers,

as well as organise and communicate an analysis of producers' needs. Most of these activities will be carried out with the help of and for the benefit of existing advisers and advisory services. Considering the number of agricultural producers, rural undertakings and private forest owners, preparation and training of advisers is crucial in order to meet their needs.

As a result of the changes, a greater number of active advisers will be providing advice to clients; standards will be developed that can be easily adapted to the clients' particular needs; brief advice will be available in a simplified manner, etc. The new procedure will make the formalities of advising simpler and more efficient, while services will be more readily available and flexible. The coordination centre will help supply advisers with the knowledge and tools they need.

According to EU regulations, most undertakings applying for support will have to bring their operations into compliance with good agricultural and environmental practices and mandatory management requirements, e.g. compliance rules by 2009. The agricultural advisory system must be ready to offer quality information on the above rules in the best possible manner.

The compliance of the advisory system's activities with the target group's needs will be inspected and assessed by the Ministry of Agriculture. The system must facilitate an integral approach to offering the advice and information required for promoting an undertaking's business.

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Information and dissemination of information

The most important information directed to the public can be read in the newsletter *Maaelu Heaks*, which was published as a supplement to the newspaper *Postimees* five times in 2006. The main topics concerned the RDP and RDS, as well as bioenergy, bird flue, Estonian food, agricultural policy and environment, and fisheries. A summary issue was published at the end of the year. The Russian publication *Selskii Vestnik* was published with the newspaper *Molodyozh Estonii* on three occasions and it covered roughly the same topics as the Estonian issues.

Information for farmers and representative organisations of rural enterprise was disseminated via the *Euronõu* extra in the newspaper *Maaleht* once in 2006. The content and layout of the extra was updated in the middle of the year and it was re-titled *Maa Elu*. The main topics covered during the year were related to the preparation of the RDS and RDP for 2007–2013, i.e. its goals, principles, measures and options were introduced. Articles were also published on livestock farming and plant production, rural enterprise, the LEADER programme, and the advisory system.

From February to June 2006, a Sunday morning show on the *Vikerraadio* station covered news related to the Ministry of Agriculture for 15 minutes every week. The show usually included two interviews. This time slot was chosen because it has traditionally been a time for agriculture and rural life related shows on *Vikerraadio*.

Since the spring of 2006, the national TV channel ETV broadcast the show *Päris maalased*, which was commissioned by the Ministry of Agriculture and portrayed successful rural people, including young people. Twelve shows were broadcast. The idea of the series was to break the myth that all country people are inept, poor, or alcoholics. The show was vivid proof of the opposite.

6.4. Activities of agricultural museums

Sirje Tamkõrv

The museums within the area of government of the Ministry of Agriculture pursued their goals of perpetuating, interpreting and introducing the history of the agriculture sector, rural life and culture. This was done with consideration for international cooperation and the important role of museums in the preservation and introduction of and appreciation for rural architecture.

The need for cooperation between rural museums is being acknowledged more than ever. The Council of Museums, set up in 2006, is becoming an important link in such cooperation. The results of research by museums have been compiled for the first time in the publication “Proceedings of Agricultural Museums I”.

In cooperation with the Agricultural Museum Promotion Society and OÜ Loodusmeedia and with support from the Ministry of Agriculture, the video libraries of three museums within the area of administration of the Ministry were digitalised from VHS to CD.

Estonian Dairy Museum

The year 2006 was a year of stability and of developing the established traditions and activities for the Estonian Dairy Museum. Joint sales activities with other tourism operators in the region continued for the third year. “Take a break at Imavere” is a trademark which was introduced via printed

materials and activities at public events and fairs in Estonia and the St Martin’s Fair in Finland.

Development of pedagogical programmes and promotion of domestic dairy products continued. The home economics competition “Milkmaid” and the Milk Day promoting domestic dairy products were organised in cooperation with the Estonian Dairy Association and the Ministry of Agriculture. As opposed to previous years, the museum participated actively in public events: the Pärnu Medieval Fair, the Pirita Convent Days, the Mooste Linen Fair, etc. Three exciting temporary exhibitions were displayed during the year. Throughout December, the staff of the museum participated in an action theatre staging Christmas plays with dairy motifs for children’s groups. The series of concerts and plays continued with eight events in 2006. The museum has become a popular venue for seminars and training events.

The Estonian Dairy Museum was the initiator of the publication “Proceedings of Agricultural Museums I”; articles by museum personnel were published in several other publications. Cooperation with researchers in various dairy areas intensified. As a result of collection and archival work, the museum’s collection amounted to 52 397 items. Restoration work has contributed greatly to the industrial exposition.

C. R. Jakobson Farmstead Museum

The museum was open for 357 days in 2006 and visited by 25 765 people, including 19 246 individual visitors and 6519 group visitors.

Outline of the events of the year:

The year began with the series of events titled “Shrovetide on the Farm”. As the ice melted on the river in spring, the farmstead museum celebrated the traditional day of putting the herd out to pasture. Children from the Rocca al Mare School helped with the spring time farm work. About 100 hikers from the *Kalev* Sport Society walked the Sakala or Jakobson trail. C.R. Jakobson’s 165th birthday was celebrated with a scientific conference in May.

The summer was welcomed with the Estonian Female Singers Society singing day “Voices of Beauty for School, Church, Home, Concert, and Party Purposes”. The day was held in the atmosphere of Jakobson’s era; 52 female choirs, a brass band and folk dancers performed. A number of other interesting events were held in the summer: a four-part adventure sport series, the running race “On the Sakala trail”, which has been a tradition since 1978, the play “Mikumärdi” by the Laiuse Amateur Theatre, and the 18th award ceremony for the most popular agricultural and cultural personalities of Pärnu Count at Kurgja. The nationwide Sheep and Goat Day and Farm Day both attracted large numbers of guests. Rocca al Mare School was again eager to do farm work at the museum on Michaelmas. A record number of guests – 14 groups

of a total of 419 people – participated in the “Autumn on the Farm” programme.

President Arnold Rüütel recognised the museum at the “Beautiful Home” competition; the museum’s main building now bears the award. “Christmas on the Farm” was introduced to 45 groups over the course of 21 days. Vello Paats, Senior Researcher of the Estonian Literary Museum published his book “The Unknown Carl Robert Jakobson”.

Estonian Agricultural Museum

The Estonian Agricultural Museum is located at the Ülenurme manor complex; a new tradition of large-scale events titled the Ülenurme Manor Days was initiated in 2006 to popularise the manor. The museum was visited in 2006 by 37 408 people, including 12 600 pupils. At external events: fairs, open-air events and information days the museum attracted 112 073 guests. The museum’s collection was supplemented with 241 items in 2006.

The museum greatly appreciates the work of the museum’s artist Maarika Tang in the layout and designing of the book “Estonian Agriculture in the 20th Century I (Overview of the History of Estonian Agriculture from 1900–1940), which was funded by the Ministry of Agriculture and introduces agricultural history. Most of the photos used in the book are from the Agricultural Museum’s collection.

The museum’s main goals in 2006 were organisational development, development of infrastructure, promotion of muse-

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um pedagogy and exhibition activities. When it comes to organisational development, it is clear that the museum as a whole has to be ready to dedicate itself to changes and new development in order to stay viable and competitive on the Estonian cultural arena and to develop cooperation on the international level. Considering this, the new structure of the museum was approved, documentation was systematised and a new communication procedure was introduced. New job descriptions were prepared for the staff and new statutes were adopted for the departments. Another achievement was the launch of a research council which contributes to the museum's R&D activities and general development, as well as the preparation of the museum's development plan for 2006–2011 which outlines objectives and the ways of achieving them.

Considering the need to ensure appropriate storage and exhibition conditions for the valuable, but easily perishable cultural heritage kept at the museum, a development plan for 2006 was drafted as an annex to the development plan for 2006–2010. Detailed planning of the museum's territory was completed. As a result, an area of land will be allocated to the museum, on which it is planned to construct an exhibition hall for the storage and display of collected items.

As a result of promotion and successful implementation of exhibitions and the museum's pedagogical programmes (bread and milk programmes introducing Estonian food, individual training of hobby blacksmiths and loomers, major events introducing calendar holidays, etc., international

exhibitions, exposition renewal plans, successful participation in fairs and the media, etc.), the museum was highly successful in 2006. The greatest success was the preparation and introduction at fairs, schools and museums of the museum pedagogy programmes "Rye Bread on Our Table" and "Milk is Health", which introduced traditional Estonian food in the framework of the project "Estonian Food". Another great achievement was the conduct of an individual teaching programme in smithery and looming for students in close cooperation with the Tartu Vocational Education Centre.

The museum is especially glad about and appreciates the support received via the international cooperation projects with the Finnish Sarka Agricultural Museum and the Hungarian Institute. In cooperation with the Sóstó village in East Hungary, an exhibition introducing Hungarian food traditions was opened at the Agricultural Museum. An exhibition on Estonian traditional food by the Estonian Agricultural Museum will be opened at the Sóstó museum village in Hungary in September 2007.

It is especially important that the Estonian Agricultural Museum has become visible. The museum's events – pedagogical programmes, scientific conferences, seminars and exhibitions have been appreciated and are attractive for various target groups. This is evidenced by the museum's visitor numbers, which have grown dozens of times compared to previous years.

7. FOOD SAFETY AND VETERINARY ACTIVITIES

7.1. Food Control

Heneli Lamp, Tiina Mällo

With the entry into force of the hygiene package on 1 January 2006, the work organisation principles, infrastructure, and statutory activities of supervisory agencies changed. The domestic hygiene regulations were repealed as from 1 January 2006, as they were no longer relevant. Changes have been and/or are being made in supervision procedures, document forms, their fulfilment and implementation, since they were based on legislation that has been repealed now. The main changes concerned the notification obligation of food businesses not subject to approval, the abolishment of differences in the hygiene requirements applicable to large-scale and small enterprises, the designation of non-accredited laboratories analysing samples taken in the course of official inspection, the conducting of audits in food businesses during the course of inspection, etc.

The group of experts involving relevant supervisory agencies within the framework of the food committee worked intensively throughout the year to identify the needs for legislative drafting in relevant areas.

In connection with Government of the Republic Order No 51 of 9 January 2006 "Setting up a group of experts for reorganising food supervision" and the Government of the Republic Decision of 16 March 2006, the competence to conduct supervision over food safety under the Food Act was vested in the Veterinary and Food Board (VFB). 1 July 2007 has been

set as the date of transfer of supervisory competence. In connection with the transfer of the area under VFBs supervision, the organisation will have a number of new duties and functions which were previously performed by the Plant Production Inspectorate and Consumer Protection Board.

The work of the Estonian food supervision services were assessed last year more than usual by various DG SANCO food and veterinary section missions, which checked administrative capacity in the field of food safety and the compliance of enterprises with various sectoral requirements. Assessment covered the capability of the system for controlling BSE, dioxins and other organochlorine substances in Baltic Sea fish, the official food control system and especially the control system for food hygiene and the safety of certain animal products intended for human consumption. Based on the control actions prescribed in the mission reports, the administration of the VFB central office and local offices has been supplemented and changed.

Besides the DG SANCO food and veterinary missions, inspectors from the Russian Federation Veterinary Service also checked Estonian meat, dairy, and egg enterprises and factory vessels, which were interested in exporting their products to Russia, several times in 2005–2006. As of April 2007, 56 enterprises handling food of animal origin had licenses to export to Russia.

Monitoring of zoonoses and zoonotic agents (viruses, bacteria, fungi, parasites or biological entities) and collection,

analysis, and publication of information about resistance to related medicinal products, continued according to the procedure established on 1 July 2005. Monitoring is organised in cooperation with the Plant Production Inspectorate concerning feedingstuffs, the Health Protection Inspectorate (HPI) concerning the epidemiology of zoonoses spread among humans and concerning food, and also with the Animal Health and Animal Protection Department of the agency.

The annual reports on monitoring have been published on the websites of the Veterinary and Food Board and the European Food Safety Authority (EFSA). Data collected in the course of monitoring of resistance to medicinal products contain information on the representative number of *Salmonella spp*, *Campylobacter jejuni* and *Campylobacter* isolates present in bovine animals, pigs, poultry, and the products originating from them.

A cooperation agreement with the HPI was signed. The objective of the agreement is to regulate horizontal coordination between the VFB and the HPI as well as zoonosis and food safety control throughout the chain in the area of food supervision and supervision over the epidemiology of communicable diseases.

Work continued with the register founded in 2005, in which the monitoring samples and analyses of food and contaminants taken in the course of supervision and monitoring and studied in a laboratory are recorded.

7.2. Animal health and animal protection

Maarja Kristian, Tarmo Serva

Animal health

According to an annual programme, Estonian herds are monitored each year for nearly 40 diseases; the monitoring results confirm that the epidemiological situation of animal populations is good. Estonia has maintained the status of a country free of extremely dangerous infectious animal diseases since 1994. Rabies continues to be the greatest problem among infectious animal diseases, threatening both people and animals, however, the number of cases is decreasing. There were 813 cases of rabies in 2003, 313 in 2004, 266 in 2005 and 114 in 2006.

The VFB has launched programmes to eradicate rabies in Estonia. Oral vaccination of wild animals (using laden baits) began in the autumn of 2005. The vaccinations covered Hiiumaa, Saare, and Lääne counties as well as Vormsi Island, and the counties of Rapla, Harju, Lääne-Viru, Ida-Viru, and parts of Järva, Pärnu and Jõgeva, covering a total territory of 25 540 km². The initial vaccination results were indeed positive: The number of cases of rabies in the vaccinated areas is lower than in non-vaccinated areas and, according to laboratory test results, nearly 74% of the target group animals have eaten the vaccine.

The entire territory of Estonia was vaccinated for the first time, twice a year, in 2006. After the spring vaccination, the

number of cases of rabies decreased considerably, falling from 15–40 to 0–5 animals a month. According to latest laboratory research, the percentage of animals having eaten the vaccine has increased to over 80 and the remaining 50% of animals have the rabies antibody titre at the required level to protect them against rabies.

Full-scale TSE (transmissible spongiform encephalopathy) investigation is still applied to the Estonian ruminant populations. BSE or bovine spongiform encephalopathy is also known as mad cow disease. In 2006, samples from 33 748 bovine animals and 2464 sheep and goats were studied; all results were negative. The Animal Protection Act, Farm Animals Breeding Act and Infectious Animal Disease Control Act Amendment Act, which entered into force on 1 December 2005, provides, among other things, for the obligation of livestock farmers to notify an authorised veterinarian or the local VFB office of the killing for the farmer's own use of a bovine animal older than 24 months and of a sheep or goat older than 18 months at least 24 hours in advance.

As a result of the leucosis control programme that began in 1987, the number of cases of leucosis in bovine animals has substantially decreased over the past decade. The number of bovine animals diagnosed with leucosis has decreased from 33 349 in 1992 to five in 2004.

Leucosis monitoring principles were changed from the beginning of 2005 and brought into conformity with the EU requirements. In connection with this, all bovine animals

older than 24 months were subjected to leucosis testing, which means that meat breed cattle, the number of which has increased in recent years, was also covered by the programme. In previous years, monitoring was mainly focused on dairy herds. The change in the programme resulted in an increase in the number of cases of leucosis. Of the 69 cases detected in 2005, 52 were diagnosed in Valga County on a beef cattle farm. Leucosis was also discovered in undertakings epidemiologically related to that herd and in some other beef and dairy herds. Despite this temporary setback, the objective is to soon achieve the complete eradication of leucosis in Estonian cattle herds. Leucosis was detected in 13 bovine animals in 2006.

The autumn/winter of 2005 and the beginning of 2006 will remain in world and European animal health history as a time of unprecedented spreading of the avian influenza virus' highly pathogenic subtype H5N1 (pathogenicity is the disease producing capacity of a pathogen). The disease, which had plagued the Asian region for years, reached Europe in June 2005. From the autumn of 2005 till the spring of 2006, H5N1 was diagnosed in more countries of the world than ever before. In the European region, the disease was mainly found in wild birds; the highly pathogenic flue was only diagnosed in the EU in few poultry farms in France, Germany, Sweden, and Denmark.

To counterbalance the threat, both the European Commission and the Estonian veterinary service took various measures to reduce the risk of the spread of the disease. The

import of poultry meat and products containing poultry meat, live poultry, untreated feathers and feather parts from the disease outbreak areas was prohibited by decisions of the European Commission. Inspection of animal products brought in by travellers for their own use was intensified on the borders, in cooperation with the Tax and Customs Boards. Poultry farmers were prohibited by a directive of the VFB Director General to handle (feed to poultry) any feed-stuffs originating from endangered areas and any gatherings of poultry (fairs, exhibitions) were banned. In connection with the intensification of the epizootiological situation in Europe, outdoor storage of poultry was prohibited from mid-February, unless the poultry was kept in a fenced area advisably covered from the top. This ban was lifted at the end of May, but it is still recommended to keep the feed and drinking water of poultry indoors or under a covering.

Extraordinary census and mapping of all poultry farmers and poultry regardless of the flock size was carried out in the first months of 2006. At the same time, poultry farmers were informed of the threat of bird flu and of the necessity to take additional precautions. In addition to informing poultry farmers, the entire nation was informed of the need to notify the veterinary supervision system immediately of any poultry suspected of being infected. A brochure introducing bird flu and its preventive and control measures was distributed during the information campaign. To answer questions from the public and disseminate immediate information, the Ministry of Agriculture opened the free information telephone number 1676.

To inform cooperating institutions of the legal bases of action and the principles of cooperation and to forward information about bird flu prevention, diagnosis and control strategies, a number of cooperation meetings were held between the VFB and other institutions involved in infectious animal disease control: the HPI, Ministry of Internal Affairs, Police Board, Rescue Board, county governments and local governments. A two-day bird flu simulation exercise was carried out in February 2006, to practice cooperation between the various institutions, check the timeliness and relevance of existing crisis control plans, and to identify any bottlenecks that may prevent the quick and efficient elimination of outbreaks.

To assess the risks arising from the spring migration of birds, the VFB set up a working group involving ornithologists and other specialists, who jointly carried out and completed in March 2006 an extensive risk analysis titled "Bird flu: potential natural species and areas at risk in Estonia". All the studies conducted have yielded negative results and bird flu has not been detected in Estonia.

Animal protection

During 2006, a total of 9695 enterprises were inspected, 366 violations of animal protection requirements were discovered, and 10 misdemeanour proceedings were instituted. Most of the violations concerned cattle farming. Tethering of calves, which is banned in the EU, was the greatest problem. Other frequent violations were discovered in relation to the keeping and the transport of domestic animals.

Compliance with animal welfare requirements was inspected in the course of regular and sample checks by supervisory officials and by authorised veterinarians. Areas where inspections are performed are animal holding conditions, ante mortem holding and slaughter at slaughterhouses, public display and transport of animals, and compliance with the requirements for rearing, intermediating and using test animals. Once a year, authorised veterinarians check all livestock farms, paying attention to compliance with animal protection requirements among other things. In addition to that, the supervisory officials of veterinary centres carried out regular checks of pigsties, henhouses and calf houses, slaughterhouses and enterprises raising, intermediating and using test animals, as well as sample checks of transport of animals. Supervision is carried out in cooperation with the Police Board, Environmental Inspectorate and volunteer animal protection organisations.

Greater attention was paid to the transport of animals in 2006. Several training courses were held for supervisory specialists in the new transport requirements introduced in the EU.

7.3. Breeding of farm animals and preservation of genetic resources

Kaija Uuskam, Maie Help, Maarja Tuimann

Most of the work in the area of breeding farm animals consisted of checking compliance with the Farm Animals Breeding Act and related acts and EU legislation at recognised breeders' associations, establishments engaged in performance of testing, persons engaged in the preservation of endangered breeds, and owners of animals, as well as supervision of breeding and preservation programmes. The breeding and preservation programmes submitted by breeders' organisations for recognition were adapted to the requirements of the European Community's animal breeding legislation.

Supervisory officials inspect 10% of herds subjected to performance testing (dairy and beef cattle, pigs, sheep and goats, horses) on site. Recognised breeders' associations are inspected every year. Nine breeders' associations have been recognised for breeding activities. Every year, supervisory officials check the correctness of the information submitted in applications for support for breeding farm animals and the compliance of the applicants with the eligibility requirements. The inspection of 2006 revealed that the Estonian Horse Breeders' Association had applied for support in an area of breeding for which the association was not recognised, which is why no support was paid out for keeping an animal breeding register for Trakehner horses.

The correctness of data contained in applications for agri-environmental support for breeding endangered species is also checked. In 2002, a total of 134 animal breeders received agri-environmental support for 549 Estonian horses. In 2003 the relevant figures were 165 and 969, in 2004 – 207 and 803. In 2005, support was paid out for breeding Estonian horses to 238 farmers for 938 horses, and in 2006 the numbers increased further (246 and 1021, respectively). The number of horses has increased more rapidly in recent years, while fewer new horse breeders have emerged.

The above data clearly shows that the first five-year support period has significantly increased the numbers of Estonia horses and their breeders – both have roughly doubled over the five year period. In part this is certainly due to the fact that people have registered their horses in the herd book in order to receive support; in part, the popularity of the Estonian horse has grown and breeders are more willing to keep pure-bred Estonian horses than hybrids of unknown parentage.

For the Tori horse and the Estonian draft horse, applications for agri-environmental support were received last year from 205 and 43 breeders and support was granted for 447 and 110 animals, respectively. The relevant figures for 2005 were 193 and 34, and 452 and 100.

In 2005, agri-environmental support for breeding the Estonian cattle breed was granted to 121 farmers for 606 Estonian breed cattle, and in 2006 to 141 farmers for 656 animals. The preparation of a +/- questionnaire started in 2006

for the harmonisation of supervision over livestock farmers. The questionnaire is an annex to the farm animal breeding report and was introduced in order to harmonise the supervision activities conducted by various chief specialists. The questionnaire was placed into use in February 2007.

Supervision of animal breeding in 2006

Supervisory officials prepared a total of 410 inspection reports and 174 follow-up inspection reports, for a total of 584 reports. Officials issued injunctions to dairy cattle farmers for violating the requirements for conducting control milking. There were also violations dealing with submitting data on the mating, calving, closure, and taking out of the heard of cows. Beef cattle farmers violated the rules of collecting performance testing data -- there were cases where the live weight of young animals was not recorded. Sheep farmers violated the breeding programme requirement, according to which a sheep should be identified and recorded if the farmer wishes to enter the sheep in the herd book. Horse farmers failed to register the transfer of ownership of horses with the association in due course. No major shortcomings were identified in pig farms.

In 2006, the supervisory agency participated in drafting amendments to the Farm Animals Breeding Act to elaborate on the activities regarding the preservation of endangered breeds and the requirements for preservation programmes.

7.4. Market organisation

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Supervision of support for dairy product market measures

According to the European Union Common Agricultural Policy Implementation Act, the VFB supervises aid for disposal and intervention buying-in and inspects the compliance of agricultural products subject to private storage with the requirements for their quality and composition and issues quality certificates upon export to another Member State. In 2006 supervision was exercised over aid for disposal of butter and cream and over intervention buying-in of butter. Seven enterprises approved under the Food Act were inspected in 2006, within the framework of dairy product market measures:

- three enterprises applied for aid for disposal of dairy products; in addition, one producer of final products was inspected;
- five enterprises submitted applications for the intervention buying-in of butter and two butter storage enterprises were also inspected.

A total of 47 inspections were carried out, broken down by the measures as follows:

- aid for disposal of butter 2
- aid for disposal of cream 21
- intervention buying-in of butter 24

A total of 303 samples were taken, of which 1619 analyses were made. Three samples fell short of the requirements.

Supervision of support for meat product market measures

In 2006, two enterprises participating in the market measure imported into Estonia 190.8 t of frozen beef intended for processing, of which 166.2 t was processed into A-products according to formulae approved by the VFB. The VFB took six product samples which were analysed at the Veterinary and Food Laboratory. Based on the analysis results, approval was granted for four formulae, products made according to which met the requirements for A-products as set out in Commission Regulation (EC) No 727/2006. Six initial inspections of enterprises were made to check the disposal of meat – it was verified that the declared quantity of meat arrived at the enterprise; the aim of six disposal inspections was to check whether all the imported meat was processed into the required products within three months after the date of import. The Tax and Customs Board was informed of the inspection results.

Supervision and control of the classification system of beef and pig carcasses

A total of 26 inspections of Estonia's three largest meat industries were made in 2006 to check beef carcass classification results; this included two follow-up visits due to the classifier's exceeding the allowed limit of error. The correct-

ness of classification results was checked in 961 carcasses, of which 856 were classified into the correct fleshing class and 892 into the correct fatness class. The participating slaughterhouses classified a total of 30 857 beef carcasses during the year. An injunction was issued to one enterprise for violation of requirements for carcase dressing.

To check the classification results of pig carcasses, 17 visits were made to four enterprises using the SEUROP system; the measuring results of 260 carcasses were checked, of which 223 were correctly measured. By August, all three industries using the device UltraFom 300 for determining lean meat content had put into use a marking device complying with requirements, which makes it possible to see the exact place of measurement on the surface of the carcase and check its location.

In 2006 the VFB checked the buying-in prices of beef, which are submitted to the Estonian Institute of Economic Research every week, in all slaughterhouses that engage in the SEUROP classification of beef carcasses. Single calculation mistakes were detected (e.g. some cases of using the arithmetic mean instead of the weighted average price at the beginning of 2005; the mistakes were corrected by the second half of the year), but as a rule, the data was accurate. At the end of 2006, eight approved classifiers of beef carcasses and eleven approved classifiers of pig carcasses worked at the slaughterhouses.

Supervision concerning inspection of composition and quality requirements established for agricultural products (butter, spreadable fats and drinking milk) for market organisation purposes and protection of geographical indications and designations of origin

New market regulation functions arising from the European Union Common Agricultural Policy Implementation Act and the EU legislation of direct application: were added to the activities of the Market Regulation Office in 2005:

- supervision of the compliance of spreadable fats (butter-fat, margarines, mixtures of vegetable and animal fats) with the requirements for composition, quality, and designation;
- supervision of the compliance of drinking milk with the requirements for composition, quality, and designation;
- protection of geographical indications, designations of origin, and traditional specialities guaranteed.

Planning of supervision and preparation of supervision procedures began for all these three topics in 2005. Planning covered mapping of the situation in all three areas in order to receive accurate material for the purpose of conducting supervision at an optimal frequency. Inspection of industrial undertakings began within the framework of supervision of the composition and quality of spreadable fats.

Closer cooperation with the Consumer Protection Board was launched in 2005. A number of trilateral meetings between

the Consumer Protection Board, Ministry of Agriculture and the VFB were held in 2006. Discussions concerned the labelling of products, further cooperation and notification, and current issues arising during the course of work. Trilateral exchange of information has improved. Round table meetings have also been held at the Ministry of Agriculture to discuss the compliance of dairy products with the requirements for composition and description. Discussions have mainly covered food labelling issues: labelling of dairy products made with vegetable fats, and the use of the description 'farm butter' as a trademark. The broader objective of the meetings was to create common goals and understanding of the requirements and inspection of food labelling in order to prevent adulteration of food and the misleading of the consumer.

Supervision over the composition and quality of spreadable fats and drinking milk was performed in 2006, in both production and storage undertakings, and the use of the lawful description of products with geographical indications was also supervised. The composition of spreadable fats was inspected in 76 products; the composition of drinking milk was inspected in 34 products, and the lawful use of geographical indicators was checked in 41 cases.

7.5. Trade, import and export

Regina Pihlakas, Tarmo Sikk

2006. In 2006, a total of 4392 lots of goods were inspected on the border, of which 4363 were products of animal origin and 29 were live animals. 172 samples were taken of animal products and 427 analyses were performed. Four lots were turned away from the border and 11 lots were destroyed due to various non-compliances. Ten of the destroyed lots were among the 18 lots of buffalo meat, allegedly of Indian origin, which were brought to the Estonian border as contraband at the end of 2004 (the remaining eight lots were destroyed in 2005).

Six misdemeanour proceedings were conducted in 2006; cautionary fines were imposed in all six cases. The main reasons for instituting misdemeanour proceedings were improper marking of goods upon import and failure to pass veterinary inspection on the EU external border; there were also problems with customs warehouses' compliance with veterinary inspection rules for goods in transit and other obligations imposed on customs warehouses.

The supervision service is also liable for operating the Rapid Alert System for Food and Feed (RASFF) in Estonia. The European Commission, the European Food Safety Authority and the Member States participate in the system. Where a member of the network has information on a serious direct or indirect risk to the health of people arising from food or feed, immediate notice must be sent to the Commission, who will forward the information without delay to the other members

of the network. In 2006, the contact person for RASFF sent 25 alerts to the European Commission concerning non-compliant goods identified in Estonia. Most of the non-compliances were related to an excessive content of food additives in food products. Seven alerts from the Commission were handled concerning products which had Estonia as their destination. These alerts were sent because of substances dangerous to human health contained in materials which came in contact with food; contamination of US long grain rice with illegal GMO rice which had not passed a risk analysis, and the incorrect or insufficient labelling of products.

Cooperation was continued under an agreement with the Tax and Customs Board for harmonising various supervision procedures and improving communication between officials. The VFB also cooperated with the Consumer Protection Board, Health Protection Inspectorate, Plant Production Inspectorate, and the Veterinary and Food Laboratory.

Various European Commission experts assessed the administrative capacity of the supervision service upon the import of agricultural and food products at border points in 2006. The inspection capacity: infrastructure, technical equipment and organisation of work concerning inspections of live animals and animal products were assessed. For the first time, assessment covered those border points open for international traffic at which the veterinary service is not present to assess the inspection carried out by customs officials to find food products in travellers' baggage or in postal items upon entry to the EU, and inspection of pets accompanying travellers. The FVO inspectors visited the Tallinn Airport and

the mail handling centre of *Eesti Post*. The work of veterinary supervision and customs officials working on the borders to detect illegal goods of animal origin was also assessed. The report and the control actions prescribed in it have been of great help in reorganising both the central authority and the border points to bring them into conformity with EU requirements and also in harmonising legislation with EU legislation.

Supervision was also conducted over trade between Estonia and other Member States in animals and animal products. Of the food products imported to Estonia from and produced in other Member States, 136 samples were taken in 2006 on which 284 analyses were performed. Eight cases of non-compliance were identified as a result of the analysis (most of them concerned excess contents of contaminants). The compliance of foodstuffs of animal origin with veterinary requirements at their destination was checked in 74 cases and five non-compliances were detected; compliance with the obligations of the recipient at their destination was checked in 71 cases and shortcomings were identified in 16 cases.

Supervision over the export of animals and animal products from Estonia consisted mostly of checking the lawfulness and coordination of the issue of veterinary certificates. This ensures the coordinated issue of veterinary certificates; a total of 8057 veterinary certificates were issued in 2006 in compliance with requirements. The bulk of export certificates are certificates for exporting animals and animal products to Russia (3182 certificates), followed by Ukraine (1904) and Switzerland (1812).

8. Foreign Relations

Olavi Petron

Bilateral relations

Participation in the EU decision-making process has become an important function of the Ministry of Agriculture's international communication after Estonia's accession to the EU. It accounts for up to 70% of the business travel of the Ministry's officials. Being present at decision-making is highly necessary, as the Common Agricultural Policy is one of the few common EU policies and the main developments are decided on the EU level. On the other hand, accession has intensified our bilateral contacts with European countries, especially on the level of specialists, who meet with their colleagues in working groups and committees, as well as on the ministerial level, who meet at the Council of Ministers once a month in Brussels or Luxembourg.

Bilateral visits also have their role. In 2006, the Minister of Agriculture visited Germany (three times), Austria (twice), Latvia, Poland, France, Norway, and Spain.

One of the main events in EU relations was the visit of Mariann Fisher Boel, Commissioner for Agriculture and Rural Development, to Estonia in October 2006. The topics discussed at her meetings with officials and producers covered the new Rural Development Plan and the positive impacts of Estonia's accession to the EU.

Cooperation with countries east of Estonia also intensified in 2006. The Minister of Agriculture participated in the offi-

cial delegation of the President of the Republic on his visit to Moldova and Georgia and he also visited Russia. Estonia was visited by the Ukrainian Minister of Agriculture, who was interested in cooperation in the spheres of the EU, agricultural research and food safety. A draft memorandum of understanding between the ministries of agriculture of the two countries was prepared and is scheduled to be signed in 2007.

A delegation of officials from Georgia visited Estonia on 13–20 May and the Mari delegation paid a visit on 22–28 April. They met with the ministry officials and acquainted themselves with the agriculture sector.

The following Memoranda of Understanding were signed in 2006:

– **with the Ministry of Agriculture, the Environment and Rural Affairs of the German land of Schleswig-Holstein for the years 2006–2010.**

The MoU was signed on 13 January. It covers the following areas: exchange of experience between specialists in agriculture, agricultural administration and research; participation in conferences and seminars; exchange of pupils and students; and information exchange.

– **with the Ministry of Agriculture and the Environment of the German land of Mecklenburg-Vorpommern for the years 2004–2008.**

The MoU was originally signed on 9 September 2004 and was extended for 2006–2007. It provides for cooperation with

the Estonian Horticultural Association, the Central Union of Estonian Farmers (which also has a separate cooperation agreement with the Mecklenburg-Vorpommern farmers' federation), cooperation between agricultural museums, cooperation with agricultural schools (Olustvere, Luua) and researchers, and exchange of experience between specialists of the ministries.

– with the Ministry of Agriculture and the Environment of the German land of Sachsen-Anhalt for the years 2006–2008.

The MoU is automatically extended for another three years unless the parties decide otherwise. The MoU was signed on 17 September. Its main areas are: exchange of experience, exchange of specialist knowledge, participation in joint events, and development of projects of common interests.

– Memorandum of Understanding between the Ministries of Agriculture of the Republic of Estonia, Republic of Latvia, and Republic of Lithuania on renewable energy issues.

The MoU was signed on 23 May. It sets out the following obligations: the Estonian Ministry of Agriculture will develop, maintain and update an online database of renewable energy issues beginning from 3Q2006.

The Latvian Ministry of Agriculture will organise a conference between the three Baltic countries on the development of renewable energy in 1Q2007 (on 11–12 May in Riga). The Lithuanian Ministry of Agriculture will conduct a symposium of the three Baltic Countries on research in renewable energy in 4Q 2006.

Baltic cooperation in the Nordic Council of Ministers

Estonia and Norway presided over the Baltic cooperation group in the Nordic Council of Ministers in 2006. A high-level official meeting between secretaries-general was held in Tallinn and a ministers' meeting took place in Oslo. The discussion focused on the involvement of Russia in Nordic-Baltic cooperation, rural and coastal development, bioenergy, management of the seal population, common inspection plan of animal diseases and zoonoses, and genetic resources. The following joint declarations were formalised:

– Nordic-Baltic Ministerial Declaration on rural and coastal development (research; promotion of economically viable fishery and aquaculture, agriculture and forestry sectors; maintenance and extension of the role of agriculture in the management of natural resources and creating an attractive countryside; recognition of initiatives that develop and promote the values and potentials that the Nordic and Baltic cuisines, foodstuffs and food cultures afford).

– Nordic-Baltic Ministerial Declaration on the grey seals in the Baltic Sea (management of grey seal populations with a view to the preservation of fish resources and protecting fishing gear, cooperation with regional conventions such as HELCOM). Latvia and Finland will preside over the Baltic cooperation group during the next period.

Foreign aid projects

The area of government of the Ministry of Agriculture has received considerable assistance for administrative development from the EU Structural Funds (PHARE and the Transition Facility) both before and after accession. Both twinning projects, under which public sector experts from other countries assist Estonia, and investment projects are being supported under the framework of PHARE and the Transition Facility projects of 2004–2006. The main objective is to improve institutional capacity, with the assistance being aimed at state agencies. The agriculture sector has been one of the most intensive users of aid over the years. The projects are coming to an end now and will continue in the form of regular bilateral projects with various countries.

Summary of the PHARE/Transition Facility projects ended in 2006:

– “2003/005-026.07.01 Development of an IT System for administration of EAGGF Guarantee section Rural Development Plan (RDP) measures”

Beneficiary: ARIB. The project ended in October 2006. Its total budget was EUR 408 000 (MEEK 6.4). It was mainly a software development project which produced a system for the administration of all disbursed unit-based aid.

– “2003/005-026.07.02 Development of IT System for Administration of Market Regulation Measures”

Beneficiary: ARIB. The project ended in October 2006. Its total

budget was EUR 1 043 000 (MEEK 16.3). This was mainly a software development project covering the technical developments required for the market measures. The developments have been in use since October 2006 and are related to the payments system. Milk quota developments were applied in November 2006 in connection with additional quota applications. The system is in line with all EU requirements.

– “2003/005-026.01.01, Development of Structural Funds electronic information system”

Beneficiary: ARIB. The project ended in October 2006. Its total budget was EUR 817 000 (MEEK 12.8). This was mainly a software development project, in the course of which two modules were implemented: the support applications model was launched in January 2007 and the payments administration module in October 2006. The current system corresponds to the support measures applied in 2007. All investment aid is administrated by this system.

– “2003/005-850.03.01, EE03/IB/TWP/AGR/19 Development of Structural Funds, direct aid control and on-site inspection procedures for ARIB”

Beneficiary: ARIB. The project ended in February 2006. Its total budget was EUR 160 000 (MEEK 2.5). The project was carried out in cooperation with the UK; Estonian inspectors were trained to conduct on-site inspection in accordance with EU Regulations 1260/1999, 438/2001, 2792/1999, 1257/1999, 817/1999, 141/2004, 1259/1999 and 2199/2003 as supplemented and amended.

– “2004/006-270.06.03 Creation of orthophotos for Land Parcel Identification System”

Beneficiary: ARIB. The project ended in April 2006. Its total budget was EUR 610 000 (MEEK 9.5). The Land Parcel Identification System (LPIS), which functions as a part of the Integrated Administration and Control System, is completely ready for work and is based on up-to-date orthophotos. Orthophotos covering 50% of Estonia’s territory were taken, processed, checked and digitalised during the project.

– “2004/006-270.06.02 Molecular genotyping of Estonian farm animals”

Beneficiary: Estonian University of Life Sciences/VFB. The project ended in December 2006. Its total budget was EUR 160 000 (MEEK 2.5). In the course of the project, a PCR

machine with the necessary accessories was procured for the Estonian University of Life Sciences, as a result of which the genetics laboratory of the University’s Institute of Veterinary Medicine and Animal Sciences is able to independently conduct genotyping and genetic identification of farm animals in accordance with EU legislation.

Noteworthy among the projects of 2007 are Ministry of Agriculture projects concerning the development of a fisheries development fund and the co-existence of GMOs and conventionally bred plants. Other major undertakings involve the construction of a quarantine greenhouse for the Agricultural Research Centre and the development of the food supervision system at the Veterinary and Food Laboratory.

Budget of the governing area of the Ministry of Agriculture in 2005-2006 (EEK '000) by institutions

	2005	2006
Total for the governing area of the Ministry of Agriculture	3 103 496.09	3 761 073.46
Purchase and renovation of tangible and intangible assets	54 674.74	78 242.40
Including:		-
out of public revenues	11 402.09	47 202.02
out of foreign aid projects co-financing	15 780.50	2 547.19
out of foreign aid	18 463.15	2 166.75
out of economic revenue	7 619.00	11 903.00
out of subsidies from state agencies	1 410.00	14 108.50
from other state agencies		314.94
Ministry of Agriculture	163 934.50	239 492.09
Operating expenditures	136691.17	179306.32
Including:		-
out of public revenues	106 834.50	136 229.24
out of foreign aid projects co-financing	8 158.42	7 455.91
out of foreign aid	14 989.25	28 689.17
out of economic revenue	299.00	325.00
out of subsidies from state agencies	6 410.000	6 607.00
Appropriations	27 181.60	60 050.04
Including:		-
Loomsete Jäätmete Käitlemise AS (animal waste handling company)	12 590.00	16 759.00
membership fees for international organisations	1 191.60	1 192.04
appropriations for other residents’ current expenditure:	13 400.00	31 899.00

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Including:		-
Estonian Chamber of Agriculture and Commerce	13 000.00	24 324.00
MTÜ Külade ja väikelinnade liikumine “Kodukant” (movement of villages and small towns)	400.00	1 400.00
MTÜ Maanaiste Liit (rural women’s association)		125.00
MTÜ Virumaa lootus (regional union of villages)		50.00
Rural Development Foundation		6 000.00
Appropriations for other residents’ purchase and renovation of fixed assets:		10 200.00
Horticultural and Apicultural Association		200.00
Animal Breeders Association of Estonia		10 000.00
Other expenditures	61.73	135.73
Including:		-
out of public revenues		60.73
out of economic revenue		75.00
Agricultural Registers and Information Board	2 580 062.65	3 110 597.46
Operating expenditures	87 244.75	94 436.41
Including:		-
out of public revenues	67 215.48	73 351.50
out of foreign aid projects co-financing	2 868.03	2 449.89
out of foreign aid	16 806.03	17 565.39
out of government sector’s internal subsidies	355.21	1 069.63
Appropriations	2 492 637.90	3 015 981.05
Including:		-
for the implementation of the NDP measures out of co-financing for foreign aid	124 824.50	170 036.09
for the implementation of the NDP measures out of foreign aid	313 695.20	370 956.38

for the implementation of the RDP measures out of co-financing for foreign aid	193 328.14	211 726.32
for the implementation of the RDP measures out of foreign aid	773 151.57	844 878.30
for the implementation of the RDP technical assistance measure out of co-financing for foreign aid	2 182.00	2 448.93
for the implementation of the RDP technical assistance measure out of foreign aid	8 728.00	9 795.73
for the implementation of market organisation measures out of foreign aid	250 543.08	278 137.48
agricultural market organisation out of co-financing of foreign aid	1 600.00	1 600.00
school milk support out of public revenues	31 000.00	0.00
school milk support out of foreign aid	31 000.00	21 000.00
for rural and agricultural development support out of public revenues	55 000.00	51 676.46
single area payment scheme and complementary national direct payments out of foreign aid	435 301.30	551 312.70
single area payment scheme and complementary national direct payments out of public revenues	203 730.00	450 338.16
compensation for fuel excise rate increase to fishermen out of public revenues	8 500.00	1 009.50
fisheries market organisation out of foreign aid	3 000.00	3 000.00
fisheries development support		3 465.00
regulation of fisheries’ fishing capacity		44 600.00
compensation for crop failure to agricultural producers	30 000.00	
compensation for fuel excise to agricultural producers	20 000.00	
SAPARD financing out of co-financing of foreign aid	2 357.72	
SAPARD financing out of foreign aid	4 696.39	
Other expenditures	180.00	180.00
Veterinary and Food Board	87 893.88	105 337.53
Operating expenditures	87 489.350	104 931.902

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Including:		-
out of public revenues	66 696.00	62 366.03
including commissioning of analyses from the Veterinary and Food Laboratory and the Agricultural Research Centre	11 568.36	-
out of foreign aid projects co-financing	4 165.785	23 835.87
out of foreign aid	3 872.565	4 524.00
out of economic revenue	12 755.00	14 206.00
membership fees for international organisations	380.00	380.00
Other expenditures	24.53	25.62
Plant Production Inspectorate	38 098.24	44 782.04
Operating expenditures	37 607.70	44 343.70
Including:		-
out of public revenues	37 393.70	38 393.70
including commissioning of analyses from the Agricultural Research Centre	5 419.00	0.00
out of foreign aid projects co-financing	214.00	130.00
out of economic revenue		5 820.00
membership fees for international organisations	486.20	434.00
Other expenditures	4.34	4.34
Animal Recording Centre	17 649.08	17 124.31
Operating expenditures	16 919.18	15 424.31
Including:		-
out of public revenues	8 969.08	8 633.31
out of economic revenue	7 950.10	6 791.00
Membership fees for international organisations	205.90	
Other expenditures	1 223.00	1 700.00

Financial lease payments	-699.00	
Rural Economy Research Centre	9 397.45	9 694.14
Operating expenditures	9 297.45	9 594.14
Including:		-
out of public revenues	7 197.45	6 175.27
out of foreign aid projects co-financing	0.00	461.90
out of foreign aid	1 000.00	2 480.96
out of economic revenue	1 100.00	476.01
Other expenditures	100.00	100.00
Land Improvement Bureau of Supervision and Expertise	1 562.60	1 562.60
Operating expenditures	1 562.60	1 562.60
Including:		-
out of public revenues	1 562.60	1 522.60
out of economic revenue		40.00
Agricultural Research Centre	45 224.06	38 798.23
Operating expenditures	44 703.57	38 455.75
Including:		-
out of public revenues	17 956.10	18 271.10
out of foreign aid projects co-financing	1 695.71	1 277.18
out of foreign aid	8 875.36	3 377.57
out of economic revenue	6 044.80	5 250.00
out of subsidies from state agencies	10 131.60	10 279.91
membership fees for international organisations	48.00	120.00
Other expenditures	472.48	222.48

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Including:		-
out of public revenues		22.48
out of economic revenue		200.00
Veterinary and Food Laboratory	40 649.32	41 016.63
Operating expenditures	38 406.17	38 487.88
Including:		-
out of public revenues	20395.70	21 605.70
out of foreign aid projects co-financing	46.95	0.00
out of foreign aid	1419.55	60.70
out of economic revenue	7975.61	5 480.00
out of subsidies from state agencies	8568.36	11 341.48
Other expenditures	2243.15	2 528.76
Including:		-
out of public revenues		8.76
out of economic revenue		2 520.00
Land improvement bureaux	25 593.42	28 599.26
Operating expenditures	25 583.39	28 589.20
Including:		-
out of public revenues	23964.04	25 545.22
out of foreign aid projects co-financing	264.84	459.50
out of foreign aid	794.51	1 378.50
out of economic revenue	560.00	585.00
out of subsidies from state agencies		620.98
Other expenditure	10.03	10.06

Agricultural museums	7 713.73	10 563.02
Operating expenditures	7 689.80	10 539.09
Including:		-
out of public revenues	7210.6	9 917.89
out of economic revenue	479.2	621.20
Other expenditures	23.93	23.93
Including:		-
out of public revenues		3.13
out of economic revenue		20.80
State research and development institutions	31 042.44	35 263.75
Operating expenditures	30 283.10	34 768.65
Including:		-
out of public revenues	5280.00	5 628.80
out of economic revenue	10281.99	10 354.00
out of subsidies from state agencies	13961.46	17 955.85
out of revenues from other residents	759.65	830.00
Other expenditures	759.34	495.10
Including:		0.00
out of public revenues		38.59
out of economic revenue		496.00
out of subsidies from state agencies		29.70
Total for the governing area of the Ministry of Agriculture	-98 258.25	2598.67
Decrease in financial reserves		58144.066
Loans to non-residents	-98 258.25	-103100.196
Loans repaid by non-residents		47554.8

