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Agricultural Situation and Prospects

in the Central
and Eastern
European Countries

Latvia



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Directorate for Agriculture (DG VI)

Latvia

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Working Document

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A great deal of additional information on the European Union is available on the Internet. It can be accessed through the Europa server (<http://europa.eu.int>).

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Introduction

In 1995 DG VI published a series of ten country reports and a summary report on the agricultural situation and prospects in the associated countries of Central and Eastern Europe (CEECs). The reports provided an analysis of the transition agriculture and the agro-food sector in these countries were going through in the first half of the nineties and an assessment of the outlook for the main agricultural commodity markets till the year 2000.

With three years more of information the current publications, which cover Bulgaria, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovakia and Slovenia, provide an update of the 1995 reports and take the outlook horizon till 2003. The underlying working hypothesis for the reports is that the first CEECs will join the Union and will start to be integrated in to the single market and the Common Agricultural Policy after 2003.

The accession process was officially launched on 30 March 1998 with the submission to the applicant countries of the Accession Partnerships, which for each country set out the principles, priorities, intermediate objectives and conditions leading up to accession. A main priority is adoption of the "acquis", the body of Community legislation, including for agriculture the sensitive areas of veterinary and phytosanitary legislation.

As was the case in 1995 the individual country reports have been prepared by the services of the Commission in close collaboration with national experts of the countries concerned and with the help of scientific advisers.

The country reports and the summary report attempt to provide an objective analysis of the current situation in agriculture and the agro-food sector and an assessment of where the candidate countries can be expected to be in their agricultural development by the time of the next enlargement.

About the data...

The data used in the country reports are derived from a CEEC dataset established by DG VI in cooperation with other services of the European Commission and with external experts. Data originate from various sources, mainly national statistics and economics institutes, FAO, OECD, and the European Commission (DG II, Eurostat).

For agriculture in general the FAO data were used, but for certain countries and/or for certain products, and in particular for the most recent years, the figures were adjusted or replaced by data from other sources, after discussion with country specialists. For the commodity supply balance sheets a simpler approach than by the FAO was used, taking into account trade in agricultural commodities up to the first processing stage, but not in further processed products.

The main objective was to obtain a dataset which was as coherent as possible, offering a good comparability of data.

Despite all efforts to create a coherent, reliable and up to date dataset, all figures presented in the country reports should be interpreted with care. Significant changes in data collection and processing methods have sometimes led to major breaks in historical series as the countries concerned have moved from centrally planned to market economies. One general impression is that these problems may have led to overestimate the decline in economic activity in general and of agricultural production in particular in the first years of transition, data from 1989 and before being somewhat inflated and data after 1989 underrecording the increase in private sector activity. More recently many CEECs have undertaken serious efforts to start to harmonise data collection and processing methods with EU practices.

With three more years of data and experience the original 1995 dataset has been improved and further adapted to DG VI's analytical needs.

Executive Summary

General economic situation

Latvia, with a population of around 2,46 million, had in 1997 a gross domestic product (GDP) of ECU 4 743 million (expressed in current prices), equivalent to 14 119 million ECU at purchasing power parity. The first years of independence and of economic transition were marked by a dramatic output decline. Economic growth resumed in 1996 at a rate of 3,3 % and accelerated sharply in 1997 to 6,5 %.

The exchange rate of the Lat has been relatively stable against the ECU. Inflation is down to 6 % in 1998, from a peak of three digits in 1992. Prudent fiscal policy, and the withdrawal of the government as a major borrower from the domestic market has allowed a decline in commercial credit rates, and an increase in the volume of lending to the private sector by commercial banks. Commercial lending rates for short-term credits fell nominally to around 13 % by the end of 1997.

Non-working persons, registered with the State Employment System in January 1998, numbered 89 558. This represents a rather moderate official unemployment rate of 6,7 %. Considerable regional disparities exist. In areas around Riga, unemployment is around 4 %, whereas in other parts, unemployment exceeds 26 %. In addition, there is a significant level of hidden joblessness.

Compared to the first 11 months of 1996, Latvia's total exports grew in 1997 by 21,6 %, while its imports grew by 25,5 %. The gap between the gross value of exports and imports has continued to grow. Latvia's major exports were wood pulp and wood pulp products (29,9 %), textiles and textile products (15,6 %), food products (up to 14,5 %), and machines, mechanical devices, electrical equipment (9 %). The EU has been growing in importance as an export market with a share of around 50 % in 1997.

Agriculture in the national economy

In 1996, agriculture and agro-processing accounted together for around 15 % of GDP. The importance of primary agricultural production in terms of GDP is declining. In 1996, the percentage of primary agricultural production amounted to 7,6 % of total added value and it fell to 6,9 % in 1997.

In 1997, around 17 % of the working population were employed in agriculture, whereas 3 % were employed in the food processing industries.

Increasing prices for agricultural commodities and the steady decline in real income since 1990 led to changes in the patterns of food consumption. Consumers substituted cheaper products for more expensive ones. As a result, consumption of dairy products, meat, fish, eggs and sugar declined, while consumption of potatoes, vegetables and edible oils increased.

The proportion of household spending on food increased to 52,2 % in 1996 from 44 % in 1995 because of large retail price increases. In 1997 the turning point may have been reached when household expenditures fell to 49 %.

Land use and farm structures

Total agricultural area in Latvia is 2,52 million ha (39 % of its total land area), of which 1,7 million ha are classified as arable land (67 %). 44 % of Latvia is covered by forests (2,9 million ha) and timber production is rising steadily. The most fertile soils can be found in the plains to the south of Riga, where most of the sugar beet production and also fruit and vegetable production is concentrated. The central and eastern mountainous areas are less favourable for crop production and are therefore dominated by cattle breeding.

In 1997, the sown area accounted for 1 million ha, which represents only 40 % of the agricultural land. Meadows and pastures cover about thirty percent of the agricultural land. The land use for the remaining 30 % is not clear; a reasonable assumption appears to be that this proportion is idle.

A significant feature of the changes in the arable sector was the sharp decline of the production of fodder crops which, in 1997, accounted only for half of the area used for these crops in 1990. While sugar beet, oils seed and vegetables represented a low percentage of the total sown area, with the absolute number of hectares decreasing over time, the increase of the total sown area from 1996 onwards resulted from an increase in the cereals. Potatoes remained broadly stable with some fluctuations reflecting short-term responses to the market situation.

With the land privatisation process winding up, land division has resulted in 95 000 family farms with an average farm size of 23,6 ha; this includes on average 13,7 ha of agricultural land and 7,7 ha of forest. Additionally, there are 173 000 household plots with an average size of 7,9 ha, including 4,9 ha of agricultural land and 2,1 ha of forests. There are 474 agricultural enterprises and statutory companies and 81 specialised State farms, which together own around 5 % of the total agricultural land.

Delays in land titling and registration have seriously constrained land transactions. As a consequence, a functioning land market has not really evolved yet.

Agricultural production

Following the major drop in farm output in the transition period, the level of production started to stabilise in 1997. Gross agricultural output even experienced a minor increase in 1997 when it reached LVL 9,100 million. The tendency towards stabilisation was totally due to a rise in crop output as livestock production continued to decline.

Cereals have been the most important arable crops grown over the last decade on roughly half of the cultivated area. An upward trend in the total sown area could be observed since 1996, which kept momentum in 1997 reaching 482,7 thsd. ha. The area sown with cereals is, however, still 30 % below its 1990 value. Yield reached on the average of all types of cereals 2,14 t/ha in 1997. Total grain production recovered from a low level of 687.000 t in 1995 to 1.037.000 t/ha in 1997.

Both the potato area and harvest remained stable in the first third of the decade with some fluctuations due to weather conditions. In 1997, the potato area reached its low at 69 thsd. ha. With yields remaining stable, the level of total production followed the decline in area and reached 843 thsd. t in 1997.

The area planted with sugar beet has been relatively constant reaching 11 thsd. ha in 1997. Sugar yields and sugar content were relatively low, especially in the first years of the reform period, while recovering to the pre-reform levels in 1997. A recovery of sugar production could be observed during the last three years up to a level of 387 thsd. tonnes in 1997.

The main fruit grown in Latvia are apples and other tree fruits, which account for roughly 90 % of total fruit production. Other fruits grown are strawberries, raspberries and black- and red currants. The area under fruit trees has declined in recent years, whereas the area planted to berries has increased, mainly in small household plots.

The cultivation of vegetables increased, mainly on household plots, whereas professional production on large-scale farms has dropped significantly in recent years. As a net effect, total production dropped to little more than two thirds of its pre-independence level and reached 146,5 thsd. tonnes in 1997.

In 1997, dairy production accounted for roughly one fourth of total agricultural output and half of the livestock part in GAO. Between 1990 and 1997, total milk production has been reduced to half of its

pre-reform level. The decline in cow numbers, which continued up to 1997, was outweighed in recent years by increasing yields per cow, resulting mainly from the selection of more productive cows in the de-stocking phase. As a net-effect, production shows a certain recovery in 1997 with a level of 986 thsd. tonnes.

Beef meat has turned to hardly more than a by-product of milk-production, with a contribution to the livestock GAO of not more than 10 % in 1997. The cattle inventory showed a decline from about 1,47 million animals in 1990 to almost a third, i.e. 509 thsd. animals, in 1997. At the same time, the proportion of dairy cows in the herd increased from 37 % in 1990 to 54 % in 1997. Total production of beef and veal was at a level of 125 thsd. tonnes in 1992. Until 1997, total production experienced a dramatic contraction, falling to only 27,6 thsd. tonnes.

Developments in pig production, which was before independence was the most important part in meat production, witnessed a sharp decline. The steady decline came to an end in 1997 at a production level of 44,5 thsd. tonnes which represents only a third of the pre-independence output. The main problem of the transition process was the deterioration of production capacities in units of a competitive size. Individual farms and household plots increased their share in stocks from 13 % in 1990 to 60 % in 1997.

In 1997, production of poultry meat reached with 7,6 thsd. tonnes, only a fifth of pre-independence level. Its share in livestock GAO accounted only for 4,5 %. Production of poultry meat used to be concentrated in a few very large-scale state enterprises which accounted, in 1990, for 90 % of the stock, and - after their transformation into private statutory companies - still hold a share of 70 %.

Egg production has a higher share than poultry meat within GAO. In 1997, its proportion was 12 %. Total production was 464,7 million eggs in 1997 - half of its pre-independence level. Egg production has

experienced, however, a positive development over the last four years. In 1997, production was 30 % higher than in 1994, when production hit its lowest level.

The forest sector has a high potential that could be mobilised relatively easily. In the last few years, the timber harvest has markedly increased. In 1997, 9 million m³ (about 3,1 m³/ha) were cut as compared to only 4,4 million m³ (about 1,6 m³/ha) in 1991. The 1997 figure may be considered having reached the limit of increment. For the future economic development of Latvia, the forestry sector and its related industries have a significant potential.

Agricultural trade

Following liberalisation, trade patterns changed dramatically. Over the last 5 years, Latvia changed from a net-exporter of agricultural commodities to net-importer, while the share of agricultural trade in total trade is still significant.

Agricultural exports were at LVL 141,1 million in 1997, which is an increase of 5 % as compared to 1996. Agricultural exports accounted in that year for 14,5 % of total exports. Agricultural imports increased from 1996 to 1997 by 28 % reaching LVL 219,5 million. This represents a proportion of 15 % of total imports. The trade deficit in agricultural commodities 78 million LVL in 1997.

The rise in imports of food products gathered momentum in 1995, notably for products such as fruit, sugar, tropical beverages and cocoa. By the end 1997, it was estimated that grain imports, which had in the past accounted for one quarter of total agro-food imports, had fallen to around 3,7 % of the total value. The main imports were alcoholic beverages, juices and mineral water, fish, sugar, and fruit and vegetables. Traditional export commodities like meat and live animals reached a remarkable share of 5 %.

The main destination of Latvian agricultural exports has been the NIS. The Russian and especially the St. Petersburg regions remain an important market, since both the difficulties in attaining EU production standards and the longer distances to large Western markets make a significant shift of trade flows towards the EU difficult.

As far as imports of agricultural and food products are concerned, the Member States of the European Union have become the largest partners. In 1997, the EU share in Latvian agricultural imports accounted for 53 %. The CEECs have become the second ranking source of agricultural imports. Showing high fluctuations in recent years, their share more than doubled between 1990 and 1997.

Up- and downstream sectors

Within the agricultural industry, privatisation in the processing industry and the food sector started in 1992-1993 and is now virtually complete.

During the last three years, food processing accounted for 8 to 9 per cent of total GDP and for about 40 per cent of GDP in manufacturing. Roughly 400 different food-processing plants exist in the country. These employ about 30 000 people or 3 % of the total number of employed persons, with an average output per employee of about LVL 17 000 per year. There are a relatively large number of meat, dairy and mill processing firms (140, 73 and 17 respectively). 65 % of these firms are estimated to employ less than 100 people - only 5 % have more than 500 employees.

Both the dairy industry and the milling industry, where the four largest milling enterprises have a market share of 60 %, reveal growing concentration. At the same time enterprises have started to specialise, targeting a definite segment of the consumer market with their production activities. The milk-processing sector has specialised in either whole milk or products such as cheese or ice cream.

First signs of a positive development reveal a certain improvement in competitiveness. Growing Western imports put pressure on the Latvian food industry to reorient towards meeting consumer requirements by increasing the quality and variety of food products, as well as improving the packaging. Nevertheless, serious problems remain to be solved. The quality of Latvian food industry output, although improved, still varies greatly, reducing the export possibilities for such products, especially to the West. The outdated machinery and the lack of access to capital also hamper the competitiveness of this sector.

Environmental aspects

The Soviet regime left Latvia with a set of environmental problems concerning eroded land, polluted sites, and hazardous livestock units.

The main environmental problems related to agriculture include the eutrophication and pollution caused by nitrogen, phosphorus and other biogenic materials, pesticides and heavy metals. A major problem is the pollution of the Baltic Sea. In 1993, wastewater resulting from agricultural activities, food processing and fishery production represented 21,3 % of total wastewater discharges in Latvia.

The use of pesticides and synthetic fertilisers fell sharply over the last few years. While this poses problems for agricultural productivity, the implication for the environment is clearly that the risk of pollution from farm inputs has, at least on the average, diminished.

Agricultural policies

After independence Latvia adopted a liberal profile in agricultural policy. Support has been provided mainly by border protection measures. The current political discussion within the farm sectors points, however, towards a higher engagement by the state in the development of the agricultural sector. The

agricultural budget reaches LVL 39,64 million in 1998, which is a spectacular increase of 40 % as compared to the budget of 1997.

The limited use of price support over the past years led for most commodities to prices, which are significantly lower than the comparative EU prices. The price gap between Latvian producer prices and EU prices is less significant only for those commodities where EU price support has been moderate, for example pig meat and rape seed, or for which a high world market price could be observed as for cereals over the last few years. For poultry, Latvian prices are even higher, since tariff rates are higher than in the EU.

Agricultural commodities, which are domestically produced are protected with tariff rates ranging from 25 % for wheat to 60 % for refined sugar. The Government announced in 1996 its intention to reduce tariffs from the current levels of 30-50 % to 30 %. In the year 2000, the differences in tariff rates for different commodities are bound to be reduced, which will result in lower rates for butter, cheese and pig meat.

Certain tax reliefs exist to stimulate agricultural production in Latvia. Until recently, private individual farmers, householders and private auxiliary farmers were not liable to pay income tax on income earned in agriculture. Property tax is not levied on property used exclusively for agricultural operations. Since 1995, some reimbursement of excise tax on diesel fuel used in agriculture is granted for agricultural producers.

The agricultural and rural support package for 1998 focuses on addressing structural problems and the development of rural areas, including an improvement of the rural environment. Provision of support is geared towards preparing for integration into the European Union Common Market and compliance with EU production requirements. It will also provide an element of co-financing in the context of EU pre-accession policies.

The 1998 budget foreseen for structural policy and rural development support reaches in total LVL 17126,7, which represents 43 % of the agricultural budget. The funds allocated to different programme areas include support of modernisation and improvement of productivity, the development of marketing channels, diversification of income sources of farm households, agri-environmental activities and credit guarantees.

Latvia signed the Agreement on Free Trade and Trade-related Matters with the EU on 18 July 1994. Under this agreement, which entered into force on 1 January 1995, the EU eliminated restrictions on imports of industrial products from Latvia in January 1995. For agricultural and food products, the agreement provides for reciprocal trade concessions.

These concessions represent a significant potential for Latvia to export to the EU its meat and dairy products. Unfortunately, a lot of current access is not taken up due to Latvia's inability to comply with EU import requirements. Some progress has been achieved to date, which is illustrated by the fact that since January 1998 six dairy processing establishments have been licensed to export to the EU. However, as of July 1998, no Latvian slaughterhouse has received the authorisation for exports to the EU.

Serious efforts are being made to adopt the "acquis" in the field of agriculture. This includes the introduction of measures to modernise agriculture as mentioned above. Measures to bring Latvian agriculture into line with EU environmental requirements and rural development measures are due to start in 1998 and are envisaged to be strengthened in subsequent years. A good deal of legislation on veterinary, phyto-sanitary, and quality- and health-related standards is in preparation or has already been established and, at least in parts, implemented.

General Outlook for Latvian Agriculture

The stabilisation and recovery of Latvian agriculture is highly dependent on general economic growth and growth in consumers' real income. Recent figures show signs of a recovery in the macro-economic situation. GDP increased in 1996 for the first time in the Nineties and reached in 1997 a strong growth rate of 6,5 %. These growth rates are likely to be maintained for the near future.

With the strong growth of GDP, the real income per household increased. The population of only 2,6 million inhabitants has, however, only limited purchasing power and the market for processed, high value added products is small. Positive developments in per capita consumption of some products like white meats, potatoes and vegetables may be offset to some extent by a further decline of the Latvian population, which is assumed to continue, although at a lower rate (0,6 %).

In line with the overall economic development, agricultural production recovered somewhat in 1997, but at a slow pace. This recovery was due to an increase of crop production, whereas the decline in livestock production continues, although at lower rates. With a view to the future trend it appears reasonable to assume that crop production will continue to recover much quicker than the livestock sector, which is particularly in need of investment.

Total agricultural land is assumed to remain at the 1997 level of 2,53 million hectares. The share of idle land will most probably continue to decrease again, since parts will be allocated to other use, and parts will be brought back into cultivation to meet the increased need for cereals and fodder area. The economically favourable long term prospects for forestry implies an increase in the forest area.

Agricultural production costs are still marked by low costs for labour and machinery. Labour productivity is, however, also low, compared to Western

standards. Production costs per output unit are affected by low yields in the crop sector due to climatic conditions and the low fertility of the soil. Feed conversion rates in the livestock sector are considerably lower than in the EU.

Progress in the completion of land registration and more concentration on structural and rural policies are likely to give momentum to the structural development of agriculture, and improved productivity. Together with funding from international institutions and the EU pre-accession programmes, such policies should become an important driving force in the process of structural adjustment and recovery of Latvian agriculture.

With the completion of privatisation, an essential precondition for a recovery of the food processing industry is met. Although the first positive signs of an improvement are visible, a significant take-off in the food processing industry is still awaited. Low capacity utilisation rates, obsolete equipment, and the slow pace of renovation caused by the lack of investment remain serious problems.

Agricultural trade will remain important, but the trade balance is likely to stay negative after the turn of the century. Only for cereals and dairy products will domestic production continue to exceed consumption. The NIS and especially Russia will remain the principal markets for Latvian products in the coming years although some cutbacks may result from the actual economic crisis in Russia. There would be a chance to reverse the trend of a widening trade balance for agricultural commodities, if Latvia manages to take advantage of trade opportunities established by the free trade agreement with the EU.

Prospects for Crop Production

The recovery in arable production involves a certain specialisation, which contributes to the relatively high share of cereals. The cereals area is assumed to increase to 548 thsd. hectares by 2003, following a trend which has already started in 1996. As a result of the development of area and yield, production should increase to 1246 thsd. tonnes by 2003, from 1038 thsd. tonnes in 1997. By 2003, utilisation will total 982,8 thsd. tonnes. Self-sufficiency is expected to be at 127 % by the year 2003, which is significantly higher than the level of 1997 (112 %).

Potatoes are relatively important for the domestic market and rank second among the marketable crops produced in Latvia. The cultivated area will stabilise at the 1995 level of roughly 75 thsd. hectares which, subject to yields, enables Latvia to reach self-sufficiency in potato production. Production should increase to 949 thsd. tonnes by 2003, from 843 thsd. tonnes in 1997. Human consumption will decline further, as a result of increasing income. By 2003, utilisation will total 952 thsd. tonnes with self-sufficiency at a level of 99,7 %.

Sugar production played only a limited, albeit stable role in Latvian agriculture with a share in the sown area of around 1 %. The cultivated area is expected to cover 12,3 thsd. hectares in 2003 which is a little bit higher than the 1997 level and still lower than that of 1990. As a result of the development of area and yield, the production should reach 39 thsd. tonnes of raw sugar by 2003. Human consumption of sugar, including processed sugar is expected to increase again to 33 kg per capita in 2003. By 2003, utilisation will total 79,9 thsd. tonnes. Self-sufficiency is expected to be at 48,8 % in 2003.

Prospects for Livestock Production

Milk production has traditionally been a key element in livestock production. Since the pre-independence yield level has been reached again, only a moderate increase in yield is expected for the coming years. As a result of the expected developments in cow

numbers and yields, the production should increase to 1034 thsd. tonnes by 2003 from 986 thsd. tonnes in 1997. Total human consumption is expected to reach 759,4 thsd. tonnes in 2003 which would result in a rate of self-sufficiency of 104,7 % by the year 2003.

A recovery of the dairy herd will also improve the basis for beef production. The average carcass weight may increase from its currently low level of 140 kg to roughly 180 kg by 2003, which would still be only 80 % of the 1990 level. As a result of increased carcass weight and an increasing herd size, production is expected to reach 32,4 thsd. tonnes by the year 2003. Beef consumption will increase only moderately to 41,8 thsd. tonnes by the year 2003, with self-sufficiency reaching 77,3 %.

Pig production used to be the most important branch in Latvian livestock production. The number of animals is expected to recover from the year 2000 onwards. This implies a forecast pig population of 493 thsd. animals by 2003. The carcass weight is expected to remain at 84 kg, the average figure for the last five years. As a result, pork production will recover by 2003 to a level of 50 thsd. tonnes, an increase of 10 % over the 1996 level. A moderate increase in total consumption to a level of 70,7 thsd. tonnes in 2003 is projected. Self-sufficiency in pork will be at 70,3 % by the year 2003.

Poultry has kept a small, albeit, stable share (4-5 %) in the gross output of the livestock sector. Following the strong decline in animal numbers up to 1997, livestock numbers will start to recover in 2000 by 5 % and increase in 2002-2003 by 4 %. Production could increase from 7,6 thousand tonnes in 1997 to 10,4 thousand tonnes in 2003. With consumption per capita reaching 9 kg by 2003, total consumption would amount to 21,6 thsd. tonnes in 2003, which is an increase by 15,1 % as, compared to the 1997 level. Self-sufficiency is expected to increase from 1999 onwards up to 48,1 % in 2003, which is extremely low, bearing in mind that Latvia used to be a net-exporter of poultry meat.

The general economic situation

1.1. Macro-economic development

1.1.1. Economic Overview

Latvia, with a population of around 2,46 million, had in 1997 a gross domestic product (GDP) of ECU 4 743 million (expressed in current prices), equivalent to 14 119 million ECU at purchasing power parity. The population is about 0,7 % of that of the European Union, while its economy accounts only for about 0,07 % as measured by GDP. The GDP per capita expressed in purchase power parity is about 18 % of the Union average.

The first three years of independence and of economic transition were marked by a dramatic output decline: by the end of 1993 real GDP had halved compared with 1990. The decline seemed to have ended in 1994, but the incipient recovery was interrupted in 1995 by banking and budgetary crises (table 1).

Recent macroeconomic developments in Latvia have been positive. Economic growth resumed in 1996 at a rate of 3,3 % and accelerated sharply in

1997 to 6,5 %. The increased growth has not resulted in any significant inflationary pressures, and consumer price inflation has continued to fall at a steady pace.

The faster growth continues, however, to put pressure on the country's external balances, and the current account deficit continues to widen. In 1997, Latvia's trade deficit and current account deficits were equivalent to 17 % and 8 % of GDP respectively. Although the current account deficit is high, it is more than covered by capital inflows; foreign direct investment is a large component of these inflows. This has allowed a gradual increase in the country's foreign exchange reserves.

The macroeconomic outlook for Latvia appears to be good, if the country can maintain its current pace of structural reform and current high investment rates and if it meets the challenges posed by a low quality infrastructure, pockets of industrial decline and urban crisis, conversion of former defence activities and a lack of economic development in the rural areas.

Table 1: Main Economic Indicators

	Units	1992	1993	1994	1995	1996	1997
Population (end of year)	mio	2,61	2,57	2,53	2,50	2,48	2,46
Economic output (annual change GDP)	%	-34,9	-14,9	0,6	-0,8	3,3	6,5
Consumer price index (annual average)	%	951,2	109,2	35,9	25,0	17,7	8,4
Current account	mio LVL	142,9	289,0	112,4	-9,5	-228,8	-328,7
Exchange rate (annual average) LVL/ECU		0,891	0,793	0,665	0,690	0,699	0,659
Gross Industrial Product (change in volume)	%	-44,5	-32,1	-9,5	-6,3	1,4	6,1
Government budget deficit as % of GDP	%	-2,96	-0,17	-1,86	-3,1	-1,4	1,78
Interest rate (central bank lending rate)			27	25,0	24,0	9,5	4,0
Disposable income per household member	LVL		27,41	40,29	49,34	51,52	53,73
As percent of the previous year	%		197	146,99	122	104	107

DGII; CSBL, LSIAE

1.1.2. Monetary Policy and Inflation

The national currency, the Lat, has been informally pegged to the Special Drawing Rights basket of currencies since February 1994. As a result, the exchange rate of the Lat has been relatively stable against the ECU. Strict adherence to this peg, maintenance of which is the cornerstone of monetary policy, has allowed inflation to come down to relatively low levels today. Inflation is down to 6 % in 1998, from a peak of three digits in 1992.

Although the nominal pegging of the currency has meant that the currency has appreciated in real terms over time, Latvia still retains a margin of export competitiveness.

Inflationary pressures still remain subdued; for example, wage growth in Latvia continues to be low; however, this is expected to change as growth picks up. The main impetus for increases in the consumer price index at the moment continues to come from the liberalisation of prices.

1.1.3. Budget

Latvia continues to pursue a prudent budgetary policy which, together with improved tax collection, and stronger growth, led to a considerable improvement of the fiscal position; in 1997, the general Government budget registered a surplus.

In the 1998 budget, passed by Parliament on 5 December 1997, it is envisaged that the State budget will be balanced, while the general, consolidated government budget, which also includes the social security fund, and municipal budgets as well as other items, projects expenditure of LVL 1 280 million (ECU 1 932 million) against revenue of LVL 1 211 million, with a deficit of LVL 67,8 million.

In 1996, State spending on agriculture declined by 50 %, because part of the budgetary allocation to agriculture was used to pay the outstanding State

debt to agriculture from the previous year. A large proportion of this budget is related to education. In 1997, the agricultural spending accounted for 5,8 % of the total budget. For 1998, a considerable increase of the agricultural budget by 34 % has been decided. As a result, public spending on agriculture would be 6,8 % of the general budget. The amount of direct subsidies for agriculture is expected to be LVL 17,1 million, which is in accordance with the 3 % limit stated in the Law on Agriculture of 1996.

Prudent fiscal policy, and the withdrawal of the government as a major borrower from the domestic market has allowed a decline in commercial credit rates, and an increase in the volume of lending to the private sector by commercial banks. Commercial lending rates for short-term credits fell nominally from 24 % in 1996 to around 13 % by the end of 1997.

1.1.4. Foreign Direct Investment and Growth

In recent years, Latvia has been successful in attracting foreign direct investment (FDI); the growth in FDI flows has in large part been related to the recent acceleration of the privatisation process in Latvia. The Latvian Development Agency estimates that between 1990 and 1997, Latvia has attracted LVL 988 million of FDI, of which LVL 232 million was accumulated in 1997. Investment came mainly from Denmark, Russia, the USA, Germany, the UK and Sweden, and was mainly concentrated in the services sector (transport, communications and banking), but also in some specific industries like forestry and wood processing.

Activity in services, especially in the transport, storage and communications sectors, continues to drive growth on the output side. A strong factor in the rise in GDP has been an increase in transit operations.

1.1.5. Population

The Latvian population is in decline, which was partly due to the out-migration of residents of Russian origin. In 1997, the birth rate declined for the ninth year in a row. The natural growth rate declined principally in the depressed region of Latgale (table 2).

The population density is just over 38 inhabitants per km², which means the country is sparsely populated by developed country standards. Around one third of the population lives in the capital Riga. Today more than two thirds of the people live in towns. A trend of migration to the cities, where the employment situation is much more favourable than in most rural areas, has led to a particularly high age structure in rural areas.

1.1.6. Employment

Non-working persons, registered with the State Employment System in January 1998, numbered 89 558. This represents a rather moderate official unemployment rate of 6,7 %. The private sector, making up approximately 60 % of value added, accounts for 66 % of employment. However, transition to a market economy and restructuring of industries with rapidly growing, concentrated capital, have created severe regional imbalances.

Latvian sources report unemployment rates for 1996 and 1997 of 7,6 % and 6,7 %, respectively. However, the labour force survey carried out in 1995 indicated that 19% of the active population were looking for work and ILO figures suggest unemployment rates of around 18,3 % and 14,4 % in the years 1996 and 1997.

Although Latvia is a relatively small country, considerable regional disparities exist; generally, the south-eastern regions are less developed than central districts. Latvia has a concentrated urban structure

Table 2: Population and Population Density

	Units	1992	1993	1994	1995	1996	1997
Resident population		2606	2566	2530	2502	2480	2464
- of which urban	Thsd.	1791	1776	1747	1726	1712	
- of which rural		815	790	783	776	767	
Population density							
- all areas		40,3	39,7	39,1	38,7	38,7	38,2
- in cities	(inhabitants	2010,7	1969,2	1932,9	1906,2	1906,2	1872,0
- in districts	per km ²)	20,0	20,0	19,6	19,4	19,4	19,16

DGII; CSBL

Table 3: Unemployment in Cities and Rural Areas

	Units	1993	1994	1995	1996	1997
Unemployment rate (national sources)	%	5,8	6,5	6,6	7,2	6,7
Unemployment rate (ILO)	%			18,9	18,3	14,4
Unemployed						
- in cities (national sources)	%	4,0	4,1	4,8	4,8	4,4
- in districts (national sources)	%	9,8	9,5	10,1	10,1	9,9

DGII; CSBL

with Riga being the most populated city in the Baltic States. In areas around Riga, unemployment is around 4 %, whereas in some parts of Latgale (South East Latvia), unemployment exceeds 26 %. In addition, there is a significant level of hidden joblessness (table 3 on previous page).

Looking at employment it has to be taken into account, that a large amount of economic activity falls outside the formal economy. Estimates suggest that up to 30 % of GDP may come from the shadow economy, which is especially important in rural areas.

1.1.7. Trade

Since independence, the composition of trade has undergone dramatic changes. For example, the share of food products in exports declined from around 22 % in the pre-reform period to 14,5 % (covering basic agricultural and fishery products and processed items) in 1997. On the other hand, the share of wood and wood products increased from some 3 % to nearly 30 %, and is now the most important export category.

Compared to the first 11 months of 1996, Latvia's total exports grew in 1997 by 21,6 %, while its imports grew by 25,5 %. The gap between the gross value of exports and imports has continued to grow: in January-November 1996, imports exceeded exports by 55,5 %, but in January-November 1997 by 60,5 %.

The EU has been growing in importance as an export market with its share increasing from around 45 % in 1996 to 50 % in 1997. More than half of Latvia's imports (53,5 %) came from the EU, up from around 50 % in 1996. The NIS share on the other hand has declined. Exports from Latvia to the region dropped from 36,5 % to 28,8 %. Imports from the NIS fell from 24,7 % to 19,5 %. Latvia's major exports (% of total exports) were, wood pulp and wood pulp products (29,9 %), textiles and textile products (15,6 %), food products (up to 14,5 %), and machines and electrical equipment (9 %).

1.2. Agriculture as a Part of the Latvian Economy

1.2.1. Share of Agriculture in the Economy

Agriculture and agro-food processing is still an important sector in the Latvian economy; it has been one of the country's major sources of income, employment and foreign exchange earnings. In 1996, agriculture and agro-processing accounted together for around 15 % of GDP. However, the importance of primary agricultural production in terms of GDP is declining. In 1996, the percentage of primary agricultural production amounted to 7,6 % of total added value and it fell to 6,9 % in 1997.

The share of agricultural trade in total trade is still significant. In recent years, total exports have shown some fluctuation around a mainly stable trend. In 1997, a decline of 15 % could be observed as a result of which agricultural exports amounted to 14,5 % of total exports. Agricultural imports are slightly increasing over time, and in 1997 amounted to 15 % of total imports.

In 1996, GDP of agricultural production including agro-food processing arrived at two thirds of the 1990 level. Economic decline in the agricultural sector was, however, generally less than in the economy as a whole, since GDP over the same period decreased by about a half (table 4).

In 1997, around 17 % of the working population were employed in agriculture, whereas 3 % were employed in the food processing industries. In 1992, it was estimated that agricultural employment accounted for 19,5 % of total employment (or 249 000 people). It is clear that the relatively high level of employment in agriculture indicates that average productivity in the sector is rather low.

Agriculture in recent years is assumed to have acted as a safety net against urban unemployment. As a

Table 4: Share of Agriculture in the Economy

	Units	1992	1993	1994	1995	1996	1997
Share of agro-food of total GDP	%	19,7	16,9	15,8	16,2	15,0	–
- of which primary agricultural production	%	11,2	10,3	8,4	8,9	7,6	6,9
- of which food processing	%	8,5	6,6	7,4	7,3	7,4	–
Share of agriculture of national employment							
- primary agricultural production	%	19,5	18,9	18,6	18,0	17,8	17,2
- food processing	%	n.a.	n.a.	3,2	3,2	3,4	3,0
Share of agriculture of total foreign trade:							
- exports	%	9,2	13,2	12,8	16,4	16,9	14,5
- imports	%	6,5	5,8	10,7	10,3	13,5	13,9

CSBL, LSIAE, IAMO

consequence, agriculture's share of total employment will, at least in the short to medium term, continue to play a key role in providing a buffer for jobs lost in other sectors, especially in rural areas.

The general situation in agriculture is characterised by a vicious cycle of low prices for farm products, a limited added value of agricultural production, inappropriate farm structures resulting from privatisation and the poor state of farm capital including machinery and buildings. The result is a low demand for services and parts of the farm sector lapsing back to a semi-subsistence position with home produced inputs and limited specialisation.

The rural/urban income gap has widened. While a significant number of private farmers generate incomes equivalent to those of urban dwellers, relative poverty has become a widespread phenomenon among part-time farmers and rural pensioners. Farm incomes continue to be depressed, as productivity in primary production remains low and farm product prices come under pressure due to inefficient processing and strong competition from imports, especially meat products. This situation is exacerbated by falling consumer demand for domestic food products. Farmers are responding to this situation by reducing the size of the breeding herd and adopting less intensive production methods.

Recent land reform has led increasingly to restitution of private land to original owners or heirs, and

the creation of a large number of family farms of small size and uncertain viability. A consolidation is to be expected in as far as agricultural land can be sold or rented. At present, the development of land markets is hampered by the fact that many farmers lack clear title to land ownership. This has been a disincentive to investment in agriculture, which acts not only against the development of a land market; it also limits the expansion of agricultural credit, since land cannot be used as collateral for bank loans.

1.2.2. The Development of Gross Agricultural Output

Following the major drop in farm output in the transition period, the level of production started to stabilise in 1997. Gross agricultural output even experienced a minor increase in 1997 when it reached LVL 9100 thousand. The tendency towards stabilisation was totally due to a rise in crop output as livestock production continued to decline (figure 1 on page 20).

Despite the steady decline in livestock production, there was some recovery in eggs, pig and milk production. Improvements in crop production could be observed for grain and sugarbeet. While formerly two thirds of the gross agricultural output was livestock production which was subsequently exported to the former Soviet Union, currently each of the two sectors represents roughly half of the gross agricultural production.

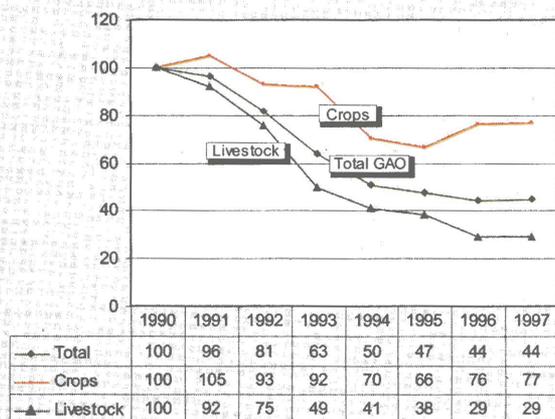
Table 5: Composition of the Gross Agricultural Output

	Units	1990	1991	1992	1993	1994	1995	1996	1997
Total GAO ¹	mio LVL	20,66	19,83	16,73	13,02	10,33	9,71	9,09	9,10
- of which crops ²	mio LVL	6,60	6,92	6,15	6,07	4,63	4,37	5,02	5,06
- of which livestock ²	mio LVL	14,06	12,91	10,58	6,95	5,70	5,34	4,07	4,04
Crops (% of total)	%	32	35	37	47	45	45	55	56
Livestock (% of total)	%	68	65	63	53	55	55	45	44

¹ prices of 1990

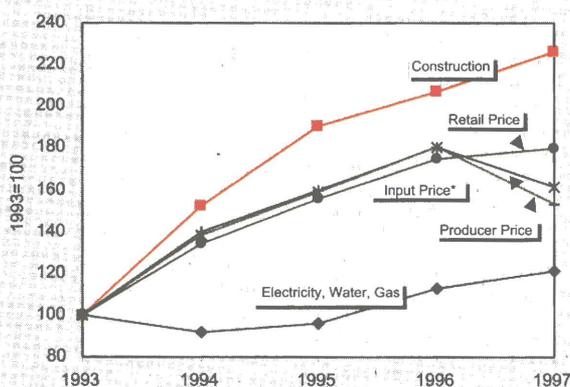
² estimates derived from GAO indices for crops and livestock reported by LSIAE CSBL, LSIAE, EC DG VI

Figure 1: Development of Gross Agricultural Output (GAO)



¹ constant prices (1990)
CSBL, LSIAE

Figure 2: Agricultural Input and Output Price Indices



*intermediate consumption
LSIAE, OECD

In crop production, recovery from 1996 onwards was driven by the development of individual farms, which increased their share in production from 12 % in 1990 to 80 % in 1997. The recovery of crop production was based on increasing production of cereals, pulses and sugarbeets, whereas fruit and vegetables output declined somewhat after having increased considerably in the first half of the Nineties (table 5).

The steep decline in the animal sectors was mainly due to the abandonment of production capacities of state farms and collective farms with family farms unable to fill the gap. In meat production, state farms and statutory companies still account for 40 % of total production. For eggs, statutory these farms are still dominant with about 70 % of the production capacity. Milk production shows a different picture where the share of individual farms increased from 29 % in 1990 to 86 % in 1997 with a slight increase from 1996 onwards after a steep fall between 1990 and 1995 to half of the 1990 level.

1.2.3. Input and Output Prices

Since independence, both the structure of prices and production costs have changed completely. Prices for inputs, such as fertilisers, seeds, pesticides and energy increased enormously which – in conjunction with low liquidity of many farms – is one reason for the decline in the use of fertilisers and pesticides (figure 2).

Compared to EU levels, prices for diesel fuel, for labour and particularly machinery are, however, still far below EU levels, leading to lower unit costs. In addition, it should be noted that the cost structure differs between different types of farms. Even taking into account the fact that labour costs in general are low, small farms often do not calculate any labour costs, due to the absence of other occupational possibilities. Labour intensive production therefore is concentrated in these farms.

When price liberalisation began in 1991, the retail prices of all products increased steadily, partly because processing enterprises sought to offset the added costs of low rates of capacity utilisation by increasing prices.

The given price-cost ratio resulted in serious economic problems in the farm sector. Whereas in 1995 market revenues per hectare (69,06 LVL) still exceeded total expenditure per hectare by 1,78 LVL, in 1996, expenditure was 6,57 LVL higher than market revenues per hectare. When in 1997, input and output prices started to decrease, farm gate prices decreased more steeply than input prices, further worsening the agricultural terms of trade. This will put agriculture even more under pressure to adopt more efficient production structures.

2. Consumption, production, structural developments

2.1. Food Consumption

Before the economic transition, food consumption in Latvia was relatively high, even by OECD standards. Since the reform process got underway in 1990, however, both FAO data and national statistics reveal a decline in food consumption (table 6).

Increasing prices for agricultural commodities and the steady decline in real income since 1990 led to changes in the patterns of food consumption. Consumers substituted cheaper products for more expensive ones. As a result, consumption of dairy products, meat, fish, eggs and sugar declined, while consumption of potatoes, vegetables and edible oils increased.

The drop in consumption was especially sharp in the case of meat, eggs and dairy products. Production and consumption of fruit and vegetables on the other hand was relatively strong, aided by the production of small household plots. Bread consumption (and

especially the traditional rye bread) remained quite stable and perhaps increased, replacing to some extent consumption of more expensive meat and dairy products.

Despite the decline in the amount of food consumed, the proportion of total household spending on food (excluding tobacco and beverages) increased in the early 1990s, rising from 29,4 % in 1990 to 48,2 % in 1992 (average EU household budget spending on food is around 20 %). The proportion of household spending on food increased to 52,2 % in 1996 from 44 % in 1995 because of large retail price increases. In 1997 the turning point may have been reached when household expenditures fell to 49 %.

Especially low-income households spend an extremely high share of their total expenditure on food. According to the results of household budget surveys, spending on food exceeded 75 % and 65 % of total expenditure in the poorest 10 % and the poorest 20 % of the population in 1996 respectively.

Table 6: Food Consumption

	Units	1990	1991	1992	1993	1994	1995	1996	1997
Household income share spent on food	%	29,4	37,8	48,2	47,7	45,9	44,2	52,2	49,0
Pig meat	kg/head	24,7	21,2	19,6	17,6	14,3	15,5	13,9	12,8
Poultry meat	kg/head	10,5	11,4	7,1	2,8	4,2	5,3	7,2	7,9
Beef meat	kg/head	12,4	7,7	6,9	10,9	8,8	8,3	5,8	5,2
Sheep meat	kg/head	0,6	0,4	0,6	0,9	0,5	0,2	0,5	0,4
Milk	litres/head	454	420	370	355	345	327	311	291
Butter	kg/head	7,3	7,3	5,5	5,3	4,3	3,1	2,5	1,9
Cheese	kg/head	4,4	34,6	3,8	3,5	3,2	3,2	3,1	3,2
Eggs	piece/head	259	232	213	210	206	214	197	180
Potatoes	kg/head	91,6	97,8	101	110,9	108,2	136	152	143,5
Vegetables	kg/head	69	69	75	71	73	54	97	103,1
Vegetable oil	litre/head	7,8	3,8	3,9	6,7	7,3	6,9	8,4	8,6
Fruit	kg/head	33	37	34	50	52	28	44	53,4
Sugar	kg/head	48,1	40,5	32,8	36	36	23,4	32,9	28,0
Bread	kg/head	80,1	83,7	90,7	92,3	89,2	89	86	82,4

CSBL, LSIAE

Analysts have noted that this percentage is considerably higher than that of Estonia, but similar to that of Lithuania, and is one of the highest in the CEECs. It has also a negative influence on economic growth in that it limits the scope for the consumption of non-food products in Latvia.

2.2. Agricultural land use

Latvia has a total land surface of 64.600 km², which is comparable to that of Ireland. It is dominated by large forests and a multitude of lakes and rivers. Average temperatures in Latvia reach 17°C in summer and -50°C in winter. Average annual rainfall is 700-750 mm.

Four natural regions can be distinguished: the coastal region along the Baltic Sea, western Latvia which is characterised by lowland plains, central Latvia which is more mountainous, and eastern Latvia which has an average altitude of 170 m.

Total agricultural area in Latvia is 2,52 million ha (39 % of its total land area), of which 1,7 million ha are classified as arable land (67 %). 44 % of Latvia is covered by forests (2,9 million ha) and timber production is rising steadily. The most fertile soils can be found in the plains to the south of Riga, where most of the sugar beet production and also fruit and

vegetable production is concentrated. The central and eastern mountainous areas are less favourable for crop production and are therefore dominated by cattle breeding (table 7).

In 1997, the sown area accounted for 1 million ha, which represents only 40 % of the agricultural land. Meadows and pastures cover about thirty percent of the agricultural land. The land use for the remaining 30 % is not clear; a reasonable assumption appears to be that this proportion is idle.

A high proportion of idle land results from the fact that, despite the rather high ratio of arable land (by western European standards), there are large areas of low quality soils (boggy and marshy soils with peat and peat-gley horizons). The poor soils had been forced into production before independence and parts may never come back into agricultural production. The share of acid soils, requiring liming, has increased to 40 % of the total arable area. However, liming of soils declined from 779 000 tonnes in 1990 to 8 000 tonnes in 1994. Some 38 % of soils also contain insufficient natural phosphorus.

The very moist climate of Latvia means that drainage plays an important role. However, this has not been carried out in a systematic way in recent years. Previously installed systems with a total area of 1,5 million hectares, especially some

Table 7: Agricultural Land Use

	Units	1990	1991	1992	1993	1994	1995	1996	1997
Total area	000 ha	6459	6459	6459	6459	6459	6459	6459	6459
Agricultural land	000 ha	2567	2568	2542	2538	2540	2540	2541	2521
- of which sown area	000 ha	1627	1621	1572	1426	1195	930	986	1003
- of which meadows and pastures ¹	000 ha	844	843	825	803	801	798	795	792
- sown area of agricultural land	%	63	63	62	56	47	37	39	40
- meadows and pastures ¹ of agr. Land	%	33	33	32	32	32	31	31	31
Forest land	000 ha	2830	2802	2830	2839	2870	2870	2881	2859

¹ estimates for meadows and pastures in 1996 and 1997

CSBL, LSIAE, EC-DGVI

250 000 hectares, require reconstruction and repair. Presently, the State finances only the maintenance of those drainage systems under the jurisdiction of the State. Landowners bear responsibility for care and maintenance of the drainage systems on private farms.

2.3. Arable Crops

Before independence, the arable sector's primary function was to supply the livestock sector with feed grains and compound feed. More than half of the arable land was put to fodder crops. However, domestic production of cereals was far below the level of consumption and large amounts of feed grains were imported, mainly from the FSU, to supply the livestock sector. The economic and political changes which followed liberalisation also affected arable production (table 8).

A significant feature of the changes in the demand and supply structure of the arable sector was the sharp decline of the production of fodder crops which, in 1997, accounted only for half of the area used for these crops in 1990.

While sugar beet, oils seed and vegetables represented a low percentage of the total sown area, with the absolute number of hectares decreasing over time, the increase of the total sown area from 1996 onwards resulted from an increase in the cereals area which in 1997 was 70 % of the pre-reform years. Potatoes remained broadly stable with some fluctuations reflecting short-term responses to the market situation. A more significant decline in the sown area used for potatoes could, however, be observed in 1997.

Arable production experienced a significant decline in output per hectare, which appears to have resulted mainly from the low level of input use. In the

Table 8: Crop Production (Sown Area)

	Units	1990	1991	1992	1993	1994	1995	1996	1997
Cereals	000 ha	675,40	648,30	696,70	693,60	486,30	408,40	446,20	482,70
Pulses	000 ha	10,50	9,00	6,70	2,80	2,80	3,00	3,60	4,70
Oilseeds	000 ha	1,90	0,70	1,30	1,70	2,20	1,10	0,80	0,90
Potatoes	000 ha	80,30	82,20	97,00	88,00	80,00	75,30	79,00	69,60
Vegetables	000 ha	10,80	12,70	19,10	18,60	17,50	17,50	15,70	13,20
Sugar beets	000 ha	14,70	14,60	24,80	12,10	12,00	9,50	10,00	10,90
Other industrial crops	000 ha	15,6	11	9,9	3,9	4,7	3,3	3,1	2,5
Fodder crops	000 ha	819,7	843,4	718	606,9	590,9	413,2	428,8	418,8
sown area (total)	000 ha	1627	1622	1572	1426	1194	930	986	1003

CSBL, LSIAE

Table 9: Fertiliser and Pesticide Use

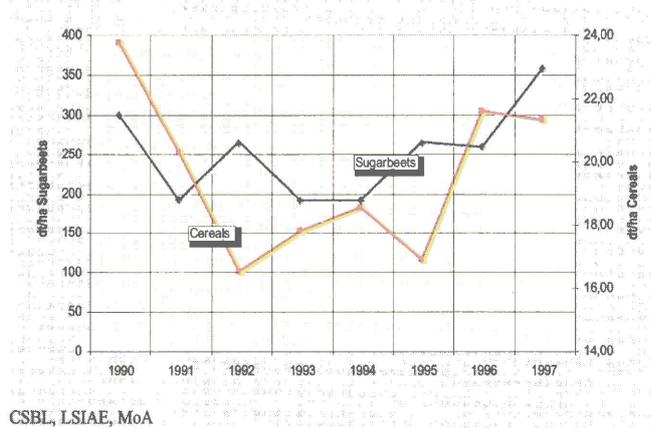
	Units	1990	1991	1992	1993	1994	1995	1996	1997
- N	kg/ha		76	58	35	23	12	15	
- P ₂ O ₅	kg/ha		60	51	19	13	5	6	
- K ₂ O	kg/ha		106	92	37	20	6	5	
Pesticides	kg/ha						22	49	
Sown area treated with pesticides	%	82	41	29	15	11	20	26	36

CSBL, LSIAE, MoA

years following independence the use of fertilisers and pesticides reached an extremely low level which only in the last two years started to resume while still being low (table 9 on previous page).

The low input use had certainly effects on the yield levels. Yields of cereals and sugar beets fell dramatically in the first half of the Nineties. Yields recovered to a higher level in the last two years, possibly influenced by the introduction of more intensive practices and also favourable weather conditions. Sugar beets yields were in 1997 even higher than in the pre-reform years (figure 3).

Figure 3: Development of Yields



2.3.1. Cereals

Cereals have been the most important arable crop, grown over the last decade on roughly half of the cultivated area. The total area sown with cereals did not contract very much until 1993, which was to some extent due to high cereal prices. In 1994, however, the area planted to cereals dropped significantly reflecting a general downward trend in the area used for arable crops.

This development was due to declining demand, the drop in cereal prices following the 1993 harvest, and the shocks resulting from the reconstruction of the farm sector. In addition, a large proportion of marginal land, which had been brought into production by the previous output oriented regime, was not used any more (table 10).

Wheat held in 1997 the biggest share (38 %) of total production, while being second ranking after barley as regards the area sown. The wheat area experienced, after a significant decline in the middle of the Nineties, a recovery up to a level of 157,0 thsd. ha in 1997.

Barley which was, in the pre-reform period, the most important cereal, was in 1997 grown on 192,3 thsd. ha which still represents the biggest share of the

Table 10: Types of Cereals in Total Cereals Production

	Units	1990	1991	1992	1993	1994	1995	1996	1997
Total cereals	000 ha	675,4	648,3	696,7	693,6	486,3	408,4	446,2	482,7
- Wheat	000 ha	141,5	71,5	128,6	169,1	94,6	109,6	149,2	157,1
- Rye	000 ha	130,7	69,2	131,4	187,6	62,7	40,4	56,4	62,3
- Barley	000 ha	308,0	398,5	350,4	275,3	266,5	203,3	178,4	192,3
- Oats	000 ha	82,4	92,7	69,4	48,5	54,0	45,6	53,6	59,2
- other	000 ha	12,8	16,4	16,9	13,1	8,5	9,5	8,6	11,8
Total cereals	000 t	1599,2	1314,8	1143,4	1230,7	896,1	689,0	960,8	1037,8
- Wheat	000 t	371,8	190,2	332,4	338,3	199,4	243,7	357,4	394,6
- Rye	000 t	323,6	145,8	295,0	340,7	113,4	71,3	112,9	133,5
- Barley	000 t	697,0	764,9	433,5	455,5	481,1	284,0	371,4	359,8
- Oats	000 t	176,1	177,2	60,0	73,7	88,9	73,2	101,4	116,6
- other	000 t	30,7	36,7	22,5	22,5	13,3	16,8	17,7	33,3

CSBL, LSIAE, MoA

cereals area (40 %). While barley shows, in terms of sown area, a steadily declining trend, an upward trend in production could be observed in 1996 and 1997, thanks to improving yields. In 1997, production of Barley reached 359,8 thsd. tonnes representing 35 % of the total cereals production.

Rye was grown in 1997 on only 13 % of the cereals area - less than half of its pre-reform level. Oats production recovered after a strong decline in the first years of the Nineties and shows an upward trend in the second half of the decade. The share of oats in total cereals production still remains the lowest of all cereals, reaching 12 % in 1997.

Looking at the aggregate of all cereals, an upward trend in the total sown area could be observed in 1996, which kept momentum in 1997 reaching 482,7 thsd ha. The area sown with cereals is, however, still 30 % below its 1990 value.

The average cereals yield contracted in the first half of the Nineties from 2,3 t/ha in 1990 to 1,8 t/ha in 1994. In last three years up to 1997, yields have

come back to the normal, with fluctuation due to weather conditions. Yield reached on the average of all types of cereals 2,14 t/ha in 1997. Total grain production recovered from a low level of 687.000 t in 1995 to 1.037.000 t/ha in 1997.

Both feed grain consumption and food use are still in decline. Per capita consumption of grain and grain products showed a modest increase up to the middle of the Nineties when bread seems to have substituted for more expensive commodities. After 1995, a lower level of bread consumption per capita could be observed. Total consumption declined at a higher rate than per capita consumption, which was mainly due to a downward trend in population (table 11).

While Latvia had been a net importer of cereals in the mid nineties, it had reached the position of self-sufficiency in 1997 (113 %). This resulted mainly from massive de-stocking in the livestock sector and the downward trend in cereals consumption. Grain imports seem to have a somewhat stable trend over time with fluctuations from year to year.

Table 11: Cereals Supply Balance

	Units	1990	1991	1992	1993	1994	1995	1996	1997
Area ¹	000 ha	675,4	648,3	696,7	693,6	486,3	408,4	446,2	482,7
Yield	t/ha	2,4	2,0	1,6	1,8	1,8	1,7	2,2	2,1
Production ¹	000 t	1599,2	1314,8	1143,4	1230,7	896,1	689,0	960,8	1037,8
Imports	000 t	482,0	464,0	498,0	8,0	48,4	54,4	238,2	76,1
Exports	000 t	-	-	0,4	59,0	67,9	24,4	11,8	16,2
Stock change ²	000 t	44,4	-142,0	-126,1	-321,0	-350,8	-326,1	246,4	178,8
Utilisation ²	000 t	2036,8	1920,8	1767,1	1500,7	1227,4	1045,1	949,7	928,6
Seed use ²	000 t	202,6	188,0	202,0	194,2	136,2	114,4	124,9	135,2
Feed use ²	000 t	1447,1	1352,4	1169,3	914,4	702,2	619,3	526,0	510,2
Human consumpt ²	000 t	387,1	380,4	395,8	392,1	389,0	311,5	298,8	283,2
- of which bread	000 t	357,5	350,2	365,3	361,6	359,2	281,4	268,9	255,4
- other processing	000 t	29,6	30,3	30,4	30,5	29,8	30,1	29,8	27,7
Bread per capita	kg	107,0	105,0	110,0	111,0	112,0	89,0	86,0	82,4
Consumpt. per capita	kg	144,8	142,6	148,9	150,5	151,6	123,1	119,4	114,2
Self-sufficiency	%	78,5	68,4	64,7	82,0	73,0	65,9	101,2	111,8

¹ pulses excluded;

² estimates (1994 for human consumption);

³ estimate based on livestock numbers

CSBL, LSIAE, MoA, EC-DG-VI.

2.3.2. Potatoes

After liberalisation, the production of potatoes increasingly switched to private subsidiary farms and household plots. In 1997, these farms accounted for almost 60 % of the total potato harvest, while the remainder is produced by individual farms.

Around one third of potato production is used for feed purposes. Under present conditions, many of these farms use labour with little or no opportunity costs, which implies that potato production, despite being labour intensive, covers the own needs of these farms and provide also some additional income. The statutory companies have consistently reduced their potato production.

Both the potato area and harvest remained stable in the first third of the decade with some fluctuations due to weather conditions. In 1997, the potato area reached its low at 69 thsd. ha. With yields remaining stable, the level of total production followed the decline in area and reached 843 thsd. t in 1997.

While seed potatoes have traditionally been an important export commodity, a strong decline in this field finally lead to a situation of no exports at all. On the consumption side, the use for feed and seeds

declined, whereas the food consumption per head saw a remarkably positive development, reflecting a substitution of more expensive types of food by potatoes due to low household incomes in the time of economic transition (table 12).

The downward trend both on the supply side and the demand side resulted in a self-sufficiency for potatoes in the range of 90 to 100 %.

2.3.3. Sugar

Production of sugar beet is concentrated in the southern districts with fertile soils. The area planted with sugar beet has been relatively constant, with an area between 12 thsd. and 15 thsd. ha, and which covered 11 thsd. ha in 1997. Sugar yields and sugar content were relatively low, especially in the first years of the reform period, while reaching again the pre-reform levels in 1997.

The exceptionally high sugar production of 462,6 thsd tonnes in 1992 followed a 70 % increase in the area planted, encouraged by a special promotion scheme which was offered in 1991 and which made sugar production very profitable. After a drop in production in the middle of the Nineties, following

Table 12: Potatoes Supply Balance

	Units	1990	1991	1992	1993	1994	1995	1996	1997
Area	000 ha	80,3	82,2	97,0	88,0	80,0	75,3	79,0	69,6
Yield	t/ha	12,7	11,5	12,0	14,5	13,1	11,5	13,7	12,1
Production	000 t	1016,0	944,0	1167,0	1272,0	1045,0	864,0	1082,0	843,3
Imports	000 t	18,0	1,0	62,0	0,5	0,5	2,1	3,0	3,0
Exports	000 t	24,0	1,0	1,0	1,6	0,2	0,0	0,2	0,1
Stocks change	000 t	-100,0	-94,5	107,6	129,9	-63,6	-189,2	0,0	-160,0
Utilisation	000 t	1110,0	1038,5	1120,4	1141,0	1108,9	1055,3	1084,8	1006,2
- seed use	000 t	321,2	338,4	397,3	380,3	320,0	340,0	316,0	278,0
- feed use	000 t	356,2	318,0	343,5	351,1	330,0	317,4	315,0	305,0
- human consumpt.	000 t	334,1	307,1	308,6	310,6	308,4	268,2	380,0	354,4
- other use	000 t	98,5	75,1	71,0	99,0	150,5	129,7	73,8	68,8
Consumption/capita	kg	125,0	115,0	116,0	119,0	120,0	106,0	152,0	143,5
Self-sufficiency	%	91,5	90,9	104,2	111,5	94,2	81,9	99,7	83,8

CSBL, LSIAE, MDA, EC-DG-VI;

a short period of phasing-out of the sugar support measures, their re-introduction in 1995 resulted in a recovery of sugar production during the last three years up to a level of 387 thsd. tonnes in 1997.

Sugar beet has been processed in three obsolete factories, which have been working below their processing capacity over the last few years. A major part of the sugar produced comes from imported raw sugar; its share in total production declined and fell below the level of sugar of Latvian origin in 1997. Thus, sugar produced from domestic sugar beet accounted for two thirds of internal consumption in 1997, whereas the lowest level had been 30 % in 1994.

As in the other Baltic countries, sugar consumption used to be rather high with 48 kg per capita in 1990 (EU 32,09 kg). After the significant drop in the middle of the Nineties, sugar consumption recovered slightly during the last two years. However, the level of 28 kg reached in 1997 is still significantly below the levels of pre-reform Latvia and that of the EU. A significant share of sugar was processed into alcohol and sold to Russia (table 13).

Due to the recovery in sugar production combined with a strong drop in total utilisation, Latvia reached a self-sufficiency of 71 % in 1997 which is above the target of 60 % set by the Latvian Ministry of Agriculture.

Table 13: Sugar Supply Balance

	Units	1990	1991	1992	1993	1994	1995	1996	1997
Area	000 ha	14,7	14,6	24,8	12,1	12,0	9,5	10,0	10,9
Yield (sugar beets)	t/ha	29,9	25,9	18,7	24,6	19,0	26,3	25,8	35,6
Production	000 t	439,1	377,9	462,6	298,0	228,2	250,0	257,8	387,5
Sugar (ref. equivalent)	(%)	11,2	11,0	10,8	11,9	11,3	11,3	13,5	12,6
Yield (sugar)	(to/ha)	3,4	2,8	2,0	2,9	2,1	3,0	3,5	4,5
Production (sugar)	000 t	49,3	41,5	50,1	35,5	25,8	28,3	34,8	48,8
Net imports and stock change	000 t	79,3	66,5	37,0	58,3	66,6	30,9	47,5	20,6
Utilization¹	000 t	128,6	108,0	87,1	93,8	92,4	59,2	82,3	69,4
Consumption per capita	kg	48,1	40,5	32,8	36,0	36,0	23,4	32,9	28,0
Self-sufficiency	%	38,4	38,4	57,5	37,8	27,9	47,7	42,3	70,3

¹ including sugar used in processed products

Table 14: Fruit and Berries Supply Balance

	Units	1990	1991	1992	1993	1994	1995	1996	1997
Area	000 ha	30,3	28,4	19,8	19,6	19,5	29,3	16,2	-
- of which productive	000 ha	25,0	22,9	18,0	17,9	18,0	21,8	12,6	-
Yield	dt/ha	9,4	43,6	36,9	65,9	18,9	35,2	24,4	-
Production (total)	000 t	23,5	99,9	66,5	117,9	34,1	76,8	30,8	-
Net imports	000 t	64,6	-1,1	23,9	12,6	99,5	-6,0	79,2	131,9
Utilisation	000 t	88,1	98,8	90,4	130,5	133,6	70,8	110,0	131,9
Consumption per capita	kg	33,0	37,0	34,0	50,0	52,0	28,0	44,0	53,4
Self-sufficiency	%	26,7	101,1	73,5	90,3	25,5	108,4	28,0	-

CSBL, LSIAE, MoA, EC-DG-VI;

2.3.4. Fruit and Berries

The main fruit grown in Latvia are apples and other tree fruits which account for roughly 90 % of total fruit production. Other fruits grown are strawberries, raspberries and black- and red currents. The area under fruit trees has declined in recent years, whereas the area planted to berries has increased, mainly due to the increased activity of the small household plots. Yields indicate much annual fluctuation, especially for tree fruits (table 14 on previous page).

The few commercial farms have in particular faced serious problems resulting in a contraction of this type of production. Household plots again play a major role in production but for growth in this particular part of agriculture, an efficient marketing chain would be an essential pre-condition. This for the moment is lacking. Otherwise climatic conditions, low labour costs and other commercial factors would favour the production of fruit and berries.

Fruit and berry consumption per capita increased significantly as compared to the pre-reform level and reached a high of 53 kg per capita in 1997. With per capita consumption increasing and considerable fluctuations in total yield due to weather conditions, the level of self-sufficiency fluctuated as well, reaching only 26 % in 1994 and exceeding 100 % in the years 1991 and 1995.

2.3.5. Vegetables

The cultivation of vegetables increased mainly on household plots and has helped to improve the nutrition of many families, whereas professional production on large-scale farms has dropped significantly in recent years. As a net effect, total production dropped to little more than two thirds of its pre-independence level (table 15).

However, this downward trend was accompanied by notable fluctuations between years. This development coincided with a steady increase of per capita consumption reaching 103 kg in 1997. As a result self-sufficiency dropped from a level formerly well above 100 % down to 57 % in 1997.

2.4. Livestock Production

Before independence and economic transition, livestock production was the most important part of Latvian agriculture, with a share of 66 % of the Gross Agricultural Output. Livestock production was closely linked to the markets of the FSU. A large proportion of animal feed cereals was imported at very low prices from the FSU. In return, an important part of the meat production was exported, mainly to the FSU. Approximately 25 % of total beef and pork production, 20 % of poultry production and more than 40 % of butter production were exported.

Table 15: Vegetables Supply Balance

	Units	1990	1991	1992	1993	1994	1995	1996	1997
Area (open field)	000 ha	10,8	12,7	19,1	18,6	17,5	17,5	15,7	13,2
Yield (open field)	dt/ha	142,0	151,0	124,0	148,0	128,0	122,0	108,0	107,0
Production (total)	000 t	169,4	209,2	251,4	285,0	233,0	224,0	179,5	146,5
Net imports	000 t	15,0	-25,1	-52,1	-100,0	-45,7	-87,4	63,2	109,2
Human consumption	000 t	184,4	184,1	199,3	185,0	187,3	136,6	242,7	255,7
Per capita consumption	kg	69,0	69,0	75,0	71,0	73,0	54,0	97,0	103,1
Self-sufficiency	%	108,9	113,6	126,2	154,0	124,4	164,0	74,0	57,3

CSBL, LSIAE, MoA, EC-DG-VI;

The livestock production has been dramatically affected by the transition process and fell to 48 % of the GAO in 1998. This has been a result of a sharp de-stocking trend which accelerated in 1994 (table 16).

After independence, leading to less strong commercial links with Russia, imported cereals became more expensive, leading to higher costs of production. Changes in farm structures, underdeveloped credit supply and lacking investment in family farms were factors contributing to the dramatic decline of total production of all meats. The stocks formerly

held by large-scale state farms could not be replaced by built-up capacities of private farms (table 17).

Total meat production fell from a 1990 level of 308,5 thsd. tonnes to 81 thsd. tonnes in 1997. The decline was most dramatic for beef and poultry which reached in 1997 only a fifth of their respective 1990 levels. Pig meat gained relative to other meats reaching 56 % of total meat production in 1997, while nevertheless dropping to a third of its 1990 production figure.

Table 16: Development of Livestock¹

	Units	1990	1991	1992	1993	1994	1995	1996	1997
Cattle	000	1472,0	1439,0	1383,0	1144,0	687,0	551,0	537,0	509,0
o.w. dairy cows	000	544,0	535,0	531,0	482,0	351,0	312,0	292,0	277,0
Pigs	000	1555,0	1401,0	1246,0	867,0	482,0	501,0	533,0	460,0
Horses	000	35,0	31,0	30,0	28,0	26,0	27,0	27,0	25,8
Sheep & goats	000	175,0	170,0	190,0	171,0	120,0	93,0	81,0	64,0
Poultry	000	10300,0	10400,0	9500,0	5400,0	4100,0	3700,0	4200,0	3800,0
o.w. laying hens	000	3900,0	3800,0	3500,0	2900,0	2300,0	2200,0	2300,0	2200,0

¹ as of 31st of December previous year
CSBL, LSIAE, MoA

Table 17: Development of Meat Production

	Units	1990	1991	1992	1993	1994	1995	1996	1997
Total meat ¹	000 t	308,5	296,4	246,5	192,5	136,0	122,8	85,4	81,4
Total meat	%	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0
Beef	%	40,6	44,5	48,7	55,6	50,1	38,3	35,8	33,9
Pigs	%	44,8	42,6	40,8	35,4	39,6	51,0	51,6	54,7
Sheep & goats	%	1,1	1,3	1,6	2,0	1,6	0,9	0,8	0,5
Poultry	%	13,1	11,2	8,6	6,6	8,4	8,8	10,2	9,3
Other meat ²	%	0,5	0,4	0,4	0,5	0,4	1,1	1,5	1,6
Beef	Index	100,0	105,4	95,9	85,5	54,4	37,6	24,5	22,1
Pigs	Index	100,0	91,3	72,7	49,3	38,9	45,3	31,9	32,2
Sheep & goats	Index	100,0	108,6	111,4	108,6	62,9	31,4	20,0	11,4
Poultry	Index	100,0	82,6	52,4	31,5	28,3	26,8	21,6	18,9
Other meat ²	Index	100,0	92,9	71,4	64,3	35,7	92,9	92,9	92,9
Total meat ¹	Index	100,0	96,1	79,9	62,4	44,1	39,8	27,7	26,4

¹ deviation from CSBL figures due to re-estimation of beef and pig figures by LSIAE;

² Estimate for "other meat" for 1996 and 1997;
CSBL, LSIAE, MoA, EC-DG-VI;

2.4.1. Milk and Dairy Production

In 1997, dairy production accounted for roughly one fourth of total agricultural output and half of the livestock part in GAO. In the pre-reform phase, milk had represented less than a fifth of GAO and around a third of the animal part in GAO. While gaining in terms of relative share, milk production has experienced difficulties in the reconstruction process. Between 1990 and 1997, total milk production has been reduced to half of its pre-reform level. Production shows, however, a certain recovery in 1997 with a level of 986 thsd. tonnes.

The decline in cow numbers, which continued up to 1997, was outweighed in recent years by increasing yields per cow, resulting mainly from the selection of more productive cows in the de-stocking phase. From a level of 2400 kg per cow in 1993, yields increased by almost 50 % to 3559 kg per cow in 1997, and thereby exceeded even the pre-reform level.

As a result of the privatisation of the large-scale state farms, dairy production was subject to a major shock and many of the large cow herds were dissolved. Between 1990 and 1997, the percentage of

milking cows kept in small units (typically with only one or two animals), increased from 30 % to 75 %.

Difficulties in the processing industry resulting in delayed payments (up to six months) added to the problems making milk production less profitable for commercial farming. Another factor was declining producer prices: Over the last five years, the producer price has fallen in real terms to about half of its pre-independence level (table 18).

As cow herds contracted, the average milk quality deteriorated, mainly due to the unavailability of cooling equipment on the individual farms. Therefore, the percentage of milk collected declined. On the other hand, the on-farm use of milk on the other hand grew in importance.

Before independence, more than 90 % of the milk produced was collected and processed. An important share of dairy products, especially butter, was exported to the former Soviet Union. In 1990 about 25.000 t of butter were exported to the former Soviet Union. Trade volumes deteriorated significantly after independence.

However, trade remains of central importance for the dairy sector. With a significant decline in per

Table 18: Milk Supply Balance

	Units	1990	1991	1992	1993	1994	1995	1996	1997
Cows ¹	000	544,0	535,0	531,0	482,0	351,0	312,0	292,0	277,0
Yield per cow ²	kg	3480,1	3254,2	2784,4	2400,0	2852,1	3037,5	3159,9	3558,8
Milk production	000 t	1893,2	1741,0	1478,5	1156,8	1001,1	947,7	922,7	985,8
Net imports and stock change	000 t	-527,0	-359,4	-199,6	57,6	134,3	107,0	86,1	-47,5
Utilisation	000 t	1366,2	1381,6	1278,9	1214,4	1135,4	1054,7	1008,8	938,3
- feed use at farms	000 t	152,7	261,1	295,8	289,2	250,2	227,5	230,8	216,7
- human consumption	000 t	1213,5	1120,5	983,1	925,2	885,2	827,2	778,0	721,6
Consumption per capita	kg	454,0	420,0	370,0	355,0	345,0	327,0	311,0	291,0
Self-sufficiency	%	138,6	126,0	115,6	95,3	88,2	89,9	91,5	105,1

¹ end of the previous year;

² calculated on the basis of milk production and cow number
CSBL, LSIAE, MoA, EC-DG-VI

capita consumption of cheese from 4,8 kg to 2,5 kg between 1992 and 1997, exports accounted in 1997 for almost half of total production. Similarly, the decline in domestic butter consumption led in 1997 to an export share of total production of almost 50 % (table 19).

While progress has been made, product quality in many cases does not meet Western standards, so that the opportunities for new markets cannot easily be found. This could become an even more serious impediment to further development of the dairy sector, given that for milk as whole, self-sufficiency has been reached while being even higher for cheese and butter.

The milk and dairy sector also suffered from the difficult general economic situation with a declining per capita consumption together with low milk prices. Per capita consumption of milk fell from a comparatively high level of 454 kg in 1990 to 291 kg in 1997. In addition, internal consumption of butter decreased due to strong competition from cheaper margarine. Although, in 1997, butter production reached a level of less than a quarter of its 1992 production, self-sufficiency was 160 %.

2.4.2. Beef

Beef meat production has experienced dramatic changes. In the pre-reform period, it contributed about a third of the gross output in livestock production. Currently it turned to hardly more than a by-product of milk-production, with a contribution to the livestock GAO of not more than 10 % in 1997. As regards the production system there has always been a close relationship to milk production since special breeds for meat production have rarely been used.

The cattle inventory showed a decline from about 1,47 million animals in 1990 to almost a third, i.e. 509 thsd. animals, in 1997. At the same time, the proportion of dairy cows in the herd increased from 37 % in 1990 to 54 % in 1997.

Total production of beef and veal was at a level of 125 thsd. tonnes in 1992, with exports accounting for half of total production. Exports increased in the following years when the high number of slaughtered animals due to de-stocking could not be absorbed by the domestic market. Until 1997, total production experienced a dramatic contraction, falling to only 27,6 thsd. tonnes (table 20).

Table 19: Dairy Supply Balance

	Units	1990	1991	1992	1993	1994	1995	1996	1997
Cheese production	000 t	24,0	21,3	17,4	13,7	9,3	9,4	8,9	10,7
Net imports and stock change		-12,2	-9,0	-7,3	-4,6	-1,1	-1,3	-1,1	-2,8
Utilisation	000 t	11,76	12,27	10,10	9,12	8,21	8,09	7,76	-7,94
- consumption per capita	kg	4,4	4,6	3,8	3,5	3,2	3,2	3,1	3,2
Self-sufficiency	%	204	174	172	150	113	116	115	135
Butter production	000 t	43,6	38,3	31,8	18,9	9,8	6,5	7,3	7,6
Net imports and stock change	000 t	-24,1	-18,8	-17,2	-5,1	1,2	1,3	-1,0	-2,9
Utilisation	000 t	19,5	19,5	14,6	13,8	11,0	7,8	6,3	4,7
- consumption per capita	kg	7,3	7,3	5,5	5,3	4,3	3,1	2,5	1,9
Self-sufficiency	%	223	197	218	137	89	83	117	161
SMP production	000 t	8,9	6,3	5,5	2,8	0,8	0,7	1,8	3,1

CSBL, LSIAE, MoA, EC-DG-VI;

Domestic consumption dropped sharply and was at 14,9 kg per capita in 1997, only 60 % of the pre-independence level. The problems evident in dairy production affected also the production of beef meat. With a decline in domestic consumption and export possibilities, new market outlets were difficult to establish and due to the inadequate sanitary conditions of most slaughterhouses, substantial exports to the EU do not appear possible for the moment.

Despite the fact that beef has been the only meat to experience a continuous increase in real prices, production fell more steeply than demand. As a result, beef production fell to a level of self-sufficiency of 76 % which marks a radical change as compared to the former high level of 266 %, recorded in 1991.

2.4.3. Pork

Before independence pig meat production was concentrated on large-scale farms. With an annual production of about 138 thsd. tonnes in 1990, pig meat production even exceeded beef meat output. But developments from 1992 onwards witnessed a sharp

decline in production. Increasing prices for pig meat and lower prices for cereals gave relief in 1995 when production increased by 16 %. However, in 1996 the decline continued and stabilised only in 1997 at a production level of 44,5 thsd. tonnes which represents only a third of the pre-independence output.

The main problem of the transition process was the deterioration of production capacities in units of a competitive size. Pig production moved from state farms and collective farms to individual farms and household plots which increased their share in stocks from 13 % in 1990 to 60 % in 1997. Pig production also had to face the handicap of relatively high cereal prices, which could not be passed over by sufficiently high pig meat prices. Thus, the profitability of pig production has deteriorated. The inadequacies of the processing industry added to the problems and still appear to be an obstacle to further progress.

An important number of pigs, kept on household plots, do not appear on the market. They are kept for on-farm consumption or for direct marketing. Official statistics may tend to underestimate this part of the total production (table 21 on next page).

Table 20: Beef Supply Balance

	Units	1990	1991	1992	1993	1994	1995	1996	1997
Cattle number	000	1472,0	1439,0	1383,0	1144,0	687,0	551,0	537,0	509,0
- of which dairy cows	%	37,0	37,2	38,4	42,1	51,1	56,6	54,4	54,4
Imports live	000	0,7	0,1	0,0	0,7	4,5	0,7	0,1	0,8
Exports live	000	11,9	9,8	11,8	22,0	0,1	0,0	0,0	0,0
Average carc. weight	kg	550,5	550,6	612,7	700,1	382,4	217,3	205,5	185,3
Slaughters^{1,2}	000	227,2	239,4	195,9	152,8	178,1	216,3	149,0	149,0
Production¹	000 t	125,1	131,8	120,0	107,0	68,1	47,0	30,6	27,6
Net imports and stock change	000 t	-62,6	-82,8	-74,9	-57,6	-25,6	-6,9	7,8	9,3
Utilisation¹	000 t	62,5	49,0	45,1	49,4	42,5	40,1	38,4	36,9
- Consumption per capita ¹	kg	23,4	18,4	17,0	19,0	16,6	15,8	15,4	14,9
Self-sufficiency	%	200,0	269,1	266,3	216,5	160,3	117,3	79,7	74,8

¹ years 1990-1995 estimated by LVAEI according to the methodology used since 1996;

² years 1996-97 estimated by LVAEI on the basis of data from MoA and CSBL

CSBL, LSIAE, MoA, EC-DG-VI.

On the demand side, a continuous decline in per capita consumption could be observed. In 1997, consumption reached 26,6 kg per capita, only 70 % of the pre-independence level. At the same time, exports declined sharply and nearly ceased after 1995.

It appears that adverse supply side factors had a more significant impact on the development of pig production than the demand side. In spite of decreasing consumption, self-sufficiency fell from a 1991 level of 140 % to 67 % in 1997. Latvia became a net importer, mainly from Denmark and Germany.

2.4.4. Poultry

Poultry production has witnessed the sharpest decline in production in recent years. In 1997, production of poultry meat reached with 7,6 thsd. tonnes, only a fifth of pre-independence level. Its share in livestock GAO accounted only for 4,5 % in 1997 (table 22).

Production of poultry meat used to be concentrated in a few very large-scale state enterprises which accounted, in 1990, for 90 % of the stock, and - after their transformation into private statutory companies - still hold a share of 70 %. Apart from produc-

Table 21: Pork Supply Balance

	Units	1990	1991	1992	1993	1994	1995	1996	1997
Pig number	000	1555,0	1401,0	1246,0	867,0	482,0	501,0	533,0	460,0
Imports life	000	0,1	0,0	0,0	7,0	3,6	0,3	0,0	0,9
Exports life	000	11,7	14,0	7,0	0,9	0,0	0,0	0,0	0,0
Slaughters¹	000	1741,3	1528,8	1297,5	807,1	648,7	738,2	525,0	530,1
Average carc. weight	kg	79,4	82,5	77,5	84,4	82,9	84,8	84,0	84,0
Production (estimated)	000 t	138,2	126,2	100,5	68,1	53,8	62,6	44,1	44,5
Net import and stock change	000 t	-35,6	-35,9	-25,9	-1,2	3,8	-3,7	26,4	21,5
Utilisation²	000 t	102,6	90,3	74,6	66,9	57,6	58,9	70,5	66,1
- kg/capita*)	kg	38,4	33,8	28,1	25,7	22,4	23,3	28,2	26,6
Self-sufficiency	%	134,6	139,8	134,7	101,8	93,4	106,3	62,5	67,4

¹ years 1996-97 estimated by LVAEI on the basis of data from MoA and CSB;

² years 1990-1995 estimated by LVAEI according to the methodology used since 1996 CSBL, LSIAE, MoA, EC-DG-VI

Table 22: Poultry Supply Balance

	Units	1990	1991	1992	1993	1994	1995	1996	1997
Poultry numbers	Mio	10,3	10,4	9,5	5,4	4,1	3,7	4,2	3,8
Total slaughters	Mio	29,0	25,0	18,5	10,1	8,1	7,1	5,5	4,2
Average carc. weight	kg	1,4	1,3	1,1	1,3	1,4	1,5	1,6	1,8
Production	000 t	40,3	33,3	21,1	12,7	11,4	10,8	8,7	7,6
Net imports and stock change	000 t	-12,7	-3,5	-2,6	-1,0	-0,6	2,6	9,3	11,1
Utilisation	000 t	27,6	29,8	18,5	11,7	10,8	13,4	18,0	18,7
Consumption per capita	kg	10,3	11,2	7,0	4,5	4,2	5,3	7,2	7,6
Self-sufficiency	%	146,1	111,8	114,1	108,3	105,8	80,9	48,3	40,5

CSBL, LSIAE, MoA, EC-DG-VI

tion for on-farm use, small-scale farms do not play a major role in poultry production and, given the economies of scale in this sector, are not likely to assume a major role in poultry meat production.

On the demand side, market prospects improved due to a recovery in per capita consumption which increased, after a sharp drop in 1992 to a level of 7,6kg in 1997. Total consumption reached 18,75 thsd. tonnes in 1997. This demand was mainly met by imports putting severe competitive pressure on domestic production. In 1997, increased consumption together with low domestic production resulted in a self-sufficiency rate of 41 %, while in 1990, with a level of consumption a third higher than in 1997, self-sufficiency had been 146 %.

2.4.5. Eggs

Egg production has a higher share than poultry meat within GAO. In 1997, its proportion in livestock GAO was 12 %. Also egg production experienced a sharp decline in output. Total production dropped to 464,7 million eggs in 1997 - half of its pre-independence level. It has to be noted, however, that egg production experienced a positive development over the last four years. In 1997, production was 30 % higher than in 1994 when production hit its lowest level (table 23).

As with poultry, egg production used to take place in large sized units of the state sector; the share of such units fell from 90 % of total production in 1990 to 75 % in 1997. Also, in the case of egg production, the considerable potential for economies of scale makes it less probable that family farms would take over a considerable part of production, unless investment can be attracted into commercial size units.

On the demand side, per capita consumption fell continuously and led together with the decline in population to a drop in total consumption which accounted in 1997 for only 65 % of the pre-independence level. Due to an even steeper decline in production up to 1994, self-sufficiency reached 68% in that year, down from a level of 118 % in 1990. Self-sufficiency was again at 104 % in 1997.

2.4.6. Sheep and Goats

In the Soviet era, sheep and goat meat had already a limited importance in meat production. In 1992, for example, total production did not exceed 4000 t per year. Since then, a steady decline could be observed to an insignificant level of 400 t in 1997.

Private farms and household plots accounted, traditionally, for the major part of sheep and goat meat output. In 1990, this farm type retained two thirds of the stocks and on-farm use has increased signifi-

Table 23: Egg Supply Balance

	Units	1990	1991	1992	1993	1994	1995	1996	1997
Laying hens ¹	Mio	3,9	3,8	3,5	2,9	2,3	2,2	2,3	2,2
Eggs per hen ²	piece	210,0	201,0	172,0	135,0	154,0	192,0	205,0	210,0
Production	Mio	818,9	760,6	595,5	389,0	359,9	421,0	470,0	464,7
Production	000 t	51,2	47,5	37,2	24,3	22,5	26,3	29,4	29,0
Net imports	000 t	-7,9	-8,9	-1,8	9,9	10,5	7,5	1,4	-1,1
Utilisation	000 t	43,3	38,7	35,4	34,2	33,0	33,8	30,8	27,9
Consumption per capita	kg	16,2	14,5	13,3	13,1	12,9	13,4	12,3	11,3
Self-sufficiency	%	118,3	122,9	105,2	71,1	68,1	77,8	95,4	104,1

¹ estimate, calculated from total production;

² estimate for 1997;

CSBL, LSIAE, MoA, EC-DG-VI

cantly since. Therefore, sheep and goat meat can be considered as having some importance only in terms of on-farm consumption, a fact which makes it very difficult to cover this sector by official statistics.

As compared to other meats, per capita consumption is on average very low. In 1997, a level of 0,16 kg was reached which represents not even 10 % of the corresponding level of 1990 (table 24).

The hypothesis that sheep and goat meat is mainly relevant in the context of on-farm consumption is, in addition, supported by the fact that sheep and goat meat does not play a role in agricultural trade, with a level self-sufficiency remaining stable around 100 %.

2.4.7. Forestry

Forests cover 44 % (2,88 million ha) of Latvia, two thirds of which are conifers, mainly pine. The forest area increased significantly in the Nineties as the

agricultural area was reduced. The timber is mainly used for the paper and construction industries. Modern domestic manufacturing capacities, such as paper-mills and sawmills, are only in the course of being established. Wood and wood products represent the biggest group of exports, which reached in 1996 about a third of total exports.

50 % of the forest area remains state property. Many of the newly established individual farms have an important share of forestland, which provides them with both, heating material and the possibility of receiving some additional income (table 25).

The forest sector has a high potential that could be mobilised relatively easily. In the last few years, the timber harvest has markedly increased. In 1997, 9 million m³ (about 3,1 m³/ha) were cut as compared to only 4,4 million m³ (about 1,6 m³/ha) in 1991. The 1997 figure may be considered having reached the limit of increment. For the future economic development of Latvia, the forestry sector and its related industries have a significant potential.

Table 24: Sheep and Goats Balance

	Units	1990	1991	1992	1993	1994	1995	1996	1997
Sheep & goats	000	175,0	170,0	190,0	171,0	120,0	93,0	81,0	64,0
Total slaughters	000	127,0	115,3	139,6	130,2	80,4	44,0	31,8	18,2
Average carcass weight	kg	27,6	33,0	27,9	29,2	27,4	25,0	22,0	22,0
Production	000 t	3,5	3,8	3,9	3,8	2,2	1,1	0,7	0,4
Net imports	000 t	n.a.	n.a.	n.a.	n.a.	0,0	0,0	0,0	0,0
Utilisation	000 t	3,5	3,8	3,9	3,8	2,2	1,1	0,7	0,4
Consumption per capita	kg	1,3	1,4	1,5	1,5	0,9	0,4	0,3	0,2
Self-sufficiency	%	100,0	100,0	100,0	100,0	100,0	100,0	97,2	99,5

CSBL, LSIAE, MoA, EC-DG-VI

Table 25: Forest area and Fellings

	Units	1991	1992	1993	1994	1995	1996	1997
Forest area	thsd. ha	2802,0	2830,0	2839,0	2870,0	2881,0	2858,0	2884,0
Fellings	thsd. m ³	4392,2	4014,6	4757,2	5730,0	6885,7	6763,6	8920,0
Yield per ha	m ³	1,5675	1,41859	1,6757	1,9965	2,39004	2,3666	3,09293

CSBL, EC-DG-VI

2.5. Agricultural trade

The agricultural and food processing sector accounts for a significant share of the foreign trade turnover of Latvia. Traditionally, Latvian agriculture produced large surpluses of dairy products, fish, eggs and meat that were exported mainly to the former Soviet Republics, in particular, to Russia. The value of exported food products amounted to roughly 25 % of total export value, when agro-food output was at its peak. However, this production was dependent on substantial imports of subsidised animal feed, grain, fertilisers, plant protection products and machinery, mainly from the FSU. Following liberalisation, trade patterns changed dramatically. Over the last 5 years, Latvia changed from a net-exporter of agricultural commodities to net-importer (figure 4).

A major factor influencing trade patterns resulted from the fact that, after independence, imported animal feed from Russia had to be paid for at world market prices. Livestock production became more expensive and exports to Russia were less competitive.

Consequently, in the period 1990-1994, livestock exports and cereals imports dropped significantly. Already in 1994, for a time, Latvia actually became a net importer of meat and dairy products. Despite

the recovery of agricultural exports after 1994, the trade deficit in agricultural commodities increased steadily.

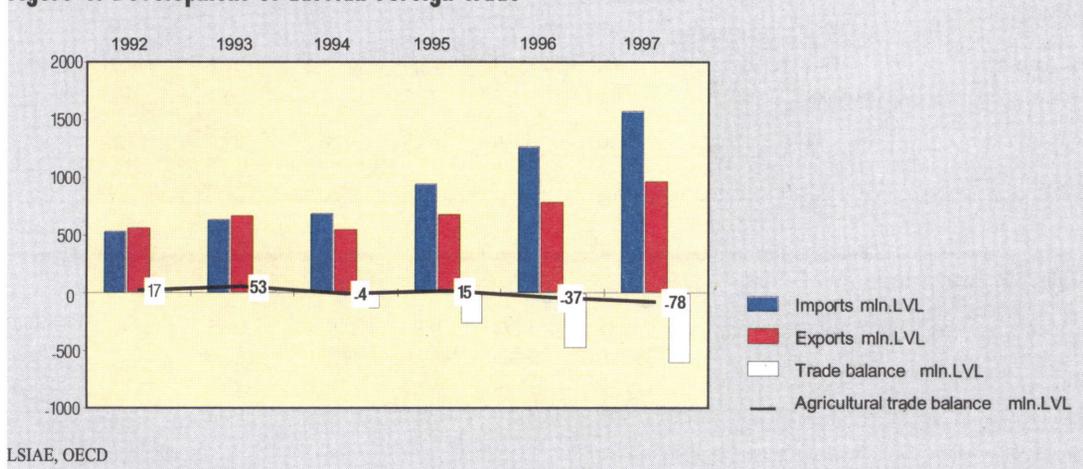
The total import volume of agricultural products in 1997 was LVL 219,5 million, an increase of 28 % as compared to the 1996 figures. Exports were at LVL 141,1 million and increased in comparison with 1996 by 5 %. The trade deficit in agricultural commodities amounted in 1997 to net imports of a value of 78 million LVL.

With respect to trade statistics, it has to be noted, however, that the Ministry of Economics counsels prudence on the issue of the comparability of export and import data, over the years. Also, the Ministry of Agriculture reports significant volumes of uncounted agricultural and food stuff exports and imports.

2.5.1. Analysis by Category of Product

Exports of livestock products dropped dramatically in the early 1990s. Some recovery could be observed, however, from 1995 onwards, specifically for processed products including dairy products. When, by 1997, the value of total agricultural exports had doubled as compared to the 1994 level, processed products represented the major part of

Figure 4: Development of Latvian Foreign Trade



agricultural exports. The share of the crop production remained insignificant (table 26).

Exports of finished fish products and canned fish constituted more than half of total exports of food products in 1996. This share declined again, however, to little more than a third in 1997. Milk and milk products gained an export share of around 14 per cent in 1997. Confectionery accounted for 7 %.

The rise in imports of food products gathered momentum in 1995, notably for products such as fruit, sugar, tropical beverages and cocoa. By the end 1997, it was estimated that grain imports, which had in the past accounted for one quarter of total agro-food imports, had fallen to around 3,7 % of the total value. The main imports were alcoholic

beverages, juices and mineral water, fish, sugar, and fruit and vegetables. Traditional export commodities like meat and live animals reached a remarkable share of 5 %.

2.5.2. Analysis by Partner

The main destination of Latvian agricultural exports has been the NIS, mainly Russia, Belarus and the Ukraine. The Russian and especially the St. Petersburg regions remain an important market, since both the difficulties in attaining EU production standards and the longer distances to large Western markets make a significant shift of trade flows towards the EU difficult.

Table 26: Structure of Agricultural Trade

	1992	1993	1994	1995	1996	1997
Exports (total) in million LVL	52,6	90,0	71,1	112,9	134,7	141,3
Which includes						
– Dairy produce, eggs, honey	15,8	18,2	6,9	8,7	14,7	21,8
– Prep. of meat, fish a. o.	6,4	15,4	23,7	37,9	54,4	46,2
– Meat and edible meat of tal	7,4	13,3	1,4	0,7	0,6	2,0
– Beverages, spirits and vinegar	5,5	9,4	7,2	9,5	7,4	10,4
– Tobacco and manuf. tob. substitutes	2,7	2,9	3,9	4,4	2,0	0,7
– Sugars and sugar confectionery	2,1	3,0	4,1	10,6	11,6	10,2
– Cocoa preparations	0,5	1,9	4,0	2,9	4,6	5,1
– Fish & other aquatic inv.	0,8	2,6	7,1	21,2	20,6	11,3
– Preparation of vegetables, fruit, nuts	1,2	2,6	1,2	5,9	6,0	10,5
– Live animals	3,1	2,3	0,7	0,4	0,5	0,4
Imports (total) in million LVL	35,4	37,1	74,6	98,4	172,0	219,5
Which includes						
* Edible fruit and nuts	1,8	3,5	7,9	9,5	12,4	14,5
* Beverages, spirits and vinegar	4,1	3,3	9,2	16,0	21,6	24,4
* Sugars and sugar confectionery	7,1	3,3	9,4	10,9	17,8	16,1
* Coffee, tea, mate and spices	2,1	3,0	2,1	4,8	7,8	13,1
* Prep. of vegetables, fruit, nuts	1,2	2,9	3,8	4,0	7,0	13,1
* Fish & other aquatic inv.	0,2	2,6	5,9	8,5	14,2	20,9
* Cereals	9,3	0,6	2,3	4,1	23,9	7,7
* Flour products	0,4	1,4	3,2	2,7	4,1	4,3
* Animal or veget. fats & oil, waxes		1,3	2,9	6,8	12,1	16,7
* Tobacco and manuf. tob. substitutes		1,3	3,0	2,3	6,3	11,9
* Meat	0,1	1,1	3,0	2,4	6,8	9,7
* Live animals		0,7	5,2	1,7	0,8	1,8
* Milk products		0,0	0,0	1,8	1,5	3,7

CSBL, LSIAE, OECD

While the share of the NIS was continuously increasing - up to 76 % in 1995 - other countries have gained as well over the recent years. The second ranking share of exports went to the CEECs which, after having plunged to 9,2 % in 1995, gained at the expense of exports to the NIS and reached 15 % in 1997. Both the NIS and the CEECs have accounted together for a stable proportion of 80 % of Latvian agricultural exports.

The third ranking export destination is the EU which accounted for 15 % of agricultural exports in 1996 and 11,2 % in 1997 (table 27).

As far as imports of agricultural and food products are concerned, the import share of the NIS fell sharply from 50 % in 1990 down to 4,3 % in 1997. The Member States of the European Union have become the largest partners in terms of Latvian agricultural imports. In 1997, the EU share accounted for 53 %. The CEECs have become the second ranking source of agricultural imports. Showing high fluctuations in recent years, their share more than doubled between 1990 and 1997.

The trade balance for the first nine months of 1997 was negative with all EU Member States and, in total, amounted to LVL 100 million. A comparison of exports in the first nine months of 1997 and 1996 reveals that trade with Austria, Belgium, France, UK and the Netherlands shows growth. The trade

balance with the NIS is positive; it totalled LVL 86,4 million, an increase of LVL 9,7 million, compared with the same period in 1996.

2.6. Transition to Private Ownership in Primary Production

2.6.1. Privatisation of Agricultural Land

During the Soviet era, land and other production assets were nationalised. Agricultural production was carried out in large-scale sovhoses (state farms) and kolhoses (collective farms) which by the 1980s averaged 3 000 ha to 4 000 ha and had a high level of vertical integration.

There was, however, a strong tradition of farm production on small household plots, both for the market and domestic consumption. Members of collective farms were allowed to farm small personal plots of around 0,5 ha. In fact, the "Law on Individual Farms", established in May 1989, before the economic reforms, encouraged private family farming, but without stating ownership to the land.

In 1990, it has been estimated that Latvian household plots produced 62 % of all potatoes, 45 % of all vegetables, 27 % of all meat and 29 % of all liquid milk.

Table 27: Destination of Agricultural Trade

	1992	1993	1994	1995	1996	1997	1992	1993	1994	1995	1996	1997
	Exports in million LVL						Imports in million LVL					
Total	60,6	100,9	71,1	112,9	134,7	141,2	40,8	41,1	74,6	98,4	171,4	219,6
OECD	10,1	14,2	8,3	13,9	22,6	18,8	14,4	19,5	37,0	63,0	111,8	154,3
<i>of which:</i>	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
– EU	7,5	9,6	5,7	12,2	19,9	16,3	10,7	14,8	27,9	49,0	87,9	116,4
– OECD-CEECs	0,0	0,0	0,0	1,0	1,7	1,8	0,0	0,0	0,0	0,0	12,8	16,0
– North America	0,2	0,5	0,3	0,7	0,8	0,6	1,2	0,3	0,8	1,3	2,6	5,7
– Other OECD	2,4	4,1	2,4	0,0	0,1	0,1	2,5	4,4	8,2	12,8	8,5	16,3
CEECs	12,0	20,0	8,9	10,6	12,8	22,4	2,9	7,1	15,3	14,2	18,4	36,6
NIS	36,1	66,1	53,5	86,1	96,6	96,0	19,3	10,3	8,3	8,2	19,9	9,5
Other	2,4	0,5	0,2	2,3	2,7	4,2	4,1	4,1	14,1	12,9	21,2	19,2

CSBL, LSIAE, OECD

Economically, however, the household plots remained dependent on the large-scale farms and, for the bulk of their production, relied on their marketing channels, and also, machinery and the supply of other inputs.

When Latvia gained independence in 1990/91, it was decided by the Latvian Supreme Soviet that former owners or their heirs should have the right to restitution of, or compensation for, all property seized during the Soviet era. A series of laws were subsequently enacted, and the general policy goals were to put in place a system based on private property rights, and a market-oriented agro-food sector, and to create a farm structure based on the family farm system which had obtained in Latvia prior to the Soviet annexation of 1940.

The "Law on Land Reform", adopted on 21 November 1990, aimed to eliminate the Soviet system. It set up the legal conditions and administrative framework to restore rightful ownership to the land nationalised during the Soviet period.

The "Law on Land Privatisation in Rural Areas" adopted on 9 July 1992, provided the framework for the second phase of land reform. During this second stage, which officially commenced on 1 January 1993, formal title to land was to be recorded on the basis of land surveys, so as to facilitate the operation of a proper land market. This necessitated further legislation to establish both the State Land Surveyors's Service, and the Land Title Register. The first land title was registered on 31 May 1993.

On 5 August 1997, the Cabinet of Ministers adopted measures concerning the completion of the land reform. On 30 November 1997, the Saeima passed a law "On land reform completion in rural areas", which came into force on 27 November. This law retained the deadlines for submission of applications of land claims laid down by the Cabinet and stipulated that the deadline for decision making on land allocation in permanent use shall be a month after

the date of the enactment of the law (27 December 1997).

By 1 February 1998, there were 129 872 landowners registered in the State land cadastre with a total land area of 1 965 572 ha. These include 98 189 landowners registered in the Land Book (the Legal Register of Land Holdings) with a total land area of 1 472 636 ha. So, out of 3,63 million ha in private ownership, 55 % was registered in the State land cadastre and 41 % in the Legal Register.

Several problems arose in the process of land reform and privatisation: Firstly, there were conflicts between the demands filed under land reform legislation enacted in the post-independence period for restitution of former land owners or their heirs and the claims of new users who had started to work the land under the "Law on Peasant Farming" of 1989, the first tentative effort to encourage private farming.

Secondly, due to differing legal measures on land reform and disposal of non-land assets, privatisation of land did not take place in parallel with the privatisation of other assets. Consequently production units were often left without land and could not be operated properly.

According to the State Land Service, land holding registration in the State Cadastre is envisaged to be completed in 1998. The question of the legal register of land holdings is more complicated. The delays in land titling are caused by a slow legal process in settling claims, absence of standardised land book registration procedures, inadequate staffing, and high fees for registration and titling.

In order to speed up the land register reform, it was seen important to elaborate the State Land Service development concept from January 1998 onwards. The registration system is being elaborated with the help of a Phare project "Technical assistance for land registration and privatisation in Latvia".

The delays in land titling seriously constrain land transactions. As a consequence, a functioning land market has not really evolved yet. There is a speculative reluctance to sell land on the side of those who received land in the restitution process and don't want to farm the land. In addition, the economic perspective in Latvia is not as yet favourable to the stimulation of the land market. An emerging land lease market provides a temporary solution for farm consolidation and for the more efficient farmers to increase their farm size. In 1996, 27,2 % of the agricultural land was not used. The unused land was mainly low productivity land owned by the State and brought into production by the output-oriented planners of the previous regime.

2.6.2. Structure of Land Ownership

With the land privatisation process winding up, the main attention is now focused on long-term land management. Land division has resulted in 95 000 family farms with an average farm size of 23,6 ha; this includes on average 13,7 ha of agricultural land and 7,7 ha of forest. Additionally, there are 173 000 household plots with an average size of 7,9 ha, including 4,9 ha of agricultural land and 2,1 ha of forests. There are 474 agricultural enterprises and statutory companies and 81 specialised State farms which together own around 5 % of the total agricultural land.

Land reform resulted in big collective and State farms transforming into a large number of comparatively small private farms. As yet, many existing private farms do not participate actively in the market. As at least one third of them does not possess the necessary production facilities on this land, they lease the land to those farmers who are already established and who possess the necessary machinery.

Many farms are oriented towards food production for family needs. Although existing farms partly help to solve employment and social problems in rural areas, the competitiveness of many farms in future may be doubtful (table 28).

It remains difficult to make a clear distinction between those farms producing for the market and those engaged in producing for own consumption. In 1996, some 40 % of agricultural land were operated by farms which were not producing for the market but which were dependent on off-farm sources of income.

The creation of family farms benefited from parts of the capital equipment and education from the former system of collective farms. However, understandably, many former collective farm workers lack entrepreneurial skills and market understanding.

Table 28: Development of Number and Land¹ of different Types of Farms

Farm Type	Number of Farms ²		Area (thsd ha) ¹		Percentage of Land		Average Size (ha)	
	1989	1997	1989	1997	1989	1997	1989	1997
State Farms	241	81	1.574	28	41%	1%	6532,4	340,5
Collective Farms	363	-	2.075	-	54%	0%	5980,2	-
Corporate Farms	-	474	-	147	0%	4%	-	309,3
Family Farms ³	3931	94905	66	2.239	2%	59%	16,7	23,6
Household Plots ³	250172	173280	96	1.409	3%	37%	0,4	8,0

¹ excluding state forests and non-agricultural land users;

² as of beginning of year shown;

³ in 1989 these lands are included also in area of collective and state farms;

CSBL, LSIAE, MoA, EC-DG-VI

2.6.3. Farm Organisations

Liberalisation of the economy and of political and social life was accompanied by a reconstruction of farm organisations, aiming at political representation and the provision of services to their members. The Latvian Farmers' Federation (LZF) was founded in 1991 and is one of a number of producer organisations. It has approximately 20 000 members. It represents regional farmers' organisations, farmer co-operatives, co-operative organisations and associations, as well as other farmer organisations, in the whole of Latvia.

The LZF's territorial structure includes 254 parish farmer organisations and 26 regional farmer organisations. The LZF's aims and commitments are to represent its members in political decision making concerning the development of agriculture and to ensure that their members' legal rights are defended. LZF aims to provide proposals and ideas to Government, institutions and other organisations to favour the development of the rural economy and to promote family farming.

With view to improve competitiveness of the agricultural sector the LZF is committed to advance LZF members' economic and social development, undertake economic and social research, and assist with the economic and professional education of farmers, and helping to raise the profile of the agricultural industry.

Co-operation agreements have been established with the Ministry of Agriculture, and between the three Baltic nation farmer organisations. There is also a co-operation agreement between Swedish Farmers' Federation and Latvian Farmers' Federation.

2.7. Privatisation and Development in the Agricultural Processing Industry

2.7.1. The Institutional Framework of Privatisation

Within the agricultural industry, privatisation in the processing industry and the food sector started in 1992-1993 and is now virtually complete.

Most enterprises were privatised according to the general privatisation scheme determined by the "Law on privatisation of state and municipal enterprises" of 1992, and its new version adopted in 1994. The law was applied to most cases of privatisation of vegetable and fruit processing industries, beverages and confectionery production (excluding the bakery industry), as well as to the remaining enterprises from other (non-food) sectors of the economy.

In both the 1992 and the 1994 versions of the general privatisation law, the shares of a privatised company were to be distributed between several groups of applicants: employees, the state and so-called private investors. The law stipulated that employees could acquire between 5 and 20 per cent of shares, and 5 per cent of shares ought to be left in state ownership, to be used as a source of income for the State Pension Fund. The remaining 75 to 90 per cent of the shares were to be offered to private investors.

According to the general privatisation scheme which was applied from 1992 to 1994, the business partners of enterprises under privatisation (suppliers of raw materials or main purchasers) could acquire 30 to 70 per cent of shares in an enterprise. The remaining shares could be offered to any other investor. In most cases, this meant that other possible applicants, e.g. banks or investment funds, had no real chance to acquire shares in the company during the course of privatisation, except in the case of companies with operating difficulties.

Concrete rules of privatisation were elaborated by the privatisation commission, focusing on issues such as the value of the enterprise, the number of shares in different lots, and the form and terms of payment. The privatisation commission was appointed by the government for each individual enterprise.

The approach chosen initially caused several problems. The lack of flexibility concerning the terms of payment and the division of capital shares made it difficult for privatised enterprises to solve problems with large debts. Financial funds acquired during privatisation were not used for the development of enterprises, but for fiscal purposes. The emerging broad range of owners with conflicting interests, and lacking preferential rights in the decision-making process, created serious obstacles for management and investments. The privatisation process was very slow, since various governmental institutions had to decide on each enterprise individually. As a consequence, only a limited number of enterprises was privatised in the years 1992 to 1994.

After 1994, a different approach was applied. Instead of a decentralised management approach, with the privatisation process being organised by sectoral ministries, a permanent State Privatisation Agency was established. This seemed necessary to speed up privatisation, to strengthen its management capacity, and to centralise the money flow, so as to be able to cover state enterprise debts from the money earned. The privatisation agency is managed by a Board of Directors and supervised by a Supervision Council, consisting of representatives from different political groups.

The new version of the law focussed on the newly introduced concept of the "strategic investor". This refers to any natural or legal person interested in acquiring management control over an enterprise after privatisation. This approach acknowledged the need for an individual, a company or an organised group of persons, with a clear picture of the future development of the company after privatisation, and

who would be ready to follow the rules agreed on for a particular company. The new version of the law also helped to improve the transparency of the privatisation process.

A third urgent problem solved by the updated law is the liquidation of insolvent state enterprises. For this purpose, the 1994 privatisation law defines the procedure of how to liquidate a state company, sell its assets and cover its debts.

Some sectors of the food processing industry, namely the milk, meat, grain industries, bakeries and also the sugar industry, were privatised according to so-called special legislation. The special legislation was passed before the 1994 version of the general privatisation law. Privatisation in agriculture and the retail sector was largely concluded in 1992-1993. In the first years after independence, food processing was the only link in the whole food chain remaining in state hands, which caused additional problems and inefficiencies in the up- and downstream sectors.

These special regulations were implemented to regulate the distribution of shares among different groups of shareholders. While the general privatisation law did not give preference to agricultural producers, although there was strong political pressure to do so, this request was taken up in the privatisation laws for the dairy and grain processing industries.

Another aim of the special legislation was to make the management of the privatisation process more efficient by establishing a centralised privatisation commission for each particular processing branch, as opposed to the special commissions for individual enterprises provided under the general privatisation legislation until 1994.

Several concepts from these specific laws were used in the new version of the general privatisation law. Among them are the reorganisation of state enterprises into state joint stock companies and the sale

of shares to this company, one privatisation commission for the whole branch, and the "strategic investor" concept.

The main features of the special legislation governing the dairy, meat and milling industries, which are the most important branches of the Latvian food industry, are given below.

The dairy sector was privatised according to the "Law on privatisation of state milk processing enterprises", passed in 1992. The creation of milk producers' co-operatives was one basic principle of the restructuring and privatisation process in this sector. In a first stage, large dairies were reorganised, and milk collecting and processing enterprises were offered to co-operatives free of charge. In a second stage, the remaining milk processing enterprises were privatised, including those units that were part of the former centralised milk processing system. This included reorganising state enterprises into companies and offering their shares to milk producers' co-operatives, employees, other natural or legal persons, and the state pension fund. Milk producers' co-operatives had to be given preference in becoming the principal shareholders, with quotas of no less than 70 per cent of the shares being offered to them. Other persons were only allowed to take control of the enterprise in exceptional cases or in later stages of the privatisation process.

The meat processing sector was privatised according to the "Law on privatisation of state meat processing enterprises", passed in 1993. The main method of privatising state meat processing enterprises was their reorganisation into state joint stock companies, followed by the sale of state-owned shares to individuals or companies. The majority of stocks (no less than 51 per cent) had to be offered in public tender to so-called principal investors, who could be natural or legal persons. Potential principal investors were required to present their business plans to the privatisation commission. Amendments to the law that were adopted later granted certain privileges to farmers and their co-operatives. However, agricul-

tural producers did not utilise fully their rights to obtain the 20 to 30 per cent of shares allocated to them.

Under the "Law on Privatisation of Bakeries" (passed in 1993) the same privatisation approach as in the meat processing sector was generally used in the grain processing and bread production enterprises. The grain sector has a high level of vertical integration and remained for a long time under the control of a state monopoly "Latvia Labiba". This organisation comprised 28 enterprises including some 13 state bakeries, and some 17 grain processing enterprises. On 9 November 1992, the concern "Latvijas Labiba" was liquidated. The operating enterprises are in certain cases not very competitive, although performance differs between branches. Flour mills are in a far better condition than feed mills, which badly need investment. Drying facilities are of crucial importance since the average moisture content of the grain harvested is too high for storage. They are, however in poor condition, and in need of major investments.

Principally both versions of the general privatisation law and also other privatisation concepts allow foreigners to participate in the privatisation process - either directly or through subsidiaries registered in Latvia. Sometimes foreigners were even given preferential treatment under the privatisation rules for individual companies. As a result, Scandinavians entered the brewery industry, Austrians and Germans the bakery industry, Americans the confectionery industry, and the British the sugar industry. In other cases, foreign companies entered the Latvian food processing industry after the initial privatisation had ended and private enterprises had been established. In the bakery industry, for instance, a joint venture was formed with Cultor from Finland, and investors from Estonia became involved in the meat and dairy industries.

2.7.2. Results of Privatisation

The privatisation process of the Latvian food industry was affected by political changes and political pressure from the farm lobby. Despite the difficulties, privatisation was carried out in a relatively short time, and, by the end of 1996, privatisation of the food-processing sector had essentially been completed.

However, it must be stressed that the privatisation carried out in this sector so far can only be considered as the initial stage of restructuring. Further adjustments will be necessary. Restructuring is relatively slow and the food industry, dominated by grain, meat, and dairy processing, is very vulnerable to external competition. Quality standards and efficiency levels are low by EU standards. Tremendous over-capacities drive production costs up.

Table 29 summarises the situation in 1997 in relation to the privatisation of the agro-food processing and service sector.

The State agro-service enterprises covering agricultural machinery, agricultural chemicals, land reclamation, construction and other services have been privatised. Also 125 such units were split up into 800 facilities before being privatised.

2.7.3. Structure and Performance of the Agricultural Processing Industry

The production structure of the food processing industry has substantially changed since the early 90s. Production volumes of more expensive products such as processed meat and sausages, butter and cheese have fallen dramatically, since the demand for these products has declined considerably. In addition, domestically produced goods are often not able to compete with cheaper imports from West European countries.

Some sectors seem, however, to be able to compete on the domestic market and on the markets of the FSU countries. These include the dairy, fish, milling, beverages and confectionery industries, which have strengthened their position on the domestic and eastern markets and are even starting to expand into the EU market. It is estimated that the self-sufficiency rate varies between 71 % for chocolate and its by-products to 85 % for alcoholic beverages and 95 % for sugar-based products.

Following the sharp drop in production in the early 90s, the Latvian agro-food industry now seems to have overcome the economic crisis. Between 1990 and 1993, output in the sector dropped both largely due to the fall in both domestic consumer demand and the loss of export markets. Between 1994 and

Table 29: Privatisation in the Agricultural Processing and Service Sector (1997)

	State enterprises before privatisation	Privatised state enterprises	Subject to liquidation or privatisation ¹	Privatisation not yet started
Privatisation based on special law	185	157	28	-
– milk processing enterprises	15	15	-	-
– meat processing enterprises	14	11	3	-
– bakeries	14	13	1	-
– grain processing enterprises	17	14	3	-
– agricultural service enterprises	125	104	21	-
Privatisation according to general laws	143	29	82	32
– of which sugar refineries	2	2	-	-
Total	328	189	110	32

¹ under the responsibility of the Privatisation Agency
LSIAE, MoA

1995, however, production rose by 10 %. In 1997, year-on-year industrial production is estimated to have increased by 13,6 %. Among the biggest year-on-year rises in output was food and beverages (up by 17,7 %) second only to metal working industries (up by 23 %).

During the last three years, food processing accounted for 8 to 9 per cent of total GDP and for about 40 per cent of GDP in manufacturing. Roughly 400 different food-processing plants exist in the country. These employ about 30 000 people or 3 per cent of the total number of employed persons, with an average output per employee of about LVL 17 000 per year.

There are a relatively large number of meat, dairy and mill processing firms (140, 73 and 17 respectively). 65 % of these firms are estimated to employ less than 100 people - only 5 % have more than 500 employees (table 30).

Both the dairy industry and the milling industry, where the four largest milling enterprises have a market share of 60 %, reveal growing concentration. At the same time enterprises have started to specialise, targeting a definite segment of the consumer market with their production activities. The milk-processing sector has specialised in either whole

milk or products such as cheese or ice cream. At mid-April 1998, six Latvian establishments were authorised to export dairy products to the EU.

First signs of a positive development reveal a certain improvement in competitiveness. Growing Western imports put pressure on the Latvian food industry to reorient towards meeting consumer requirements by increasing the quality and variety of food products, as well as improving the packaging.

Nevertheless, serious problems remain to be solved. The quality of Latvian food industry output; although improved, still varies greatly, reducing the export possibilities for such products, especially to the West. The outdated machinery and the lack of access to capital also hamper the competitiveness of this sector.

Also developments in the agricultural sector have had significant implications for the food-processing sector. The drop in agricultural production has considerably reduced raw material availability for the processing sector and has thus been a major reason for the low capacity utilisation in this sector.

In addition, the restructuring of the agricultural sector led to the creation of many very small peasant farms, many of them primarily engaged in subsis-

Table 30: Structure of the Agro-Food Industry in 1996

Type of activity/product	Output mill. LVL ¹	Share in total food output (%)	Number of employees	Output per worker (LVL)
Total food industry	430,9	100,0	29 627	14 544
– Meat processing	51,7	12,0	3 150	16 413
– Fish processing	69,5	16,1	7 292	9 531
– Fruit and vegetable processing	18,3	4,2	903	20 266
– Milk and dairy products	78,5	18,2	5 199	15 099
– Basic cereal products	37,0	8,6	1 142	32 399
– Bread production	51,4	11,9	5 601	9 177
– Sugar production	14,3	3,3	1 259	11 358
– Chocolate/chocolate products	27,4	6,4	1 269	21 592
– Non-alcoholic beverages	27,4	6,4	1 816	15 088
– Other types of activity	55,4	12,9	1 996	27 756

¹ current prices
CSBL, LSIAE, IAMO

tence farming. The lack of alternative employment opportunities has encouraged these farms to engage in processing activities themselves inducing a decrease in the procurement share of total production.

Low profitability, low capacity utilisation, and obsolete technology remain significant constraints in the process of restructuring the meat-processing sector. At mid-April 1998, no Latvian meat plants were authorised to export meat or meat products to the EU (table 31).

Table 31: Procurement Share in total Production of Livestock Products

Product	1990	1994	1995	1996	1997
Meat	87.1	37.2	32.1	40.4	38.4
Milk	85.1	37.1	33.9	39.1	36.5

CSBL, LSIAE, IAMO

Wood processing is a significant part of Latvian industry (8 % of the industrial production). It is the only sector which records a rise in employment. Wood is one of the country's major national assets (it covers 40 % of the territory). Wood products account for some 30 % of Latvian exports (of which 85 % go to western markets and mainly to the EU - Sweden and the UK are big importers). The share of processed and value-added products (sawn materials as opposed to round wood) in exports, while it is increasing, remains low.

Investment in the wood-processing sector is growing. However, the need for modernisation and rationalisation is underlined by the fact that more than 80 % of firms in the sector had an annual capacity of 5 000 m² at end 1996. Output of wood and wood products rose by 16,6 % in 1997.

2.8. Technical assistance and Foreign Direct Investment

EU technical and financial assistance to Latvia commenced under the 1991 TACIS programme and has been extended under PHARE since 1992. In the 1992-1996 period, the PHARE programme allocated ECU 124 million to Latvia. The allocation for 1997 was ECU 38 million. The support has been focusing on supporting the reform of the legal and institutional framework, infrastructure development, restructuring and privatisation of enterprises and land, and tax administration and customs.

This technical assistance has been operated in parallel with implementation of the first World Bank credit line for US \$ 25 million - the Agriculture Development Project (ADP). Currently, the Latvian Government is working with the World Bank to prepare the Rural Development Project (RDP), a second credit line of US \$ 25 million. RDP, while continuing provision of credits to larger farmers and agro-processors as well as wood-processors, will widen the scope of assistance available by including a grant component in credits provided to rural households, and farmers whose agricultural activities generate only marginal income. There will also be a loan guarantee element, to reduce the risk that banks face as a result of being offered low levels of collateral by poorer farmers and rural entrepreneurs.

Foreign Direct Investment (FDI) into the agricultural sector has increased considerably in recent years. Most of the FDI allocated to the agricultural sector went into food processing with the major part going into secondary (for example, tobacco, beverages and confectionery) rather than primary processing branches where farmers own a high volume of shares. In 1997, the flow of FDI into food processing reached the considerable amount of US \$ 12,3 million.

FDI into primary agricultural production has remained insignificant. While, in 1993, a relatively high share of 1,8 % had been reached, the following years saw a level below 1 %. Apart from the gener-

ally low profitability of primary agricultural production, the specificity of the privatisation process including its slow progress may have added to this outcome.

The level of FDI going to agriculture and the agro-food industry has accounted only for a limited share of total FDI over the last few years. Having reached a peak of 11,5 % in 1994, FDI into agriculture and agro-food processing fell to 8 % of total FDI in 1997, which is half the value of the agro-food sector's proportion in the Latvian economy (table 32).

Most FDI into the Latvian processing sector originates from Scandinavian countries and Austria, and also from the USA.

2.9. Environment

The Soviet regime left Latvia with a set of environmental problems concerning eroded land, polluted sites, and hazardous livestock units.

In several places, contamination by the accumulation of hazardous substances (for example, heavy metals) is a serious problem. Other environmental problems related to agriculture include the eutrophication and pollution of the Baltic Sea as well as general pollution caused by nitrogen, phosphorus and other biogenic materials, pesticides and heavy metals. In 1993, waste water resulting from agricul-

tural activities, food processing and fishery production represented 21,3 % of total wastewater discharges in Latvia.

The percentage of organic substances in the soil fell from 1,97 % in 1945 to 1,77 % in 1994, resulting in a reduction of the buffer capacity (the ability of the soil to absorb nutrients and transfer them to plants) and an increase in surplus nutrient input entering the internal waters and the Baltic Sea. In 1996, the amount of fertiliser was about two to three tonnes of manure, which didn't pose a major risk. Problems result, however, in the form of localised pollution from leaking manure tanks.

The big cattle breeding units were one of the biggest polluters of soil, water and the Baltic Sea. Although their number has fallen, problems do persist. According to hydro-chemical and hydro-biological data, most surface water (about 85 %) is slightly polluted or polluted.

The main environmental problem of Latvian agriculture is eutrophication caused by nutrients. It has to be noted, however, that also other sources like municipal waste waters add to the problem.

The use of pesticides and synthetic fertilisers fell sharply over the last few years, since imported fertilisers and pesticides, now dominating the market, have to be paid for at world market prices, while farm-gate prices for agricultural products remain

Table 32: Foreign Direct Investment

	FDI Stock				FDI Flow		
	1992	1993	1994	1995	1996	1997	1997
Total FDI (mio. US\$)	32,14	74,62	309,46	519,27	685,39	854,69	169,30
Primary Agriculture							
value (US\$ million)	0,02	1,33	0,13	0,07	0,41	0,43	0,03
% of total FDI	0,08	1,79	0,04	0,01	0,06	0,05	0,02
Food Processing							
value (US\$ million)	1,60	3,81	35,55	53,41	55,97	68,33	12,36
% of total FDI	4,99	5,10	11,49	10,29	8,17	7,99	7,30

1 Figures for 1997 refer to VII-IX CSBL, LSIAE

comparatively low. The lack of liquidity and short term credits has added to the situation. While this poses problems for agricultural productivity, the implication for the environment is clearly that the risk of pollution from farm inputs has, at least on the average, diminished.

The use of Nitrate fertilisers in 1996 was at only a third of its 1990 level. Similarly, the use of pesticides declined. In 1996, the number of areas treated accounted only for a fourth of the pre-reform level.

Lack of liming has contributed to a serious deterioration of land resources and lower productivity over the past six years. The deterioration of pH levels has been very serious and the proportion of soils with increased acidity has increased from 15% in 1989 to 50% in 1997. In 1985 - 1990, on average, 200 000 hectares were treated with lime; in 1996 however - only 2 500 hectares were so treated. It has been estimated that crop losses due to increased acidity amount to more than LVL 20 million.

It has been estimated that 230 000 ha or 13,4 % of all arable land is exposed to wind erosion and 380 000 ha or 24,3 % to water erosion.

Agricultural and Rural Policies

3.1. General Orientations in Agricultural Policies after Independence

Agricultural policy in Latvia has developed in response to both internal and external factors. External factors include those linked to commitments made in negotiating accession to the WTO, including trade measures relating to import restrictions as well as to national subsidy programmes. Of central importance are the EU association agreement and the EU accession process as whole, as well as negotiations with IMF and World Bank.

After independence Latvia adopted a liberal profile in agricultural policy which is reflected by the fact that the Producer Subsidy Equivalent (PSE) was only 4 % in 1996 and 8 % in 1997. The only exception was sugar, where a relatively high border protection resulted in a PSE of 57 % in 1997.

The main support for Latvian agriculture has been provided by border protection measures. Apart from subsidies for high quality seeds and breeding material, there is practically no internal price support, either through state procurement or direct payments.

The general orientation in Latvian agricultural policy, as noted already, gave way to the replacement of larger state and collective farms by predominantly small family farms. While some see this as an unavoidable side-effect of overcoming the communist farming model and re-installing private ownership, the orientation pursued has also been criticised as a populist approach which ignored that small family farms may not survive in the absence of protectionism and which, therefore, impedes the necessary modernisation of the farm sector.

In Latvian agricultural policy debates, it appears, however, that there is a clear understanding to the need to move to more efficient farm structures.

The current political discussion within the farm sectors points towards a higher engagement by the state in the development of the agricultural sector. The agricultural budget reaches LVL 39,64 million in 1998, which is a spectacular increase of 40 % as compared to the budget of 1997.

The budget increase certainly reflects Latvia's efforts to adopt policy elements as established in the context of the EU agricultural policy, with Latvia giving clear emphasis to structural policies.

In addition, the farm groups have generated pressure with a view to achieving a higher support level, since the economic difficulties including the high volatility of farm prices, are blamed on imports which are said to undermine the ability of farmers to make a reasonable living.

A recent survey, commissioned by the World Bank and the Latvian Government, found out that farmers perceive assistance through business advisors, mobile credit officers, pagast officials, and technical advisors as being important for further development. The policy priorities mentioned were credit for land purchase, domestic market protection, and mortgage credit.

3.2. The Institutional Set-up for Agricultural and Rural Policies

The responsibilities of agricultural and rural policies are shared among several ministries. The Ministry of Agriculture is responsible for the development of the rural economy, including the crop, livestock, fisheries and forestry sub-sectors, as well as introducing measures for rural diversification.

The Ministry of Environmental Protection and Regional Development is responsible for the development of legislation concerning regional develop-

ment, spatial planning, supervision of local Government and the Administrative territorial reform of local and regional Governments.

The Ministry of Economy deals with policies concerning economic development including the operation of the Regional Fund (assisted regions) and the Municipal Development Fund. The Latvian Development Agency is an executing agency under the Ministry of Economy. The Ministry is also responsible for regional enterprise support centres.

The Union of Local Governments represents Latvian local Governments (75 % of all regional and local Governments being members). The Union provides linkage between local/regional and central Governments in the field of regional development. Local Government officials are increasingly involved in spatial planning and local development initiatives.

In 1997, the Regional Development Council was approved by Parliament, to co-ordinate (a) regional development issues at central Government level, and (b) central, regional and local Government activities. The specific tasks of the Council are to determine regional development strategy, propose policies to the Cabinet, and develop programmes for regional development. The Council is responsible for operation of the regional fund.

An inter-ministerial working group was set up in 1997 to maintain a permanent rural policy dialogue, as well as prepare agreement with the World Bank on the financing of the Rural Development Project (RDP). The main focus is to co-ordinate efforts and resources at the disposal of different ministries in order to achieve efficiency, transparency and cost-effectiveness.

To pursue its European integration activities, Latvia has established a European Integration council consisting of the Ministers principally concerned which meets every month to co-ordinate the implementation of the national programme for integration into the EU.

3.3. Agricultural and Food Strategy Objectives

The "Law on Agriculture" passed by Parliament on November 8, 1996, aims to achieve an efficient agricultural policy for the transition period until accession to the EU and establish the main principles of market regulation in agriculture. The law sets out the main long-term objectives and implementation mechanisms for Latvian agricultural policy as follows:

- the necessary structural adjustments and increased international competitiveness;
- an economically efficient, environmentally friendly, and socially oriented agriculture;
- the development of efficient processing enterprises and to increase valued-added;
- the maintenance of employment in rural areas;
- bringing up incomes in agriculture up to the average in the national economy;
- the development of agricultural research and education.

Under the law, the Government is required to set out farm policy programmes for the coming twelve months by the first of August each year. The legislation stipulates the level of budgetary allocations for public spending and investment in agricultural research and education. The law states that public spending on agriculture may not fall below 3 % of total annual budgetary expenditure. It also makes some provision for legal protection to producers in the event of delayed payment for goods.

The Ministry of Agriculture assumes no significant contradictions between the goals and instruments mentioned in the "Law on Agriculture" and those requirements and principles laid down by GATT/WTO, existing free trade agreements and the

EU association agreement. Indeed, the Law states that any type of support to agriculture and rural development should not contradict the principles and statements enshrined in international agreements signed or to be signed by Latvia.

3.4. Instruments of Agricultural and Rural Development Policy

3.4.1. Market Intervention

Market intervention has not played a major role in Latvian agricultural policy. The main support instrument has been border protection which is described in the following section. In the latest discussions on orientations in Latvian agricultural policies, however, a reinforcement of market intervention is under consideration.

The limited use of price support over the past years led for most commodities to prices which are significantly lower than the comparative EU prices.

The price gap between Latvian producer prices and EU prices is less significant only for those commodities where EU price support has been moderate, for example pig meat and rape seed, or for which a high world market price could be observed as for cereals over the last few years. For poultry, Latvian prices are even higher, due to the fact that Latvia, being a net-importer, applies higher tariff rates than the EU (table 33).

After liberalisation of agricultural prices in 1991, so-called minimum prices for grains, livestock products, and flax were introduced as a transitional measure. The price guarantee was not applied by specific regulations but by the state food processing enterprises, which were ordered to pay at least the minimum price for the products they purchased.

In the case of sugar, the price for sugar beet was set by the Ministry of Agriculture up to 1994. With the

Table 33: Producer Prices in Latvia in Percent of the EU Prices

Commodity	1993	1994	1995	1996	1997
Wheat	39,07	51,31	73,67	98,18	95,16
Rye	35,77	42,47	63,75	98,09	98,88
Barley	33,22	40,94	47,34	79,22	78,46
Potatoes	55,25	38,15	44,19	70,33	76,29
Rapeseed	75,18	67,76	73,81	78,75	91,26
Sugarbeet	58,96	67,59	66,42	65,06	70,66
Milk	25,40	35,22	42,04	46,35	47,52
Beef/Veal	11,84	24,18	29,80	37,00	35,39
Pig meat	76,98	129,47	90,12	76,76	86,38
Poultry	71,15	108,64	115,85	105,47	124,42

CSBL, LSIAE, MoA, EC-DG-VI

privatisation of the state owned food-processing enterprises, the state could no longer provide price support through price setting.

Most of the minimum prices for agro-food products became irrelevant as a result of shifts in relative price levels and were abolished already at the end of 1992. Only, the minimum price for grain was maintained for state use, while there was no specific mechanism providing a real price guarantee to producers. The minimum guaranteed price for grains was abolished in 1997.

A certain market influence could have been exerted by the Latvia State Cereal Bureau which was established in 1993 and which has been replaced, meanwhile, by the Cereal Trade Agency. These institutions were set up to determine grain needs and the possibilities of its coverage with home-produced grain, to analyse and predict price formation in the Latvian grain market, to regulate foreign trade in grain, to ensure quality and protection of consumer interests, and to arrange procurement and maintenance of the State Grain Reserves.

The Cereal Trade Agency managed in 1997 only 3,3% of Latvia's overall harvest, while being capable of ensuring three months' consumption of milling grain in Latvia. Therefore, the market impact of its activities can only be limited.

Due to the low purchasing power of the population and increased volumes of production (grains and milk particularly) policy does not allow the maintenance of higher prices on the internal market as compared to prices for imported products. Another reason not to envisage agricultural market intervention may be the generally restrictive budgetary policy.

3.4.2. Border Protection

Since mid-1997, there have been no measures protecting the internal market other than ordinary import duties. Quantitative restrictions on the import of grain as well as the import ban on sugar have been abolished and the import licensing system has been modified to meet the requirements of the WTO Agreement on Import Licensing Procedure.

The vast majority of imports is subject to free trade agreements or has MFN status. The Government is committed to reducing the peak tariffs, but hesitates to do so prematurely before having achieved WTO membership.

Import tariffs range from 1 % or less for raw materials to 15 % for most goods for final consumption. Goods not produced in Latvia or produced to an

insufficient amount, as well as capital goods and raw materials are exempt from customs tariffs or are subject to minimum import tariffs (0-0,5 %) (table 34).

Agricultural goods which are domestically produced continue to be protected with tariff rates ranging from 25 % for wheat to 60 % for refined sugar. Since considerable tariffs for agricultural products represent a distorting element in current agricultural policy, the Government announced in 1996 its intention to reduce tariffs from the current levels of 30-50 % to 30 %, as agreed with the World Bank. In the year 2000, the differences in tariff rates for different commodities are bound to be reduced which will result in lower rates for butter, cheese and pig meat.

3.4.3. Tax Relief

Certain tax reliefs exist to stimulate agricultural production in Latvia. Until recently, private individual farmers, householders and private auxiliary farmers were not liable to pay income tax on income earned in agriculture. In other activities, income tax is set at 25 per cent of taxable income. Currently, personal income tax must be paid from profits from agricultural activities exceeding 3000 LVL and from all other profits.

Table 34: Tariff Protection of Selected Commodities¹

Wheat		Oilseeds		Refined Sugar	
1997	2000	1997	2000	1997	2000
applied rate	bound rate	applied rate	bound rate	applied rate	bound rate
25	30-40	0,5	10-15	60	60
Butter		Skimmed Milk Powder		Cheese	
1997	2000	1997	2000	1997	2000
applied rate	bound rate	applied rate	bound rate	applied rate	bound rate
45	36-45	30	30	45	36-45
Beef		Pig meat		Poultry	
1997	2000	1997	2000	1997	2000
applied rate	bound rate	applied rate	bound rate	applied rate	bound rate
30	40	45	36-45	30	20-40

¹ expressed as ad valorem equivalents
CSBL, LSIAE, MoA, EC-DG-VI

According to rules established from 1995, those private farmers whose turnover in the previous year is less than 45000 LVL were exempt from corporate income tax and they could choose to pay personal income tax. Other agriculture enterprises had a tax discount of LVL 10 per hectare of land used in agriculture. They could choose the so-called small enterprise discount rate of 20 % from calculated income tax.

Changes in the tax legislation during 1997 had important tax implications for farmers. Private individual farmers, householders and private auxiliary farmers are now liable for income tax at the standard rate of 25 %, if their annual income is less than LVL 45 000. Agricultural enterprises whose profits exceed LVL 45 000 are subject to the much higher rate of corporate tax.

The general rate of social tax remains 37 % with farmers being eligible for a lower tax rate of 19 % up to 1995. Since the new law on Social tax came into force in 1996, farmers have had to pay higher social taxes than before, 22 % in 1996, and 28 % in 1997. The balance (up to the general rate of 37 %) was paid from the budget. From the beginning of 1998, farmers must pay the full social tax.

Property tax is not levied on property used exclusively for agricultural operations (or intended to be so used).

Since 1995, some reimbursement of excise tax on diesel fuel used in agriculture is granted for agricultural producers.

3.4.4. Structural Policy and Rural Development Support

The agricultural and rural support package for 1998 focuses on addressing structural problems and the development of rural areas, including an improvement of the rural environment. Provision of support is geared towards preparing for integration into the European Union Common Market and compliance with EU production requirements. It will also provide an element of co-financing in the context of EU pre-accession policies (table 35).

An important principle of the support package is additionality of funding, implying co-financing up to a certain proportion of project costs, with the remainder having to be financed from other sources. Co-financing rates range from 10 to 50 %, depending on the type of measure.

Table 35: Programme Areas of the Agricultural Budget in 1998

Programme areas	(thousand LVL)
Crop related and agro technological improvement of soils	1500,0
Development of production and modernisation of technology	6000,0
Pedigree work	3416,5
Seed Breeding	2220,2
Production and Storage of High Quality Production	1880,0
Support to non-traditional sectors and the rural environment	951,0
Credit Guarantee Fund	804,0
Renovation of private forestry land and afforestation of non-agricultural land	105,0
Fisheries	150,0
Liquidation of consequences of accidents	100,0
Total	17126,7
MoA	

The 1998 budget foreseen for structural policy and rural development support reaches in total LVL 17126,7, which represents 43 % of the agricultural budget. The funds allocated to different programme areas are shown in table 35.

Under the headings of the programme areas, it is envisaged that the following measures relating to agriculture and rural development will be implemented:

- **Crop-related and agro-technological improvement of soils:** This programme aims to improve the technical cultivation properties of soil covering at least 60,000 hectares of land each year. The programme-area includes projects for field organisation, improvement of meliorated land and existing melioration systems and the improvement of acidic soils.
 - **Development of agricultural production and technological modernisation:** Here, the objective is to support the competitiveness of local food products on domestic and international markets by upgrading both processing enterprises, and the implementation of quality control systems to ensure compliance with EU standards. The actions envisaged include the promotion of land purchase, the reconstruction and upgrading of farm equipment and machinery, the reconstruction and building of production infrastructure, the purchase of high quality breeding animals and the reproduction of perennial plantations.
 - **Pedigree work:** The objective is to improve the quality of animals and start up and increase highly productive milk and beef animal herds. The development of pig breeding, horse and sheep herds are also eligible. Furthermore, national animal registers shall be developed.
 - **Seed breeding:** This measure includes the production of certified seed breeding material, maintenance of the genetic fund, and the improvement of technical equipment for scientific activities.
 - **Production and storage of high quality production:** These measures envisage partial funding to support high quality plant cultivation for processing, specifically in the sectors of flax, barley for brewing, potatoes, protein crops, and vegetables from green houses. Furthermore, storage for grain, breeding of young animals for meat and measures to improve the competitiveness of forage are eligible.
 - **Support for non-traditional sectors and rural environment:** These measures focus on problems of rural development in the pre-accession period. They are conceived in the framework of current government policy regarding the attraction of World Bank credit for investments in rural development and EU support from structural funds to be used for development of rural infrastructure. The aim is to improve living conditions and the environmental functions in rural areas, to strengthen agricultural production, to support diversification of the rural economy and activities like rural tourism.
 - **Credit Guarantee Fund:** The aim of this instrument is to improve farmers' access to credit resources for the purposes of development and modernisation of production. Credit guarantee funds are to be spent for co-provision of guarantees of 30-50 %, depending on the specific aim. The maximum amount of guarantees is up to 50,000 or 70,000 LVL, depending on the investments. Funding of the credit guarantee fund will be in form of a deposit with cumulative accruals.
- Apart from agri-environmental provisions being part of the agricultural and rural support package, no specific environmental policies are established for the agricultural sector. There are, however, provisions established under the general framework for environmental and planning policies which are also applicable to agriculture.

3.4.5. Farm credit

Access to credit at reasonable interest rates is a prerequisite for developing the farm sector. Involvement of commercial banks in providing farm credits is still limited and so is the assistance offered by credit programmes which has reached mainly a few better-off farmers. There is therefore still a shortage of both short-term and long-term credits for agricultural producers in Latvia. Long-term interest rates fluctuate between 25-40 % for long-term credits.

Credits are also available to the farm sector through the special State credit institution "Laukkredits" (rural credit) which was set up to run the World Bank's \$25 million credit line for agriculture. These credits have a fixed interest rate of 18 % and are available subject to strict conditions; the pay-back level is very high.

In 1996, three credit and savings co-operatives were established with the assistance of the EU. However, their resources are still very limited and it is unlikely that they will play any significant role in the provision of rural credit unless some donor credit lines (State issued or foreign) are channelled through these institutions or unless there is an improvement in the general economic situation.

In the context of policies to improve farmers' access to credits, the credit guarantee funds, mentioned in the previous section could play an important role. This fund is specifically needed in cases where farmers, due to unclear or lacking land titles, are unable to provide for a credit guarantee on their own.

3.5. Regional Policy

As Latvia and the other CEECs have been attributed Objective 1 status in Agenda 2000, Structural Funding will become an important instrument in facilitating development. This will require inter-sectoral and horizontal co-ordination, as well as clearly

defined legal and administrative arrangements for rural and regional development.

Concerning the legal framework, basic documents governing regional development in Latvia are Guidelines for Regional Policy in Latvia (1995), Concept of Regional Policy in Latvia (1996) and a draft Law on Development Planning. This legislation aims to provide methods and means for development, in order to promote sustainable and balanced regional development in Latvia, and establish better co-ordination of activities and actors involved in regional development/planning.

In May 1997, Parliament passed the Law on Assisted Regions. This stipulates conditions for obtaining status of an assisted region, and the measures that can be provided in order to support these regions. The law also sets out the principles for co-operation between central and local Government institutions. The status of assisted regions has been assigned to three regions (Balvu, Kraslavas and Preiul rajons (districts)), six cities (outside the three assisted rajons) and 55 rural municipalities (pagasts) and towns (within 16 rajons outside the three assisted rajons).

Latvia's regional development initiatives are implemented through sectoral ministries. While the Ministry of Environment and Regional Development deals primarily with spatial planning, the Ministry of Economy handles regional policy. A Regional Development Council, including representatives from all concerned ministries, participates in the drafting, co-ordination and implementation of regional development initiatives. The actual support for economic development of these regions will be channelled through the regional fund.

Latvia's current regional policy expenditure is limited. However, the share of Latvia's total development related expenditure, which could constitute potential counterpart funds to the EU structural policy, cannot yet be determined.

3.6. Policies Governing Trade Relations

3.6.1. World Trade Organisation

Latvia is expected to become a member of the World Trade Organisation (WTO) in the course of 1998. Since 1992, when Latvia applied for GATT membership, it has had observer status. Upon accession, it would have to comply with the obligations of the multilateral WTO agreements to which the European Community is a party, including the provisions of the Uruguay Round GATT Agreement concerning market access, domestic support and export subsidisation.

3.6.2. Free Trade and Association Agreements with the EU

As with Lithuania and Estonia, the most important achievement in bilateral relations with the EU was the Agreement on Free Trade and Trade-related Matters signed on 18 July 1994, and which entered into force on 1 January 1995. Under this agreement, Latvia has been granted a four-year transition period in which to adapt its non-agricultural economy to competition within the Western European context, while a six-year transition period has been agreed for agriculture. The EU eliminated restrictions on imports of industrial products from Latvia in January 1995. For agricultural and food products, the agreement provides for reciprocal trade concessions.

The broad-ranging Association Agreement between the European Union and each of the three Baltic Republics, concluded on 9 June 1995, entered into force on 12 February 1998. It confirms these trade provisions and broadens the co-operation into other areas.

Since July 1996, these trade arrangements have been modified to take into account the Agreement on Agriculture concluded during the GATT Uruguay

Round, and also to reflect further improvements in the concessions on agricultural products granted to the Baltic States by the Community.

In the Marrakech agreement, the Community replaced the variable agricultural levies and other non-tariff barriers by fixed customs duties from 1 July 1995. This replacement affected the agricultural concessions granted in the Free Trade Agreements with the Baltic States, and in order to maintain the degree of preferential access granted, it was therefore necessary to adjust the agricultural concessions provided in the Agreements on free trade and trade-related matters.

Community concessions were improved in 1996. In 1997, trade in processed products was even further liberalised. At the same time, allocated quotas of dairy products were slightly extended and exports of confectionery and spirits to the EU were possible on more favourable terms.

The GATT-related adjustments, together with the new concessions decided by the Community, resulted in the level of preference for all agricultural products being increased from 60 to 80 %. The applicable duty is in general 20 % of the MFN duty (compared to 40 % previously). The arrangements also provide for a 5 % yearly increase in the volumes of the tariff quotas (table 36 on next page).

The above table illustrates the concessions concerning a number of products of particular importance for Latvian agriculture. These concessions illustrate the potential for Latvia to export to the EU its most important meat and dairy products. Unfortunately, a lot of current access is not taken up due to Latvia's inability to comply with EU import requirements.

Some progress has been achieved to date, which is illustrated by the fact that since January 1998 six dairy processing establishments have been licensed to export to the EU. However, as of July 1998, no Latvian slaughterhouse has received the authorisation for exports to the EU.

Table 36: Concessions according to the Free Trade Agreement with the EU

Type of commodity	Base quantity	Annual quantities (tonnes)				
		1.7.1996 to 30.6.1997	1.7.1997 to 30.6.1998	1.7.1998 to 30.6.1999	1.7.1999 to 30.6.2000	from 1.7.2000
Meat of bovines, fresh, chilled or frozen	1 500	1 575	1 650	1 725	1 800	1 875
Meat of domestic swine, fresh, chilled or frozen	1 000	1 050	1 100	1 150	1 200	1 250
Meat of sheep or goats	100	105	110	115	120	125
Chicken carcasses; breast of chicken; legs of chicken	500	525	550	575	600	625
Skimmed-milk powder	2 500	2 625	2 750	2 875	3 000	3 125
Butter	900	945	990	1 035	1 080	1 125
Cheeses	1 200	1 260	1 320	1 380	1 440	1 500

EC-DGVI

This underlines the scale of the challenges to be met before membership of the EU becomes a reality - upon accession to the Community, not only exporting establishments but all abattoirs, dairy and meat processing plants must meet EU requirements.

Achievement of this objective will require high investments, a major training effort and a massive mobilisation of all sectors involved - the administration, industry, co-operatives and farmers' organisations - so as to secure the vital upgrading of standards needed to effectively enforce EU regulations, and assure Latvia's access to EU markets.

3.6.3. Free Trade Agreements in the Baltic Co-operation

Latvia has been an active participant in Baltic co-operation, both in the different co-operation structures which exist between the three Baltic States, and in the wider context of the Council of the Baltic Sea States.

On 1 April 1994, a free trade agreement between Latvia and the other Baltic States, Estonia and Lithuania, came into force. During 1996, provisions were established to extend the Baltic FTA to agricultural products. This agreement establishes complete free trade in all products meeting the Baltic

rules of origin. The agreement on agricultural commodities entered into force on 1 January 1997 and is intended to be the first step in the formation of a customs union.

Bilateral free trade agreements were concluded, inter alia, with the Scandinavian countries and Switzerland. All of Latvia's free trade agreements stipulate that a separate agreement on trade in agro-food products has to be concluded.

The conclusion of a free trade agreement with EFTA in December 1995 replaced Latvia's bilateral agreements with EFTA member countries. Since January 1995, its trade links with Finland and Sweden are covered by the agreements it has completed with the EU.

3.7. Relations with the EU and Efforts to adopt the "Acquis Communautaire"

The Commission's White Paper of 1995 on the Internal Market sets out the legislation which the candidate countries would need to transpose and implement in order to apply the "acquis communautaire", that is the established body of European and Community Law, Rules and Regulations, and identified elements for the implementation of the single mar-

ket. In March 1998, the Commission submitted the "Accession Partnership" to Latvia, which sets out the priority areas in the pre-accession phase.

The Latvian National Programme for EU Integration was established in April 1998 as the general strategy for the pre-accession phase, as a response to the "Accession Partnership".

The implementation of Community policies, especially for agriculture and the Structural Funds, requires efficient management and control systems for public expenditure, with provisions to fight fraud. Approximation of legislation is moreover needed to allow the system of "own resources" to be introduced, with satisfactory provision for accounting.

The Europe Agreement provides for co-operation in audit and financial control, including technical assistance from the Community as appropriate.

Given that EU agricultural expenditure, Structural Funds and "own resources" are quite different from current systems in Latvia, the establishment of the necessary management and control mechanisms will require considerable preparation.

Serious efforts are being made to adopt the "acquis" in the field of agriculture. This includes the introduction of measures to modernise agriculture as described above. Measures to bring Latvian agriculture into line with EU environmental requirements and rural development measures are due to start in 1998 and are envisaged to be strengthened in subsequent years.

Another priority to be accomplished by the year 2000 is the strengthening of the capacity of the Ministry of Agriculture with a view to cope with the requirements of accession. This includes measures on training and the improvement of management skills, measures to strengthen the plant protection services, veterinary and phyto-sanitary border control and veterinary field services, and the strength-

ening of statistical services and agricultural accounting. Work on the improvement of national food quality control system is also a priority for 1998-2000.

A good deal of legislation on veterinary, phyto-sanitary, and quality- and health-related standards is in preparation or has already been established and, at least in parts, implemented.

Although considerable progress has been made, much remains to be done. This includes also the investment in technical equipment for control and monitoring services in the veterinary and phyto-sanitary field.

4. Mid term outlook

4.1. The General Economy

The stabilisation and recovery of Latvian agriculture is highly dependent on general economic growth and growth in consumers' real income. Recent figures show signs of a recovery in the macro-economic situation. GDP increased in 1996 for the first time in the Nineties and reached in 1997 a strong growth rate of 6,5 %. These growth rates are likely to be maintained for the near future.

The official unemployment rate declined over the last few years and reached a rate of 6,7 % in 1997. As mentioned earlier, it is estimated, however, that there is a significant hidden unemployment. With the recovery in the overall economy, a further decline in unemployment can be expected. This would have implications also for the development of the agricultural sector. Apart from affecting the overall purchasing power, a high rate of unemployment slows down structural adjustment in the farm sector, since agriculture assumes the role as a buffer against joblessness.

With the strong growth of GDP, the real income per household increased also, although the absolute level is still low and the majority of households face serious difficulties in making a living.

The rate of inflation, as measured by the consumer price index, came down to 8,4 % in 1997 and will most probably continue along this pathway. This contributes to rising real income, resulting in an increase in purchasing power and giving a positive prospect for the demand for food products.

The population of only 2,6 million inhabitants has, however, only limited purchasing power and the market for processed, high value added products is small. Positive developments in per capita consumption of some products like white meats, potatoes and

vegetables may be offset to some extent by a further decline of the Latvian population which is assumed to continue, although at a lower rate (0,6 %).

The exchange rate of the "Lat" has remained stable and the currency is forecast to remain strong. While this causes problems with respect to the growing trade deficit and competitiveness of domestic products vis-à-vis imports, it positively influences the scope for consumption in general.

In relation to the development of trade relations, the markets in the East are likely to remain more important than Western markets until Latvia is able to overcome the low standards of quality and packaging. The general trade balance has been in deficit since 1992 and is likely to remain in deficit, at least for the next few years. Similarly, the trade balance for agricultural commodities became negative in 1996 with a most probable tendency to widen over the coming years.

4.2. Developments in Agriculture and the Agro-Food Processing Industry

Gross Agricultural Output declined from 1990 onwards. The livestock sector was more affected by this development than the crop sector. In line with the overall economic development, agricultural production recovered somewhat in 1997, but at a slow pace. This recovery was due to an increase of crop production whereas the decline in livestock production continues, although at smaller rates. With a view to the future trend it appears reasonable to assume that crop production will continue to recover much quicker than the livestock sector, which is particularly in need of investment.

A definitive trend of improvement in the productivity and profitability of farming can be observed already, although the economics of farming is still volatile. The main problems are outdated machinery, the need for markets, very small holdings, and the bad condition of building infrastructure.

While the decline in the sector seems to have ended, there is little likelihood of significant growth over the next few years.

Production costs are marked by low costs for labour and machinery and the absence of a genuine land market. On the other hand, labour productivity is also low compared to Western standards. Production costs per output unit are also affected by relatively low yields in the crop sector due to climatic conditions and the low fertility of the soil.

Feed conversion rates in the livestock sector are considerably lower than in the EU, to the extent that the potential benefits from cheaper animal feed are somewhat reduced. Conversion rates however could be improved if a higher percentage of protein was used in the feed mixture. Most of the protein feed will have to be imported. Dramatic changes in the structure of production costs cannot be expected for the coming years.

The farm structure is still evolving. Some of the statutory companies, emerging from former co-operatives and state farms have not proved viable in current economic circumstances and are in the process of liquidation. The number of private farms is increasing, with small-scale farming accounting for nearly 37 % of agricultural land use.

An improvement in farm structures is of central importance for the development of Latvian agriculture. In recent years, the slow progress in land registration following privatisation has hampered the development of a land market and discouraged investment.

Farm gate prices for cereals dropped sharply after independence, leading to a better position for the livestock sector. In 1996, the terms of trade for the livestock sector worsened again, since producer prices for milk and for meat did not follow the development of cereal prices. In 1997, farm gate prices rose at a slower pace than retail food prices, leaving higher margins for the intermediate and particularly the retail sectors.

Modernisation and improved competitiveness of the food processing industry on the international markets are important for the development of Latvian agriculture as a whole. With the completion of privatisation, an essential precondition for recovery is met.

Although the first positive signs of an improvement are visible, especially in the dairy industry, a significant take-off in the food processing industry is still awaited. Low capacity utilisation rates, obsolete equipment, and the slow pace of renovation caused by the lack of investment remain serious problems. Incentives for foreign investment in the food industry, apart from investment in fish processing, tobacco and soft drink sectors are still rather limited.

Agricultural trade will remain important, but the trade balance is likely to stay negative after the turn of the century. Only for cereals and dairy products will domestic production continue to exceed consumption. The NIS and especially Russia will remain the principal markets for Latvian products in the coming years, although some cutbacks may result from the actual economic crisis in Russia.

The WTO implications for Latvia are not yet clear. Exports of dairy products and beef meat could however face problems if the costs of production exceed world market levels. At present internal support measures are at a very low level and it is unlikely that GATT will provide much scope for an increase.

Trade with the EU is based on the Europe Agreement, which entered into force in February 1998.

For the most relevant commodities export quotas have been fixed which benefit from tariff reductions. The trend of a widening trade balance for agricultural commodities may be reversed, if Latvia manages to take advantage of trade opportunities established by the free trade agreement with the EU.

Progress in the completion of land registration and more concentration on structural and rural policies are likely to give momentum to the structural development of agriculture, and improved productivity. Together with funding from international institutions and, notably, in conjunction with the EU pre-accession programmes, such policies should become an important driving force in the process of structural adjustment and recovery of Latvian agriculture.

4.3. Commodity Projections

4.3.1. Land use

Total agricultural land is assumed to remain at the 1997 level of 2,53 million hectares. Changes in land use are expected to be most significant with respect to the area sown with cereals. Already from 1995 to 1997, it was mainly the cereals area which drove the total of the sown area up to a level of 1003 thsd. ha.

As regards other crops, stabilisation or a moderate increase, as with potatoes and vegetables, appears to be likely. The fodder crops area may increase slightly from the year 2000 onwards, when the number of cattle is expected to increase again (table 37).

The share of idle land will most probably continue to decrease again, since parts will be allocated to other use, and parts will be brought back into cultivation to meet the increased need for cereals and fodder area. The economically favourable long term prospects for forestry implies an increase in the forest area.

4.3.2. Cereals

Cereals are currently the most important arable crops, with a share in the total sown area higher than the formerly dominating fodder crops. Expansion of the cereals area reflects a recovery in the arable production, while livestock production, and thus the production of fodder crops, continue to decline. The recovery in arable production involves a certain specialisation, which contributes to the relatively high share of cereals.

Table 37: Land Use Projection

	Units	1990	1995	1996	1997	2000	2003
Total area	000 ha	6459	6459	6459	6459	6459	6459
Agricultural land	000 ha	2567	2540	2541	2521	2521	2521
of which is sown area	000 ha	1627	930	986	1003	1052	1077
– cereals	000 ha	675	408	446	483	532	549
– pulses	000 ha	11	3	4	5	5	5
– potatoes	000 ha	80	75	79	70	75	78
– vegetables	000 ha	11	18	16	13	14	15
– sugar beets	000 ha	15	10	10	11	11	11
– industrial crops	000 ha	16	3	3	3	3	3
– fodder crops	000 ha	820	413	429	419	412	417
of which is meadows and pastures	000 ha	844	798	795	792	787	787
of which is idle land	000 ha	93	823	760	726	682	657
Forest land	000 ha	2830	2870	2881	2859	2902	2946

CSBL, LSIAE, MoA, EC-DG-VI

Main assumptions

- The cultivated area will increase to 548 thsd. hectares by 2003, following a trend which has already started in 1996.
- In 1995-1997, the average yield was 2 t/ha. Yields are expected to stabilise at 2,10 t/ha by 2003, remaining well below the pre-independence level.
- Due to unstable weather conditions, annual fluctuation of yields will probably remain high - especially if the use of fertilisers does not recover.
- As a result of the development of area and yield, production should increase to 1246 thsd. tonnes by 2003, from 1038 thsd. tonnes in 1997.
- Seed use is assumed to stay at the 1997 level of 280 kg/ha.
- Feed use will increase as animal production starts to recover. Feed use is likely to increase to 533 thousand tonnes by 2003 from 510 thousand tonnes in 1997.
- Processing (mainly alcohol) is expected to increase moderately to 30 thsd. tonnes.
- Human consumption is projected to increase to 124 kg per capita by 2003 which will still be significantly lower than the pre-independence level. The increase in per capita consumption is expected to offset the effect of the declining population.
- By 2003, utilisation will total 982,8 thsd. tonnes. As production reaches 1246 thsd tonnes, Latvia will become a net exporter. Self-sufficiency is expected to be at 127 % by the year 2003, which is significantly higher than the level of 1997 (112 %) (table 38)

4.3.3. Potatoes

Potatoes are relatively important for the domestic market and rank second among the marketable crops produced in Latvia. Potatoes gained in significance in recent years also, because - due low average standard of living - potatoes have been for many households an affordable substitute for more expensive food.

Table 38: Cereals Projection

	Units	1990	1995	1996	1997	2000	2003
Area	000 ha	675,4	408,4	446,2	482,7	532,5	548,6
Yield	t/ha	2,4	1,7	2,2	2,1	2,2	2,3
Production	000 t	1599,2	689,0	960,8	1037,8	1156,3	1245,7
Stock change and net imports	000 t	437,6	404,9	12,5	-76,9	220,8	263,0
Utilisation	000 t	2036,8	1045,1	949,7	928,6	935,4	982,8
Seed use	000 t	202,6	114,4	124,9	135,2	149,1	153,6
Feed use	000 t	1447,1	619,3	526,0	510,2	492,8	532,5
Human consumption	000 t	387,1	311,5	298,8	283,2	293,5	296,6
- of which bread	000 t	357,5	281,4	268,9	255,4	263,5	266,6
- other processing	000 t	29,6	30,1	29,8	27,7	30,0	30,0
Bread per head	kg	107,0	89,0	86,0	82,4	86,6	89,2
Human consumption per capita	kg	144,8	123,1	119,4	114,2	120,6	124,1
Self-sufficiency	%	78,5	65,9	101,2	111,8	123,6	126,8

CSBL, LSIAE, MoA, EC-DG-VI

Main assumptions

- The cultivated area will stabilise at the 1995 level of roughly 75 thsd. hectares which, subject to yields, enables Latvia to reach self-sufficiency in potato production.
- In 1995-1997, the average yield was 12,6 t/ha which appears to be a realistic level also for the future although with fluctuations due to weather conditions.
- As a result of the developments in area and yield, production should increase to 949 thsd. tonnes by 2003, from 843 thsd. tonnes in 1997.
- Seed use is assumed to stay at the 1997 level of 4 t/ha.
- Feed use will increase again with a recovery in pig production which is expected for the year 2000. Feed use may reach 298 thsd. tonnes in 2003 which would still be less than the 1997 level.
- Processing (mainly alcohol) is assumed to continue its role as a residual consumption with

some fluctuations between 70 and 80 thsd. tonnes.

- Human consumption will decline further, as a result of increasing income. For 2003, a per capita consumption of 120 kg is expected, which is slightly lower than the pre-independence level. The decrease in per capita consumption in conjunction with a decline of population will further reduce total human consumption.
- By 2003, utilisation will total 952 thsd. tonnes. As production is expected to reach 949 thsd tonnes, self-sufficiency will be at a level of 99,7 % (table 39).

4.3.4. Sugar

Sugar production played only a limited, albeit stable role in Latvian agriculture with a share in the sown area of around 1 %. Expansion is limited, since only a part of Latvian soils is suitable. Expansion of the area sown with sugarbeets is in short term also limited by a limited processing capacity.

Table 39: Potatoes Projection

	Units	1990	1995	1996	1997	2000	2003
Area	000 ha	80,3	75,3	79,0	69,6	74,6	75,3
Yield	t/ha	12,7	11,5	13,7	12,1	12,6	12,6
Production	000 t	1016,0	864,0	1082,0	843,3	939,6	949,0
Imports	000 t	18,0	2,1	3,0	3,0	2,7	2,7
Exports	000 t	24,0	0,0	0,2	0,1	0,1	0,1
Stocks change	000 t	-100,0	-189,2	0,0	-160,0	-10,0	0,0
Utilisation	000 t	1110,0	1055,3	1084,8	1006,2	952,2	951,6
- seed use	000 t	321,2	340,0	316,0	278,0	298,3	301,3
- feed use	000 t	356,2	317,4	315,0	305,0	275,6	298,1
- human consumption	000 t	334,1	268,1	380,3	355,9	304,3	286,9
- other use	000 t	98,5	129,7	73,5	67,3	73,9	65,2
- consumption per capita	kg	125,0	106,0	152,0	143,5	125,0	120,0
Self-sufficiency	%	91,5	81,9	99,7	83,8	98,7	99,7

CSBL, LSIAE, MoA, EC-DG-VI

Main assumptions

- The cultivated area is expected to cover 12,3 thsd. hectares in 2003 which is a little bit higher than the 1997 level and still lower than that of 1990.
- As regards yields, a high fluctuation could be observed in recent years. A moderate increase from a base level of 26,3 tonnes per hectare appears to be a realistic. Due to unstable weather conditions, actual fluctuation of yields will remain high. The sugar content is assumed to stay at the last years' average of 11,8 %.
- As a result of the development of area and yield, the production should reach 39 thsd. tonnes of raw sugar by 2003.
- Human consumption of sugar, including processed sugar is expected to increase again to 33 kg per capita in 2003. The increase in per capita consumption will partly be offset by the decline of the Latvian population.
- By 2003, utilisation will total 79,9 thsd. tonnes. As production reaches only 39,35 thsd tonnes self-sufficiency is expected to be at 48,8 % in 2003 (table 40).

4.3.5. Milk

Milk production has traditionally been a key element in livestock production which, over the last five years, even gained in relative importance. Milk production depends to a large extent on the cost of feedstuffs and labour. Commercial production in large-scale farms has therefore been very much affected by high price ratio of feed and milk.

Milk production dropped steeply and the bulk of milk production has been transferred to household plots, with grassland as the major source of feed. The first signs of a recovery in the downstream sector would indicate a positive development in the milk sector.

Main assumptions

- The number of dairy cows will start to recover slowly by the year 2000. Up to now, there is no evidence of a recovery in animal numbers. Direct support measures starting in 1998 may stimulate the number of animals to a certain degree. Herd size is expected to be 273,7 thsd. cows in 2003.
- After a sharp drop in milk yields per cow between 1990 and 1993, the last five years saw

Table 40: Sugar Projection

	Units	1990	1995	1996	1997	2000	2003
Area	000 ha	14,7	9,5	10,0	10,9	11,6	12,3
Yield (sugar beets)	t/ha	29,9	26,3	25,8	35,6	26,5	26,9
Production	000 t	439,1	250,0	257,8	387,5	306,8	330,5
Sugar (ref. equivalent)	(%)	11,2	11,3	13,5	12,6	11,8	11,8
Yield (sugar)	(t/ha)	3,4	3,0	3,5	4,5	3,1	3,2
Production (sugar)	000 t	49,3	28,3	34,8	48,8	36,2	39,0
Net imports and stock change	000 t	79,3	30,9	47,5	20,6	38,3	40,9
Utilization¹	000 t	128,6	59,2	82,3	69,4	74,5	79,9
Consumption per capita	kg	48,1	23,4	32,9	28,0	30,6	33,4
Self-sufficiency	%	38,4	47,7	42,3	70,3	48,6	48,8

¹ including sugar used in processed products
CSBL, LSIAE, MoA, EC-DG-VI

an improvement of yields at an annual rate of 10%. This spectacular improvement was mainly due to the selection of high-yield cows in the phase of de-stocking. Since the pre-independence yield level has been reached again, only a moderate increase in yield is expected for the coming years, reaching an annual milk yield per cow in the year 2003 of 3778 kg.

- As a result of the expected developments in cow numbers and yields, the production should increase to 1034 thsd. tonnes by 2003 from 986 thsd. tonnes in 1997.
- Feed use will follow the development of livestock numbers and is expected to increase over the coming years at an average annual rate of 1%.
- Consumption per capita of milk and dairy products may remain stable up to the year 2000 and then increase again as a result of improving household incomes.
- Total human consumption is expected to reach 759,4 thsd. tonnes in 2003 which – despite the continued decline in Latvian population – would be slightly higher than the level reached in 1997.

- With production recovering faster than demand, self-sufficiency would reach 104,7 % by the year 2003 (table 41).

4.3.6. Beef

Beef production is highly dependent on developments in the dairy sector. The number of cattle continued to decrease by 5 % in 1997, with a stock of 478 thsd. animals on 1.1.1998.

The number of dairy cattle is expected to start to recover in 2000, although at a very slow pace (1 % per annum, increasing to 2 % by 2002). This implies a recovery of the production base for beef. Since - with low prices in recent years - only few calves were left alive for fattening, calve numbers represent an actually under-used potential for expanding production. However, this potential would be exploited only, if there were with more favourable developments in the markets.

Main assumptions

- Total slaughters are based on cattle numbers taking into account the production cycle for beef. In 1997, almost 40 % of the total cattle herd were slaughtered. The ratio is expected to decrease to 35 % in 2003, alongside with an increasing car-

Table 41: Milk Projection

	Units	1990	1995	1996	1997	2000	2003
Cows ¹	000	544,0	312,0	292,0	277,0	260,5	273,7
Yield per cow ²	kg	3480,1	3037,5	3159,9	3558,8	3666,7	3777,8
Milk production	000 t	1893,2	947,7	922,7	985,8	955,1	1034,0
Net imports and stock change	000 t	-527,0	107,0	86,1	-47,5	-50,5	-46,4
Utilisation	000 t	1366,2	1054,7	1008,8	938,3	904,6	987,7
- feed use at farms	000 t	152,7	227,5	230,8	216,7	210,5	228,3
- human consumption	000 t	1213,5	827,2	778,0	721,6	694,1	759,4
Consumption per capita	kg	454,0	327,0	311,0	291,0	285,1	317,6
Self-sufficiency	%	138,6	89,9	91,5	105,1	105,6	104,7

¹ end of the previous year;

² calculated on the basis of milk production and cow number
CSBL, LSIAE, MoA, EC-DG-VI

cass weight and a change from de-stocking to increasing herds. There is some potential to increase the average carcass weight of animals from its present estimated level of 140 kg to 149 kg per animal. It is assumed that, by 2003, the carcass weight will have reached roughly 180 kg which would still be only 80 % of the 1990 level.

- As a result of increased carcass weight and an increasing herd size from 2000 onwards, production is expected to reach 32,4 thsd. tonnes by the year 2003. While this would be an increase by roughly a sixth as compared to 1997, it would represent total only a quarter of the 1990 level.
- Human consumption declined sharply after independence from 23 kg per capita in 1990 to 15 kilos in 1997. Consumer preference for beef is lower than for pork. Slowly increasing purchasing power is likely to result in an increase in pork consumption and, in particular, in poultry consumption. Beef consumption is expected to increase only to 18 kg per capita by the year 2003.
- At present, the level of self-sufficiency is at 74,8%. This rate is expected to increase to 77,3% by the year 2003, due to increased production. (table 42).

4.3.7. Pork

Pig production used to be the most important branch in Latvian livestock production. However, by 1997, it ranked second after milk production. The number of pigs decreased sharply, by 70 %, during the period 1990-1997.

After a slight recovery in 1995, pig numbers have again decreased in the 1996-1997 period due to a worsening of the price ratio between pork and barley. In addition, increased low-priced imports of pork meat have begun to put domestic pork production under severe competitive pressure.

Main assumptions

- The number of animals is expected to recover from the year 2000 onwards at a rate initially of 2 % per year which could accelerate to 4 %. This implies a pig population of 493 thsd. animals by 2003.
- Total slaughters are based on the historical production cycle being approximately 10 months. The carcass weight is expected to remain 84 kg, the average figure for the last five years.

Table 42: Beef Projection

	Units	1990	1995	1996	1997	2000	2003
Cattle number	000	1472,0	551,0	537,0	509,0	482,4	521,4
- of which dairy cows	%	0,4	0,6	0,5	0,5	0,5	0,5
Average carc. weight	kg	227,2	216,3	149,0	149,0	162,8 ^a	177,9
Slaughters^{1,2}	000	550,5	217,3	205,5	185,3	172,3	181,8
Production	000 t	125,1	47,0	30,6	27,6	28,1	32,4
Net imports and stock change	000 t	-62,6	-6,9	7,8	9,3	10,9	9,5
Utilisation¹	000 t	62,5	40,1	38,4	36,9	39,0	41,8
- Consumption per capita*)	kg	23,4	15,8	15,4	14,9	16,0	17,5
Self-sufficiency	%	200,0	117,3	79,7	74,8	72,0	77,3

¹ years 1990-1995 estimated by LVAEI according to the methodology used since 1996,

² years 1996-97 estimated by LVAEI on the basis of data from MoA and CSBL
CSBL, LSIAE, MoA, EC-DG-VI

- Due to the developments in animal numbers and carcass weight, pork production will recover by 2003 to a level of 50 thsd. tonnes, an increase of 10 % over the 1996 level. Production will be at its lowest point in 1999.
- Human consumption is expected to increase as a result of rising incomes from 26,6 kilos per capita in 1997 to 29,6 kilos by 2003. This would still be only three quarters of the 1990 level. Higher per capita consumption will take place in conjunction with a decreasing population, and a moderate increase in total consumption to a level of 70,7 thsd. tonnes in 2003 is projected.
- In 19970, self-sufficiency in pork was 67,4 %. Since production is expected to recover more rapidly than consumption, self-sufficiency is projected to increase to 70,3 % by the year 2003. (table 43).

4.3.8. Poultry

Poultry has kept a small, albeit, stable share (4-5 %) in the gross output of the livestock sector. As with the rest of the livestock sector, poultry production experienced a shock after independence, resulting in a strong decline in animal numbers up to 1997. This decrease gained momentum again in the last two

years due to a worsening of the price ratio between poultry and barley and due to increased low-priced imports of poultry.

Main assumptions

- Livestock numbers will start to recover in 2000 by 5 % and increase in 2002-2003 by 4 %, mainly driven by increasing domestic demand.
- Total slaughters are based on the historical production cycle; intensity will continue to increase, although it will not be back at the pre-independence level by 2003. Average slaughter weight is expected to go down to 1,5 kg in 2003, reflecting the consumer demands and higher conversion rates.
- As a combined effect of the number of slaughtered animals and carcass weight, production could increase from 7,6 thousand tonnes in 1997 to 10,4 thousand tonnes in 2003.
- Consumption per capita has risen significantly since 1995 and will continue to do so, reaching 9 kg by 2003.
- Total consumption would amount to 21,6 thsd. Tonnes in 2003, which is an increase by 15,1 % as compared to the 1997 level.

Table 43: Pork Projection

	Units	1990	1995	1996	1997	2000	2003
Pig numbers	000	1555,0	501,0	533,0	460,0	473,9	492,9
Average carc. weight	kg	79,4	84,8	84,0	84,0	84,0	84,0
Slaughters¹	000	1741,3	738,2	525,0	530,1	568,7	591,5
Production	000 t	138,2	62,6	44,1	44,5	47,8	49,7
Net import and stock change	000 t	-35,6	-3,7	26,4	21,5	22,1	21,0
Utilisation²	000 t	102,6	58,9	70,5	66,1	69,9	70,7
– kg/capita ²	kg	38,4	23,3	28,2	26,6	29,1	29,6
Self-sufficiency	%	134,6	106,3	62,5	67,4	68,4	70,3

¹ years 1990-1995 estimated by LVAEI according to the methodology used since 1996;

² years 1996-97 estimated by LVAEI on the basis of data from MoA and CSBL
CSBL, LSIAE, MoA, EC-DG-VI

■ Foreign trade in poultry expanded in 1996 and 1997, mainly low-priced imports from the USA and Canada. It is, however, unclear as to whether the gap between recorded domestic production and consumption has actually been filled by imports only, or whether there is a higher amount of unrecorded domestic production.

■ As a result of developments in production and consumption, self-sufficiency is expected to increase from 1999 onwards up to 48,1 % in 2003, which is extremely low, bearing in mind that Latvia used to be a net-exporter of poultry meat (table 44).

Table 44: Poultry Projection

	Units	1990	1995	1996	1997	2000	2003
Poultry numbers	Mio	10,3	3,7	4,2	3,8	3,7	4,2
Average carc. Weight	kg	29,0	7,1	5,5	4,2	5,2	7,1
Total slaughters	Mio	1,4	1,5	1,6	1,8	1,4	1,5
Production	000 t	40,3	10,8	8,7	7,6	7,4	10,4
Net imports and stock change	000 t	-12,7	2,6	9,3	11,1	12,7	11,2
Utilisation	kg	27,6	13,4	18,0	18,7	20,1	21,6
Consumption per capita	kg	10,3	5,3	7,2	7,6	8,3	9,0
Self-sufficiency	%	146,1	80,9	48,3	40,5	36,7	48,1

CSBL, LSIAE, MoA, EC-DG-VI

Glossary/Abbreviations

ADP	Agricultural Development Project	ha	Hectare
CEECs	Central and Eastern European Countries	ILO	International Labour Organisation
		IMF	International Monetary Fund
CEFTA	Central European Free Trade Association	kg	Kilogramme
COMECON	Council for Mutual Economic Assistance	LSIAE	Latvian State Institute of Agrarian Economics
CPI	Consumer Price Index	LVL	Latvian Lat (national currency)
CSBL	Central Statistical Bureau of Latvia	LZF	Latvian Farmers' Federation
EC-DG VI	European Commission, Directorate General VI (Agriculture)	MFN	Most Favourite Nation
		MMPP	Minimum Marginal Purchase Price
ECU	European Currency Unit	MoA	Ministry of Agriculture
EFTA	Baltic Free Trade Agreement	NIS	Newly Independent States (from the former Soviet Union)
EU	European Union	OECD	Organisation for Economic Co-operation and Development
FAO	Food and Agriculture Organisation	PHARE	Poland and Hungary Aid Restructuring Economy; extended to all CEECs
FDI	Foreign Direct Investment	PPS	Purchase Parity Standard
FTA	Free Trade Agreement (Tariff concession)	SMP	Skim Milk Powder
FSU	Former Soviet Union	t	Tonnes
GAO	Gross Agricultural Output	TAIEX	Technical Assistance Information Exchange
GAP	Gross Agricultural Product	WB	World Bank
GATT	General Agreement on Tariffs and Trade	WTO	World Trade Organisation
GDP	Gross Domestic Product		

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Annex 1: The veterinary sector in Latvia

Prepared by the Technical Assistance Information Exchange Office (TAIEX)

The situation of Latvia's agriculture is still linked to the outcome of the privatisation of the collective farming system. However, as land reform and privatisation are now almost complete, agricultural production has started to stabilise following a drastic fall after independence. Larger family farms (up to 20 ha), smaller farms and household plots now characterise the scene. Only very few of the former collective farms have survived and are now being operated as co-operatives. Self-sufficiency in the main products of animal origin ranges from just over 100% for milk (annual production ~986.000 t.) to only about 66% for meat (annual production 80.000 t.). At present, Latvia is a net importer of animal products. The situation in the fish sector is similar. The number of fishing vessels, both the high-sea fleet and the Baltic fleet have been drastically reduced. The total catch is now about 200.000 t. per year, including the inland aquaculture production, which is becoming increasingly popular. More than 17% of Latvia's population is employed in agriculture and food production.

In order to assist in restructuring the agricultural sector and to ensure increased trade flows, Latvia has identified the veterinary sector as being critical within the pre-accession period and policies.

In a functional analysis of the veterinary sector at least five sub-sectors are to be distinguished.

1. Veterinary Education and Training Sector

- 1.1 Founded in 1919, the Latvian Faculty of Veterinary Medicine is now part of the Latvian University of Agriculture in Jelgava, a city 40 km south of Riga. Fifty new students are admitted annually, representing ~0.002% of the Latvian population. This percentage is sufficient to cover the future needs of the veterinary profession in Latvia. Veterinary students are trained for 5 years and awarded the diploma of veterinarian upon qualifying.
- 1.2 The Veterinary Faculty has developed its curriculum based on the needs, traditions and experience of Latvia as well as the experience of other veterinary colleges in Europe, USA and Canada. However, the Faculty has not undergone an evaluation procedure with regard to the application of EU training schemes and teaching programmes.
- 1.3 In respect of postgraduate training, the Latvian Association of Veterinarians is responsible for the continuous professional development of private veterinary practitioners, who are compulsory members of the Association. The Association organises regular events for postgraduate training. One way of controlling the professional development of the private sector is the private vets' licence, issued by the Association for a five year period and extended only if the private vet has passed a further examination or has a good professional standing. The State Veterinary Department manages the professional development of its staff through regular meetings; specialisation in the hygiene sector is possible. Further intensive in-and-out country training for state veterinary officials is provided by TAIEX activities and seminars and vari-

ous Phare programmes. This should be continued systematically throughout the process of implementing and applying the EU veterinary acquis.

2. The State Veterinary Sector

- 2.1 The State Veterinary Service (SVS) of Latvia became an independent institution in 1992, and comes under the supervision of the Ministry of Agriculture. A Chief Veterinary Officer (CVO) is head of the service, appointed by the Cabinet of Ministers. In general, the SVS is responsible for preparing national veterinary legislation, which should fully correspond to the EU veterinary acquis, according to political consent. The SVS also has to enforce veterinary legislation, except border controls. Since May 1997, veterinary checks on imports, transit and exports of consignments of veterinary concern are carried out by the Sanitary Border Inspection, again an independent state institution subordinate to the Ministry of Agriculture.
- 2.2 Concerning veterinary legislation, the EU veterinary acquis is in the process of being integrated into Latvian legislation. Consequently, as for all Associated Countries, access to updated and consolidated EU legislative texts, ideally by electronic means, is a major problem, as is the grouping of legislative measures to simplify the task of creating meaningful national legislation. With regard to the enforcement of veterinary legislation, the SVS operates its headquarters with 7 divisions called State Veterinary Departments (SVD). Under the direct control of the SVD are the national veterinary laboratory and the laboratories at district level; The 26 district veterinary offices and Riga city veterinary office - known as District Veterinary Boards - are also directed by the SVD. Altogether the SVS employs about 540 vets.
- 2.3 To oversee the meat and other food industries and for the veterinary supervision of markets, the veterinary boards contract about 430 vets. Another 400, mainly private practitioners, are contracted for carrying out compulsory prophylactic measures on animal health in the field. State veterinary inspectors have all the executive and administrative powers necessary to carry out the checks, for which farmers and the industry have to pay. The revenue flows back into the State Veterinary Service's budget.
- 2.4 The situation for Sanitary Border Inspection (SBI) is completely different. All checks are carried out without any charge. This decision is highly appreciated by the industry which mainly lives from the transit business. On the other hand, it could definitely lead to a serious distortion of competition, for example for the ports on the Baltic Sea. At present, Latvia's Sanitary Border Inspection Service operates 31 Border Inspection Posts (BIPs) on roads, in railway stations, ports and airports comprising veterinary, phytosanitary and medical checks. Because of a lack of infrastructure to carry out physical inspection at the border, consignments are sent to their destination following documentary and identity checks at the BIP. There are 50 specially approved customs warehouses inside Latvia, where the physical sanitary examination is carried out. At present, import and transit controls are based on a licence procedure. Licences are issued by the SVS following written application by the importer or transit agent. The number of import consignments checked per year is rather low (1996: 2000); the main activity is checking the transit of consignments of items of veterinary concern (1996: >12.000). The number of BIPs will clearly be reduced drastically when Latvia and neighbouring Associated Countries join the EU. Probably not more than 3 BIPs at road crossings (2 to Russia, 1 to Belorussia), 1 BIP on the railway, BIPs at 3 ports and 1 airport will remain. Available resources should there-

fore only be spent on these earmarked BIPs, to bring them up to the standard required by EU veterinary legislation. Plans for new infrastructure, already underway, need reviewing as concerns their veterinary aspects. A number of free zones and free ports are planned, which must be under full veterinary control, if it is intended to introduce consignments of products of animal origin into these areas. It is worth mentioning that the processing of consignments of veterinary concern in these areas is prohibited, if the products are not fit for import into the EU.

- 2.5 The equipping of veterinary offices and BIPs with PCs has made good progress. However, a computerised communication network is still missing but desperately needed by both services. It would be very wise to have only one integrated system for the two services. The reason for this can be seen in the EU veterinary acquis. Once a consignment of veterinary concern, introduced from a non-EU member, has been cleared at the EU border, it still has to be under the intra-community veterinary trade control system until it is consumed in a Member State or has left the EU again. Latvia wishes to install the EU IT systems like ADNS, ANIMO, SHIFT and Inforvet as soon as possible.
- 2.6 The animal health situation of Latvia concerning OIE-List A diseases appears to be good. However, Classical Swine Fever (CSF) remains a problem, at least in the wild boar population. CSF-surveillance tests on wild boars revealed a sero conversion rate of 5%. Accordingly, oral vaccination of the wild boar population against CSF is planned for this year, whereas vaccination of the domestic pig population against CSF will cease. The domestic cattle population is free of Tuberculosis and Brucellosis; whilst Enzootic Bovine Leucosis is not yet completely eradicated (9% cases per year). Infectious Bovine Rhinotrachitis and Aujeszky's disease

are under eradication programmes, based on vaccination. Assistance is required to complete the elaboration of disease monitoring and surveillance plans as well as contingency plans.

- 2.7 Concerning Animal Welfare legislation, a new draft has recently been presented to the Latvian government. The SVS has also drafted 4 of the 8 necessary implementing regulations and is at present preparing the remaining 4. The application of EU animal welfare standards on keeping of calves, pigs, laying hens and laboratory animals as well as on the transport and slaughter of animals is therefore pending the implementation of corresponding Latvian animal welfare rules.
- 2.8 In the field of public veterinary health, the veterinary service has a very strong involvement. Veterinary staff and veterinary supervision are organised in such a way that the "stable to table" concept can be realised. Much veterinary attention is paid to the permanent supervision and inspection of the traditional food markets. These markets still play an important role in the direct supply of food to consumers by farmers and producers. Riga market, for example, processes more than 12.000 cattle carcasses and more than 15.000 pig carcasses annually. A specific task for the veterinary services at these markets is to carry out the post mortem examination of pig carcasses (including examination of *Trichinella*) and sheep and goats carcasses in the delivery area of the market halls. Exceptionally, the slaughter of these categories of animals is allowed on the farm without meat inspection. Any movement of such a carcass from the farm to the market requires an individual veterinary certificate, including the ante mortem inspection results. However, it is not possible to check the identity of the carcass, because the individual animal identification is not on the carcass.

A number of other activities are in the process of being implemented and applied such as the elaboration of a zoonosis control plan, a residue monitoring and sampling plan and the introduction of control point/HACCP concepts within the food processing sector.

3. The Private Veterinary Sector

3.1 A veterinary chamber does not exist in Latvia. However, it is compulsory for veterinary practitioners to be members of the Latvian Veterinary Association. The Association has observer status with the Federation of Veterinarians of Europe (FVE) and represents the profession. Since 1994 they have been responsible for issuing the licence necessary for private veterinary practitioners. At present, about 1700 vets are licensed as practitioners, but about a third of these do not provide services. Around 300 practitioners are employed by co-operative farms, local municipalities or private clinics. Around 800 practitioners execute official state veterinary duties on the basis of an agreement with the boards mentioned above. However, the state does not pay the practitioner; he himself has to charge the industry or the farmer for his services. The average income of practitioners is generally still very low.

3.2 It is worth mentioning that there are some technicians licensed as vets, who qualified under the former Soviet system.

4. Livestock Sector

4.1 At present neither a full register of holdings, nor an animal identification system exist in Latvia. Only a database for pedigree cattle exists, operated by the Livestock Department. However, Phare projects have been established, to assist in animal identification, herd registration and animal movement control.

Every movement of cattle from one district to another requires a veterinary movement certificate.

The domestic livestock population comprises 509.000 cattle, 460.000 pigs, 64.000 sheep and goats, 26.000 horses and 3,8 mio poultry.

4.2 A national animal health trust fund does not exist at present. However, an appropriate proposal was included in the draft amending the Veterinary Activities Act. It seems very important for Latvia's livestock farmers to have a fund of this kind, in view of current problems financing any emergency actions such as eradication measures.

5. The Processing Industry under Veterinary Legislation

5.1 Animal production is still an important component of farming in Latvia and so is the processing of animal products. This requires a competitive processing industry fulfilling EU hygiene and technical standards as laid down in the relevant veterinary directives on meat, milk, fish, eggs and other products of animal origin. However, it seems that at present there is no real pressure for the industry to adopt EU standards. The reasons for this may be, firstly, the low standards of self-imposed efficiency, for example with respect to meat and, secondly, the nearby export markets of Russia and the Ukraine.

5.2 This could also explain why, out of the whole agri-food industry, only 6 dairies have been approved according to EU standards. EU approval for fish establishments is under consideration at present.

5.3 Pushed by the Veterinary Services, the industry is being forced to apply CP/HACCP concepts and good manufacturing/good laboratory

practices. In doing so, food hygiene and food quality or product safety and quality will be improved. But there is no doubt that substantial funds are also needed for the technical upgrading necessary for the agri-food industry to reach EU standards. At present, there are about 430 establishments dealing with meat (slaughter including low capacity slaughter, collecting, processing and purchase), 50 markets, 150 dairy establishments, 18 plants producing eggs, about 200 bigger stores, 27 companies producing or supplying veterinary pharmaceuticals and about 250 veterinary or human pharmacies allowed to supply veterinary pharmaceuticals.

6. Conclusion

As animal production and the processing of animal products are still important for Latvia, the veterinary services are working very hard and intensively to remove major obstacles to Latvia's accession to the EU. However, the introduction of EU system.

Annex 2: PHARE in the Latvian agricultural sector

Phare programme funds' commitments in agriculture accounted for ECU 17 million from 1990 to 1996 and ECU 7 million from 1997 to 1999.

To date, most technical assistance in support of Latvian agriculture, forestry and rural development has been provided by Phare 1993 and 1994 "first wave" projects (backed up by selective bilateral assistance). This has assisted:

- the Ministry of Agriculture (MOA), to improve its management, co-ordination, training and statistical capacity;
- Laukkredits, to help it appraise, disburse and recover demand-led applications for credit, using Western banking principles;
- State Land Service, to facilitate the registration and titling of land, in order to develop a land market, so that it can be used as collateral against bank lending;
- agro-enterprise restructuring, to assist medium-sized companies in the dairy, meat, bakery, brewing, fats/oils, confectionery, fish and other sectors, focusing on the release of constraints to marketing, distribution, investment and quality control; and
- agro-industry privatisation and capitalisation, to help complete the privatisation process in selected agro and fisheries enterprises, and facilitate investment by local and/or foreign investors.

1995 and 1996 "second wave" Phare support for private Latvian agriculture/forestry covered:

- development of agricultural policy and statistics in MOA, as part of an overall programme of

institutional support (which started implementation in the last quarter of 1997);

- convergence/integration/harmonisation/approximation of Latvian legislation with EU laws, standards, regulations and directives, particularly related to veterinary and phyto-sanitary issues (which will start implementation in the first quarter of 1998);
- national food quality control and regulation, and its implementation at sector level (which started implementation in the last quarter of 1997);
- private farm and forestry business development (under implementation);
- diversification of the rural economy, and development of rural finance (which started implementation in January 1998); and
- pilot activities in support of border inspection and control (veterinary and phyto-sanitary), and animal identification (implementation in the last quarter of 1997 and first quarter of 1998).

The "third wave" of Phare support for Latvian agriculture will focus on facilitating the EU pre-accession process and related tasks, and cover:

- bringing forestry legislation into line with that in Europe, at the same time as addressing land use issues and ensuring that forestry policy is structured to stimulate afforestation of abandoned farmland and re-afforestation (1997);
- follow-up to three pilot activities focused on strengthening veterinary, phyto-sanitary and border control services (1997);



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