

European Commission
Directorate General for Agriculture (DG VI)
Working Document

Agricultural Situation and Prospects in the Central and Eastern European Countries

SUMMARY REPORT

Bulgaria
Czech Republic
Estonia
Hungary
Latvia
Lithuania
Poland
Romania
Slovakia
Slovenia

JUNE 1998

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The manuscript was prepared by Rob Peters with the assistance of the other country report authors. The author accepts full responsibility for any errors which could still remain in the text. The closing date for data collection was May 1998.

1. GENERAL ECONOMIC SITUATION	12
1.1 Macro-economic environment	12
1.2 Agriculture in the overall economy.....	15
2. AGRICULTURE AND RURAL SOCIETY	19
2.1 Agricultural production	19
2.2 Agriculture and food trade	20
2.3 Farm structures.....	22
2.4 Rural development	25
2.5 Agriculture and environment	26
2.6 Up- and downstream sectors	26
3. AGRICULTURAL AND RURAL POLICIES	28
3.1 Market and production support	29
3.2 Trade policy	32
3.2.1 WTO.....	32
3.2.2 Other trade agreements.....	36
3.3 Structural and rural policy.....	37
4. COMMODITY SITUATION AND OUTLOOK.....	38
4.1 Land use.....	39
4.2 Livestock.....	41
4.3 Arable crops	42
4.4 Other crops.....	44
4.5 Dairy and meat.....	45
5. GENERAL CONCLUSION AND OUTLOOK	48

Table 1 : CEC-EU population and GDP	12
Table 2 : Gross Domestic Product, real growth	13
Table 3: other economic indicators	15
Table 4: importance of agriculture	16
Table 5: CEC net agrofood trade	20
Table 6: CEC-EU net agrofood trade	21
Table 7: Commodity breakdown CEC-EU agrofood trade	22
Table 8: Shares in agrofood trade	22
Table 9: CEC farm structure according to land use	24
Table 10: percentage PSE CEC-EU	28
Table 11: effective support prices selected products 1997/98	29
Table 12: Producer prices selected crop products CEC-EU 1997	31
Table 13: Producer prices selected animal products CEC-EU 1997	31
Table 14: CEC-EU tariff protection selected products (ad valorem equivalents)	33
Table 15: Minimum access tariff quotas in 2000	34
Table 16: Export commitments in 2000	35
Table 17: Arable land use	40
Table 18: Livestock numbers	41
Table 19: Cereals supply balance	43
Table 20: Oilseeds supply balance	43
Table 21: Beet sugar supply balance	44
Table 22: Fruit, vegetable and wine area and production	45
Table 23: Milk supply balance	46
Table 24: Beef supply balance	46
Table 25: Pigmeat supply balance	47
Table 26: Poultry supply balance	47

Graph 1: Per capita income (ECU PPP, 1996) 14

Graph 2: Gross Agricultural Output 19

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 (CECs). 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 CECs 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 CEC 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 economic 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 CECs 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

Most CECs achieved a turnaround in their economies in 1993 or 1994 after a sharp contraction in the first years of transition from centrally planned to market economies.

Average economic growth of the CECs slowed to 3.5% in 1997, after peaking at 5.7% in 1995. The overall evolution masks wide differences between countries: while Poland grew at close to 7%, Bulgaria's economy contracted by nearly 7% in 1997.

The slowing of aggregate economic growth should be reversed in 1998 and 1999. Although the recent events in Asia and Russia add some uncertainty to the forecast, it is expected that the external economic outlook will further improve, mainly determined by accelerated growth in the EU. On average, the ten applicant countries are expected to experience faster growth than the EU, which should allow the catching-up process to continue. The average CEC growth rate is expected to be in the 4 to 5% range till the end of the decade.

Agriculture in the overall economy

In terms of area, contribution to GDP and in particular share in total employment agriculture is still relatively more important in the CECs than in the EU. Only in the Czech Republic, Slovakia and Slovenia the relative size of agriculture is comparable to the EU average.

In a number of CECs agricultural employment has increased in absolute and relative terms, in particular in those countries where agriculture has played a buffer role in a generally deteriorating economic situation such as Romania and Bulgaria. The share of the total work force employed in agriculture is particularly high in these two countries, but also in Poland and Lithuania. The overall number of more than 10 million employed in agriculture for the CEC-10 is high compared to the EU's 7.5 million, while the productivity in agriculture as measured by the value added per worker is only around 11% of the EU level.

Food is an important item of household expenditure in most CECs, varying from 30 to 60%. Only Slovenia and Hungary are closer to EU levels.

Agricultural production

After a clear decline in the volume of agricultural output in the first years of transition, a certain stabilisation seems to have set in for most CECs in recent years.

Only in Slovenia and Romania output levels exceed or have returned to pre-transition levels. In most other countries a combination of factors such as price and trade liberalisation, privatisation, abolition of consumer subsidies and loss of traditional markets led to increasing pressure on agriculture. Input prices such as for energy and fertiliser tended to move to world market levels, while agricultural output prices tended to stagnate or rise much less in the face of falling demand. Most severely affected was the livestock sector, where in many CECs the decapitalisation is still continuing or has only recently come to a halt. In the crop sector, which initially adapted by cutting inputs, stabilisation of input-output price relationships has more recently led to a certain recovery in input use and higher output levels.

Agriculture and food trade

Most CECs, with the exception of Hungary and Bulgaria, are or have become net importers of food in recent years. The largest exporters in value terms are Poland, Hungary and the Czech Republic, while Poland and the Czech Republic are also large importers.

The most important trade partner for many CECs is the EU, in particular on the import side, where the EU has a share varying between 40 and 55%, although it has lost some market share since 1995 as trade between the CECs is increasing.

Also as an export destination the EU is important, in particular for the more export oriented countries such as Hungary, Poland, the Czech Republic and Bulgaria, which ship between 30 and 40% of their agrofood exports to the EU, although also here a certain diversification in export destinations has taken place since 1995.

The CEC agrofood trade deficit with the EU has increased from 1 to around 1.5 bio ECU from 1995 to 1997. The only two countries that have a positive agrofood trade balance with the EU are Hungary and Bulgaria.

The commodity breakdown of agrofood trade flows between the CECs and the EU shows that the main export items are live animals and meat, still accounting for over 25% of export value to the EU, although the share of live animals has decreased as the livestock sector has declined. Vegetables are important in the export as well as the import trade with the EU, including processed vegetables and fruit on the import side as well as beverages.

Farm structures

As in the wider economy, one of the main objectives of reform during transition was to decollectivise agriculture and to re-establish private property rights. Putting land and other farm assets into private ownership or private operation took a number of different forms, leading to different degrees of fragmentation of ownership and of farms.

A general feature in the countries, which had a predominantly collectivised agriculture in the pre-transition era, appears to be that the dualistic character - very large scale collective or state farms on the one hand and very small individual or private plots on the other - is diminishing. The average size of what is left of the state-managed farms or their successors, e.g. the private cooperatives, has decreased significantly, while at the other end of the scale the size of individual farms is slowly increasing. For the medium term, however, the forms of private producer cooperatives or associations, which have emerged, will most likely continue to play an important role in agricultural production and the focus of the smaller farms will continue to be production for own consumption and local markets. The rate of structural reform will also depend on the emergence of functioning land markets, which so far has been hindered by the delay in most countries of the definitive settlement of property rights and by limitations on acquisition of land in certain countries.

In Poland and Slovenia, that already had a large private sector in agriculture structural reform has been less marked. In particular in Poland the small scale and fragmented nature of private farming remains a long term structural handicap.

Rural development

In several CECs there was a net migratory flow to the countryside as general economic conditions worsened during transition and agriculture played the role of buffer allowing people to live off their plots of land in their home villages and supplement other income sources such as retirement pensions. The underemployment and hidden unemployment related to subsistence farming poses large future challenges for a balanced development of the rural economies.

Agriculture and environment

Agriculture is the dominant form of land use, over 55% of total land area on average in the CECs, and an important factor in managing land, water and air resources (including bio-diversity) and in shaping the countryside.

During transition the application of fertilisers and agro-chemicals decreased substantially, as has livestock production, relaxing somewhat the pressures on the environment. More recently input use has again started to increase as the crop sector has recovered, but application levels are generally much below EU averages. For the future it remains to be seen how sustainable practices can be balanced with yield requirements.

Up- and downstream sectors

In the pre-transition era the CEC up- and downstream sectors of agriculture were predominantly in the hands of large state-owned monopolies. The privatisation and breaking up of state monopolies in the input supplying and food processing

industries has progressed, albeit to different degrees and in different ways in the different countries.

Countries opted for different schemes such as mass privatisation through vouchers (e.g. the Czech Republic), first transforming the state monopolies into joint stock companies, then splitting them up and offering the shares to the general public, heavy involvement of foreign capital (e.g. Hungary) and employee and management buy outs (e.g. Slovenia).

Most CECs continue to face overcapacity and restructuring problems in the first processing stages such as milling, slaughterhouses and dairies and much of the equipment is obsolete. Foreign direct investment has tended to concentrate on the higher value added sections of the food industry such as beverages, tobacco and confectionery, but also the sugar industry has attracted western capital, in particular in the Visegrad countries.

Agricultural and rural policies

Across the CECs a wide range of support instruments is applied varying from market price support and several types of direct payments to input subsidies, investment aids and tax exemptions.

The main market price support instruments applied are border measures (tariffs, import/export licensing and export subsidies) and intervention in the market to underpin minimum or floor prices.

Although in most cases support prices are still lower than in the EU, the gap has become smaller in recent years as (nominal) support prices have been increased.

The changes in price support, world market developments and some recovery in domestic demand have led to an increase in producer prices, somewhat more so for crop products than for animal products. The price gaps at farm gate level with the EU have tended to decline over time.

Some countries have been introducing direct aids to support crop and livestock production, e.g. in the form of area and/or headage payments. Nearly all countries support agricultural production through credit and input subsidies and tax exemptions.

In addition to the legal framework that covers farm structures (land and farm privatisation) various structural and rural policy instruments are being developed by the CECs such as support for agricultural investment and for farming in less favoured areas. Policies and support instruments for off farm investment and economic diversification in rural areas are generally still limited.

In most countries rural policy formulation is still at an early stage and limited to village renewal and improving the technical infrastructure, although some

countries are developing programmes for small and medium sized enterprises, tourism and local processing of raw materials to promote economic diversification.

Conclusion and Outlook

Support for agriculture through border protection, market intervention and structural aid has generally increased. Farm prices have increased, in particular for crop products. The price gap between the CECs and the EU for cereals, pigmeat and poultry has narrowed considerably and could be expected to disappear if the EU's Agenda 2000 CAP reform plans are implemented. Several CECs might face the need to adjust their price support downward for these products. For sugar, dairy and beef price gaps are still bigger, for the livestock products also partly due to quality differences. For the latter Agenda 2000 would reduce the EU prices.

The projections for the main commodities show that the CECs could be expected to somewhat increase their surplus production of cereals, oilseeds and pigmeat until 2003. The export of these surpluses would mostly have to be at world market prices. The traditional dairy surplus would be somewhat reduced, while for beef and poultry the region would be more or less self-sufficient.

1. GENERAL ECONOMIC SITUATION

1.1 Macro-economic environment

In demographic terms the CECs represent a potential addition to the existing Union's population of 28%. Nearly 60% of the increase would come from the so called first wave countries¹ with which accession negotiations are to be opened in first instance. The relative size of the CEC-10 economies combined as measured by GDP in 1996 is however much smaller at only 4% of EU-15 GDP. The first wave countries represent 77% of CEC-10 GDP.

Table 1 : CEC-EU population and GDP

1996	population million	GDP bio ECU	GDP pc	
			ECU	ECU PPP
Poland	38.6	107.4	2782	5576
Hungary	10.2	35.3	3466	6544
Czech Republic	10.3	41.1	3980	10549
Slovenia	2.0	14.9	7523	10484
Estonia	1.5	3.3	2274	4199
CEC-I	62.6	202.1	3230	6677
Romania	22.6	28.0	1239	4324
Bulgaria	8.4	7.4	881	3927
Slovakia	5.4	14.9	2759	7459
Lithuania	3.7	4.9	1324	4034
Latvia	2.5	3.9	1568	3268
CEC-II	42.6	59.1	1388	4556
CEC-10	105.2	261.2	2484	5818
EU-15	372.7	6764.9	18153	18154

Source: Eurostat, country reports

GDP per capita for the first wave countries stood at 18% of the EU level, while for the other CECs it reached 8%. When exchange rates adjusted for purchasing power parity (PPP) are used the gap in living standards is reduced to around 37 and 25% respectively of the average EU level. Some of the higher income CECs such as the Czech Republic and Slovenia come close to Greece in purchasing power terms (see graph 1).

Most CECs achieved a turnaround in their economies in 1993 or 1994 after a sharp contraction in the first years of transition from centrally planned to market economies. However, despite the growth in recent years most countries (with the possible exception of Poland) are still well below pre-transition output levels (see table 2).

¹ Poland, Hungary, Czech Republic, Slovenia, Estonia

Average economic growth of the CECs slowed to 3.5% in 1997, after peaking at 5.7% in 1995. The overall evolution masks wide differences between countries: while Poland grew at close to 7%, Bulgaria's economy contracted by nearly 7% in 1997. The mediocre overall performance in 1997 can be attributed to problems in specific countries.

Although Bulgaria started to emerge from its economic crisis, the depth of the depression in 1996 and the first months of 1997 was such that another large fall in GDP was recorded in 1997. In Romania, growth has been much weaker than expected because of continuing political, legal and economic uncertainty. The exchange rate difficulties in the Czech Republic brought to the fore other structural economic weaknesses, which forced the government to take restrictive measures. On the other hand, continued fast growth was recorded in Poland and Slovakia, while growth accelerated considerably in Hungary and the three Baltic states.

Table 2 : Gross Domestic Product, real growth

<i>% change</i>	1990	1991	1992	1993	1994	1995	1996	1997
Poland	-11.6	-7.0	2.6	3.8	5.2	7.0	6.1	6.9
Hungary	-3.3	-11.9	-4.3	-2.3	2.9	1.5	1.3	4.4
Czech Republic	-1.2	-11.5	-3.3	0.6	2.7	6.4	3.9	1.0
Slovenia		-8.1	-5.5	2.8	5.3	3.9	3.1	3.7
Estonia			-22.0	-8.5	-1.8	4.3	4.0	5.2
CEC-I			-0.7	1.9	4.2	5.7	4.6	5.1
Romania	-5.6	-12.9	-8.8	1.5	3.9	7.1	4.1	-6.6
Bulgaria		-8.4	-7.3	-1.5	1.8	2.9	-10.1	-6.9
Slovakia	-2.5	-14.4	-6.5	-3.7	5.0	7.0	6.9	5.9
Lithuania	-3.3	-13.1	-34.0	-30.4	1.0	3.3	4.7	5.7
Latvia			-34.9	-14.9	0.6	-0.8	2.8	3.5
CEC-II			-11.9	-3.9	3.4	5.7	3.0	-1.8
CEC-10			-3.2	0.6	4.1	5.7	4.3	3.5
EU-15					2.9	2.1	1.4	2.3

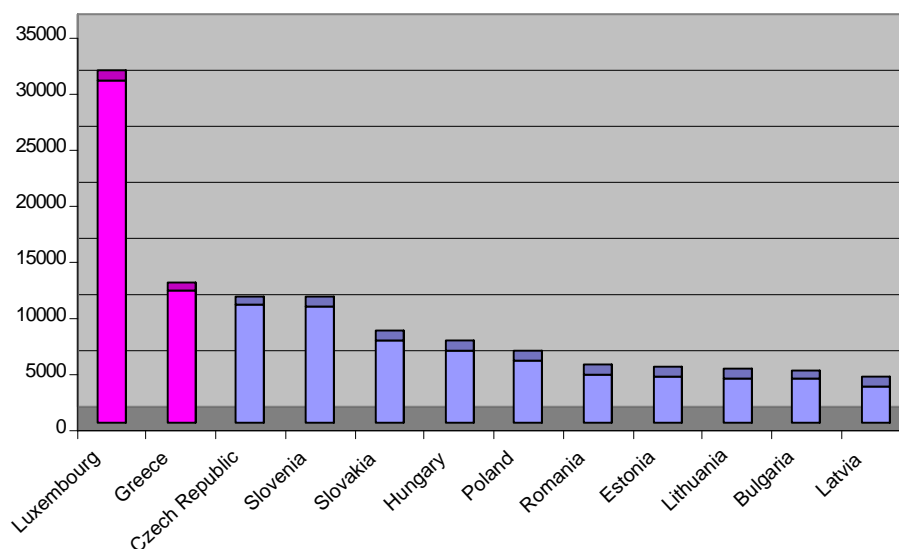
Source: DG II, country reports

The slowing of aggregate economic growth should be reversed in 1998 and 1999. Although the recent events in Asia and Russia add some uncertainty to the forecast, it is expected that the external economic outlook will further improve, mainly determined by accelerated growth in the EU. Additionally, the continued integration of the associated countries in the Union, and the implementation of necessary economic reform programmes in Bulgaria, Romania and the Czech Republic, will support overall economic developments in the CECs. Due to the limited trade relations with the Asian tigers, no major direct effects of the financial crisis in Southeast Asia are expected.

Only three countries are expected to experience significantly lower average growth in 1998 and 1999 than they did in 1994-1997, the period of growth following the output contraction at the start of transition. As mentioned above, the Czech Republic and Romania are implementing stabilisation measures and

structural reforms, which have a negative effect on short-term growth prospects. The lack of measures to tackle Slovakia's structural weaknesses is likely to undermine the growth potential of the Slovak economy. In Estonia and Poland growth is expected to stabilise at a high level, albeit somewhat lower than in previous years. On average, the ten applicant countries are expected to experience faster growth than the EU, which should allow the catching-up process to continue. The average CEC growth rate is expected to be in the 4 to 5% range till the end of the decade.

Graph 1: Per capita income (ECU PPP, 1996)



With the notable exception of Bulgaria and Romania, the gradual disinflation process in the CECs is continuing. Most countries now record annual inflation rates of less than 15% and half of the countries have reached single digit inflation. Especially, the countries that still had relatively high inflation rates (Baltic countries, Poland) recorded sizeable reductions of inflation in 1997. Lower real wage increases and improved productivity were major factors behind the inflation slowdown. Nevertheless, experience in the countries with the lowest inflation rates shows that it remains difficult to reduce inflation below 5%. Some of these countries have even experienced a new acceleration of inflation. Therefore, it is expected that disinflation will only progress slowly in most countries in 1998 and 1999.

The officially recorded unemployment rates seem generally to have stabilised, after rising in the first years of transition, and are not out of line with those seen in the EU.

Bulgaria has made remarkable progress in achieving fiscal balance. In several countries budget deficits were on the high side and continued to increase (Slovakia, Romania, Hungary and Poland), although overall government debt levels would not seem excessive for the countries for which data are available.

Table 3: other economic indicators

	inflation		unemployment		budget balance		government debt		current account	
	% change cpi		% labour force		% GDP		% GDP		% GDP	
	1996	1997	1996	1997	1996	1997	1996	1997	1996	1997
Poland	19.9	14.9	13.6	10.5	-2.5	-1.4	53.6		-1.0	-3.1
Hungary	23.6	18.3	9.9	8.7	-3.3	-4.6	74.1	68.0	-3.7	-2.2
Czech R.	8.8	8.5	3.5	5.2	-0.1	-1.0	33.1	42.0	-8.2	-7.2
Slovenia	9.7	9.0	7.3	7.1	0.3	-1.5	21.6		0.2	0.2
Estonia	23.1	12.0	10.0	10.5	-1.5	1.8			-9.8	-9.8
Romania	38.8	154.8	6.3	8.8	-3.5	-4.9			-6.7	-6.2
Bulgaria	310.8	578.6	14.0	15.0	-11.7	-3.1			0.4	4.4
Slovakia	5.8	6.1	12.6	13.0	-4.4	-5.6	24.8	21.8	-10.1	-7.0
Lithuania	13.1	8.4	7.1	6.7	-2.5	-1.3			-9.2	-10.3
Latvia	17.6	8.4	7.2	6.7	-1.4	1.8			-9.8	-9.8
EU-15	2.1	1.9	10.9	10.7	-4.2	-2.4	73.0	72.1	0.9	1.3

Source: DG II, country reports

Exports recovered faster than expected in 1997. They benefited mainly from higher external demand and better export competitiveness. Productivity improved as a consequence of slower wage developments and efficiency gains, which are the result of significant investment efforts in previous years. Import developments were more diverse. While real imports receded in Bulgaria, Romania and Slovakia, they accelerated by more than 20% in Estonia, Lithuania, Hungary and Poland. As a net result, the trade balances and current account deficits were stabilised approximately at their 1996 levels. The positive factors that supported exports in 1997 should continue to play in 1998 and 1999. However, domestic demand is expected to strengthen in almost all countries, which should push up imports. Therefore, no improvement of external balances is foreseen. Increased inflows of foreign direct investment (FDI) make the current account deficits in most countries sustainable. However, in some countries that do not benefit from large FDI flows, persistent large imbalances are a cause for concern.

1.2 Agriculture in the overall economy

In terms of area, contribution to GDP and in particular share in total employment agriculture is still relatively more important in the CECs than in the EU. Only in the Czech Republic, Slovakia and Slovenia the relative size of agriculture is comparable to the EU average.

Table 4: importance of agriculture

1996	agric. area		agric. production*		agric. employment		agrofood trade		food expenditure
	000 ha	% tot. area	bio ECU	% GDP	000	% tot. empl.	% tot. exp.	% tot. imp.	% household income
Poland	18474	59.1	6.5	6.0	4130	26.7	11.0	11.0	35
Hungary	6184	66.5	2.1	5.8	298	8.2	17.5	5.1	24
Czech Republic	4279	54.3	1.2	2.9	211	4.1	5.7	7.5	31
Slovenia	785	38.7	0.7	4.4	61	6.3	4.2	7.8	23
Estonia	1450	32.1	0.3	8.0	74	9.2	15.7	15.6	30
CEC-I	31172	56.7	10.6	5.3	4774	18.4			
Romania	14789	62.0	5.3	19.0	3975	37.3	8.8	7.6	58
Bulgaria	6164	55.5	0.9	12.8	769	23.4	18.8	8.0	54
Slovakia	2445	49.9	0.7	4.6	169	6.0	5.4	8.6	35
Lithuania	3151	48.5	0.5	10.2	398	24.0	13.1	17.1	52
Latvia	2521	39.0	0.3	7.6	208	15.3	16.8	13.4	39
CEC-II	29070	55.0	7.8	13.1	5519	27.9			
CEC-10	60242	55.9	18.4	7.0	10293	22.5			
EU-15	135260	41.8	117.5	1.7	7514	5.1	7.4	9.6	18

Source: country reports

*As measured by Gross Agricultural Product (GAP)

Food expenditure for Poland, Hungary and the Czech Republic includes beverages and tobacco

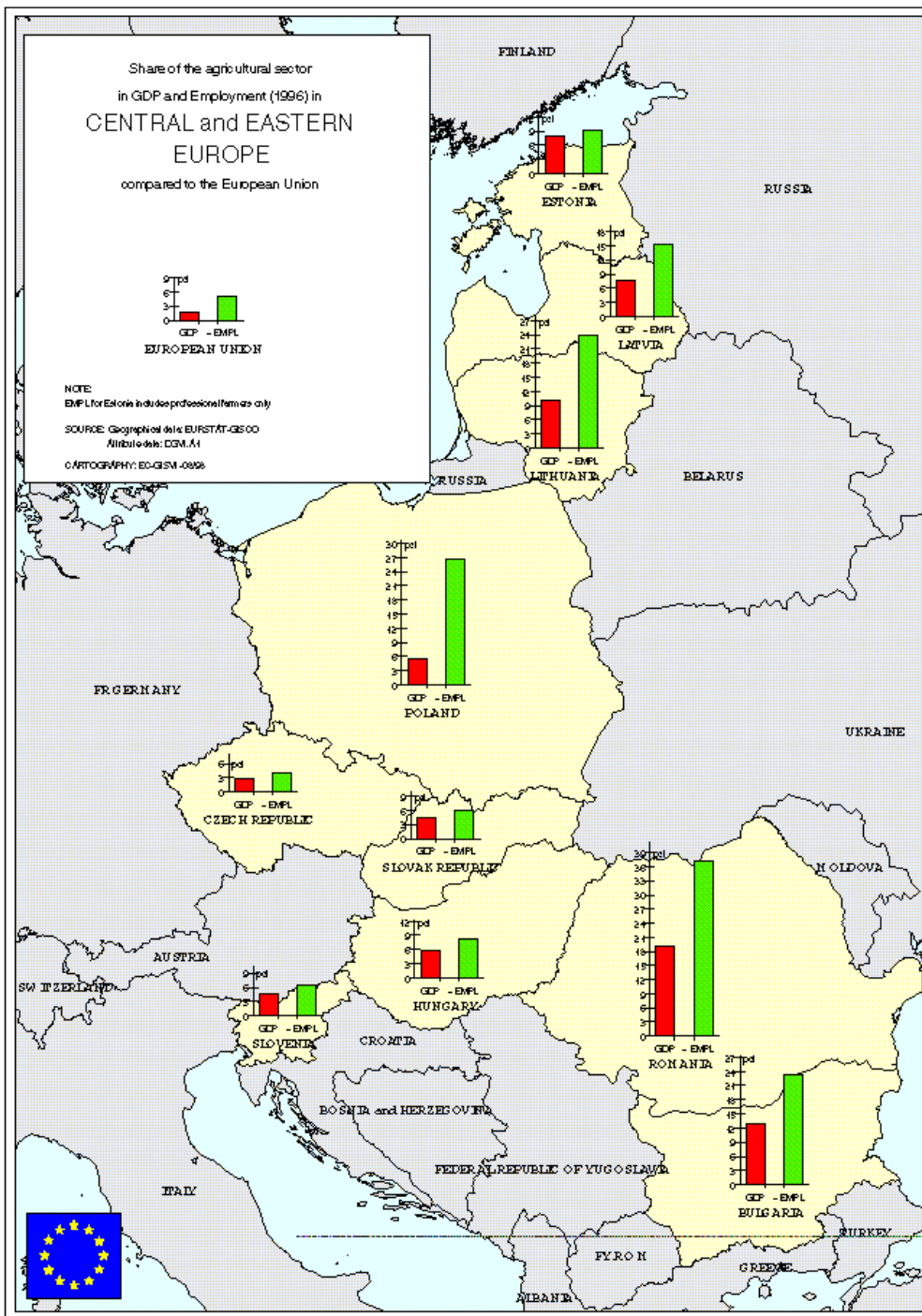
Most dependent on agriculture are Romania and Bulgaria followed by the Baltics. The share of agriculture in GDP has generally been declining in the CECs since 1989 with the exception of Romania, where it increased at the start of transition and in Bulgaria, where very contrasted developments in agriculture and the rest of the economy last year lead to a sharp increase in the share of the former.

In a number of CECs agricultural employment has increased in absolute and relative terms, in particular in those countries where agriculture has played a buffer role in a generally deteriorating economic situation such as Romania and Bulgaria. The share of the total work force employed in agriculture is particularly high in these two countries, but also in Poland and Lithuania. The overall number of more than 10 million employed in agriculture for the CEC-10 is high compared to the EU's 7.5 million, while the productivity in agriculture as measured by the value added per worker is only around 11% of the EU level². An increase in productivity to half of the EU's level would imply that the current Gross Agricultural Product, measured on the basis of an output price level comparable to the EU, could be produced by an agricultural work force of around 6 million instead of the current 10 million, indicative of the potentially large labour surplus in agriculture and of the importance economic diversification in rural areas could assume in coming years.

² Even when taking into account the generally lower agricultural prices in the CECs the productivity gap remains large.

Agrofood exports as percentage of total exports are relatively important for Hungary and Bulgaria, while for the three Baltic countries agrofood makes out a relatively high share of exports as well as imports (partially a reflection of transit trade).

Food is an important item of household expenditure in most CECs, varying from 30 to 60%. Only Slovenia and Hungary are closer to EU levels.

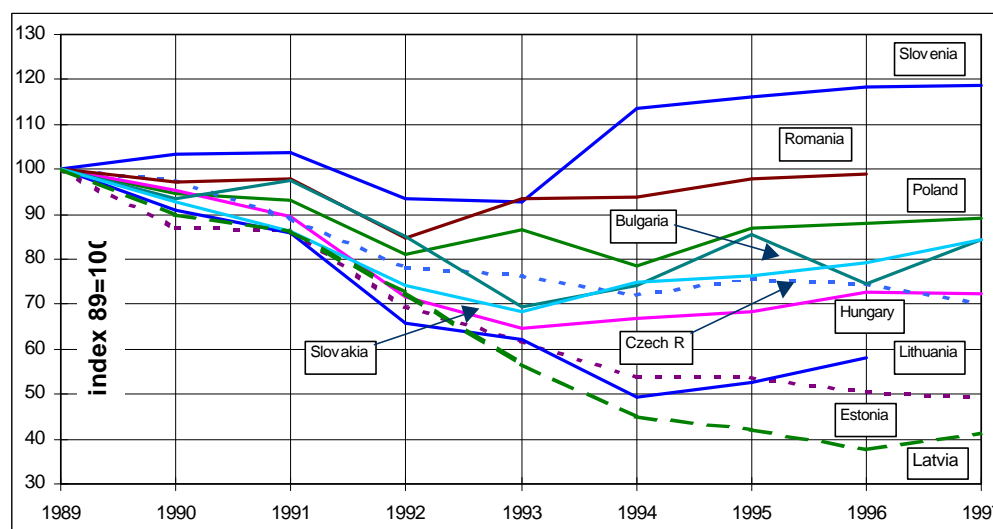


2. AGRICULTURE AND RURAL SOCIETY

2.1 Agricultural production

After a clear decline in the volume of agricultural output in the first years of transition, a certain stabilisation seems to have set in for most CECs in recent years.

Graph 2: Gross Agricultural Output



Source: country reports; gao measured in constant prices.

Only in Slovenia and Romania output levels exceed or have returned to pre-transition levels. Slovenia maintained a policy of relatively high producer prices and had already a large private sector in agriculture, which suffered less disruption from structural reform. Romania followed a deliberate policy of stimulating agricultural production.

In most other countries a combination of factors such as price and trade liberalisation, privatisation, abolition of consumer subsidies and loss of traditional (COMECON) markets led to increasing pressure on agriculture. Input prices such as for energy and fertiliser tended to move to world market levels, while agricultural output prices tended to stagnate or rise much less in the face of falling demand. Most severely affected was the livestock sector, where in many CECs the decapitalisation is still continuing or has only recently come to a halt. In the crop sector, which initially adapted by cutting inputs, stabilisation of input-output price relationships has more recently led to a certain recovery in input use and higher output levels.

Poland, Bulgaria and Slovakia have been moving into the 80 to 90% range of previous agricultural output levels, mainly due to recovery in the crop sector, while Hungary and the Czech Republic are still in the 80 to 70% range. The

Baltic countries suffered the deepest decline and are at 60 to 40% of pre-transition levels. Lithuania and more recently Latvia seem to have achieved a turnaround in the downward output trend.

2.2 Agriculture and food trade

Most CECs, with the exception of Hungary and Bulgaria, are or have become net importers of food in recent years. The largest exporters in value terms are Poland, Hungary and the Czech Republic, while Poland and the Czech Republic are also large importers.

Table 5: CEC net agrofood trade

<i>million ECU</i>	1990	1991	1992	1993	1994	1995	1996	1997
Poland	972	312	-34	-481	-293	-365	-970	-418
Hungary	1285	1621	1536	1004	1048	1470	1423	1553
Czech R.				23	-336	-347	-648	-577
Slovenia			-90	-217	-230	-293	-285	-362
Estonia				49	21	-46	-132	-225
Romania	-816	-423	-528	-524	-196	-253	-108	
Bulgaria	356	365	351	261	359	541	404	232
Slovakia					-189	-183	-337	
Lithuania						5	-18	-10
Latvia			22	75	-5	21	-52	-119

Source: country reports

Poland managed to halve its food trade deficit in 1997 by a big increase in exports, while Bulgaria saw its surplus drop as imports increased and exports declined.

The most important trade partner for many CECs is the EU, in particular on the import side, where the EU has a share varying between 40 and 55%, although it has lost some market share since 1995 as trade between the CECs is increasing.

Also as an export destination the EU is important, in particular for the more export oriented countries such as Hungary, Poland, the Czech Republic and Bulgaria, which ship between 30 and 40% of their agrofood exports to the EU, although also here a certain diversification in export destinations has taken place since 1995. After the sharp decline in exports to the FSU and other former COMECON markets in the early years of transition, a certain recovery has taken place in recent years. As the agrofood sector in Russia and other eastern markets has collapsed, they have increasingly become an outlet for lower quality CEC

supplies³. For the Baltics, traditional suppliers of livestock products to the FSU, the latter region and in particular Russia is the most important outlet with again an increasing share in recent years.

Total CEC agrofood exports to the EU have been close to 3 bio ECU in recent years with the bulk of exports coming from Poland and Hungary, while imports from the EU have continued to increase to around 4.5 bio ECU in 1997. As a result the CEC agrofood trade deficit with the EU has increased from 1 to around 1.5 bio ECU from 1995 to 1997. The only two countries that have a positive agrofood trade balance with the EU are Hungary and Bulgaria.

Table 6: CEC-EU net agrofood trade

<i>million ECU</i>	1990	1991	1992	1993	1994	1995	1996	1997
Poland	354	-24	-82	-346	-331	-344	-571	-527
Hungary	596	756	607	384	370	515	658	529
Czech R.				-84	-233	-338	-526	-457
Slovenia			-20	-132	-194	-308	-303	-290
Estonia				-32	-65	-150	-253	-249
CEC-I				-210	-453	-625	-996	-994
Romania	-226	-167	-246	-236	-76	-129	-134	
Bulgaria	66	37	59	-47	-35	-7	71	75
Slovakia					-118	-139	-183	-186
Lithuania						-53	-102	-141
Latvia			-4	-7	-34	-53	-97	-152
CEC-II						-380	-446	
CEC-10						-1005	-1442	

Source: country reports, Comext.

For the EU agrofood exports to the 10 CECs represent around 10% of total agrofood exports, while imports from the CECs represent a little over 5% of total EU agrofood imports.

The commodity breakdown of agrofood trade flows between the CECs and the EU shows that the main export items are live animals and meat, still accounting for over 25% of export value to the EU, although the share of live animals has decreased as the livestock sector has declined. Vegetables are important in the export as well as the import trade with the EU, including processed vegetables and fruit on the import side as well as beverages.

³ In part these products, of in particular animal origin, have on the home market been displaced by “western” products.

Table 7: Commodity breakdown CEC-EU agrofood trade

% total agrofood trade	CEC exports to EU					CEC imports from EU				
	1993	1994	1995	1996	1997	1993	1994	1995	1996	1997
1 Live animals	14%	14%	10%	9%	10%	1%	2%	2%	1%	1%
2 Meat and offals	17%	16%	15%	17%	16%	5%	9%	5%	3%	4%
3 Fish, crustaceans, etc.	3%	3%	4%	5%	6%	3%	3%	3%	3%	3%
4 Dairy products, eggs, etc.	3%	3%	3%	3%	3%	2%	2%	2%	2%	2%
5 Other animal products	1%	1%	1%	1%	1%	2%	2%	2%	2%	2%
6 Live plants, cut flowers	9%	9%	9%	8%	8%	4%	4%	5%	5%	4%
7 Vegetables	9%	9%	9%	9%	11%	9%	10%	9%	9%	9%
8 Fruit and nuts	1%	1%	1%	1%	1%	2%	2%	3%	2%	3%
9 Coffee, tea, spices	1%	2%	3%	2%	2%	14%	2%	1%	9%	5%
10 Cereals	0%	0%	1%	0%	0%	1%	1%	1%	1%	2%
11 Milling products, malt, starch	8%	7%	10%	9%	7%	2%	2%	3%	4%	3%
12 Oilseeds	0%	0%	0%	0%	0%	0%	1%	1%	1%	1%
13 Plant extracts, resins, etc.	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
14 Plant fibres	2%	2%	2%	1%	1%	5%	6%	7%	6%	7%
15 Fats and oils (vegetable or animal)	4%	4%	3%	3%	3%	1%	1%	1%	1%	1%
16 Meat/fish preparations	1%	1%	2%	3%	3%	7%	4%	6%	5%	4%
17 Sugar and confectionary	0%	0%	1%	1%	1%	5%	6%	6%	5%	5%
18 Cocoa (preparations)	0%	0%	1%	1%	1%	3%	4%	4%	5%	5%
19 Cereal preparations	7%	7%	9%	8%	8%	3%	4%	4%	4%	4%
20 Vegetable/fruit preparations	1%	0%	1%	0%	0%	8%	9%	11%	10%	9%
21 Miscellaneous food preparations	6%	5%	5%	6%	7%	7%	9%	8%	7%	6%
22 Beverages, spirits	4%	4%	4%	5%	5%	7%	7%	8%	7%	10%
23 Food industry waste, animal feed	1%	1%	1%	1%	1%	6%	5%	5%	5%	4%
24 Tobacco (products)	8%	9%	7%	6%	6%	4%	4%	4%	4%	4%

Source: Comext

CEC-EU agrofood trade is dominated by the first wave countries, which have a share of over 80% in exports to the EU and of 75% in imports from the EU. Their export share has been slightly declining since 1993, while their import share has increased.

Table 8: Shares in agrofood trade

% share	Exports to EU					Imports from EU				
	1993	1994	1995	1996	1997	1993	1994	1995	1996	1997
CEC-I	84%	84%	83%	82%	81%	70%	74%	73%	75%	75%
CEC-II	16%	16%	17%	18%	19%	30%	26%	27%	25%	25%

CEC-I: Poland, Hungary, Czech Republic, Slovenia, Estonia

CEC-II: Romania, Bulgaria, Slovakia, Lithuania, Latvia

2.3 Farm structures

In most CECs in the pre-transition era nearly all cultivated land was in hands of collective and state farms. The major exceptions were Poland, which kept a dominant private sector in agriculture even under central planning, and Slovenia, which had a small “socially owned” sector of agriculture and a large number of small part time farmers, occupying over 90% of agricultural area.

Of the countries with a predominantly collectivised agriculture state management was almost complete in Bulgaria and the Baltics, which followed the Soviet agricultural model, while in Hungary, the Czech and Slovak Republics and Romania the “old” cooperatives or collective farms played a more important role and enjoyed a variable degree of freedom: a high degree in Hungary and a very low degree in Romania. In all these countries a very small scale system of household plots and sometimes of small farmers (e.g. mountain farmers in Romania) coexisted with the large scale collective system. For certain products such as fruit and vegetables and in certain countries animal husbandry the share of household plots in total production was quite significant.

As in the wider economy, one of the main objectives of reform during transition was to decollectivise agriculture and to re-establish private property rights. Putting land and other farm assets into private ownership or private operation took a number of different forms, leading to different degrees of fragmentation of ownership and of farms.

Several countries (e.g. Hungary, Czech Republic, Slovak Republic) opted for a combination of restitution and compensation of former owners, leaving existing farm structures intact to a certain degree. This was in particular the case for the transformation of the collective farms. By law all the old coops were turned into private cooperatives or other business entities, leaving the members the choice of staying with the new entity (which happened in most cases) or setting up for themselves. The state farms have mostly been privatised, transferring the non-land assets into private ownership, but keeping the state owned land and leasing it. In the new structures emerging, private farming - mainly individual farmers and to a lesser extent corporate farms - is growing in importance. A large majority of the so-called private farms remains generally of the micro or small type, oriented towards own consumption and short marketing channels. However, in Hungary and the Czech Republic a significant minority of mid-sized farms, western type has appeared, and could gradually increase their place in the sector.

Bulgaria decided to liquidate all state-managed systems (agro-industrial complexes) and to reconstitute the land to the former owners or their heirs prior to collectivisation, a process which is still not completed. Newly formed private cooperatives, which were previously grouped together at the regional level in the larger complexes, and similar informal structures still control a sizeable proportion of arable land, similar to Slovakia, the Czech Republic and to a lesser extent Hungary, where producer cooperatives have an important share of agricultural area.

Romania chose yet another approach in distributing a limited amount of land to former owners (up to 10 ha) and to its current users, the members of the old cooperatives. After dissolution of the old cooperatives farmers' associations and new (small scale) individual farms were formed, while the state farms were officially converted into companies under guidance of the ministry of

agriculture. The latter still have a significant share of agricultural land, similar to the agricultural companies in Lithuania and to a lesser extent to the remaining state farms in Slovakia. For two thirds of agricultural area the redistribution of land has however led to a wide fragmentation in use and ownership.

The Baltics initially took the same route as Romania in mainly distributing the land to its users, but were later faced with claims from former owners. The state managed farms were succeeded by public or private corporate type of farms (in Lithuania and Estonia) and fairly widespread small to medium scale private farming (in particular in Latvia).

Table 9: CEC farm structure according to land use

	share in total agricultural area (%)								latest census year
	cooperatives*		state farms**		other corporate farms***		private/indiv. farms****		
	pre-transition	current	pre-transition	current	pre-transition	current	pre-transition	current	
Poland	4	3	19	7		8	77	82	1996
Hungary	80	28	14	4		14	6	54	May-96
Czech Rep.	61	43	38	2		32	0	23	1995
Slovenia			8	4			92	96	1997
Estonia	57		37			37	6	63	1997
Romania	59	12	29	21			12	67	1997
Bulgaria	58	42	29	6			13	52	1995/96
Slovakia	69	60	26	15		20	5	5	1994
Lithuania			91	33			9	67	1996
Latvia	54		41	1		4	5	95	1997
	average size (ha)								
	cooperatives*		state farms**		other corporate farms***		private/indiv. farms****		
	pre-transition	current	pre-transition	current	pre-transition	current	pre-transition	current	
Poland	335	222	3140	620		333	6.6	7.0	
Hungary	4179	833	7138	7779		204	0.3	3.0	
Czech Rep.	2578	1447	9443	521		690	5.0	34.0	
Slovenia			470	371			3.2	4.8	
Estonia	4060		4206			449	0.2	19.8	
Romania	2374	451	5001	3657			0.5	2.7	
Bulgaria	4000	637	1615	735			0.4	1.4	
Slovakia	2667	1509	5186	3056		1191	0.3	7.7	
Lithuania			2773	372			0.5	7.6	
Latvia	5980		6532	340		309	0.4	23.6	

Source: country reports

* collective pre-transition, transformed into private (producer) cooperatives/associations currently

** state farms pre-transition, remaining state farms and state held/controlled enterprises currently

*** joint stock, limited liability companies and other business entities currently

**** household plots pre-transition, individual (part time) farms currently

A general feature in the countries, which had a predominantly collectivised agriculture in the pre-transition era, appears to be that the dualistic character - very large scale collective or state farms on the one hand and very small individual or private plots on the other - is diminishing. The average size of what is left of the state-managed farms or their successors, e.g. the private cooperatives, has decreased significantly, while at the other end of the scale the size of individual farms is slowly increasing. This tendency can be expected to

continue in the future and to contribute to increased efficiency as the larger units reach more manageable proportions and the smaller ones acquiring more land can benefit from economies of scale. For the medium term, however, the forms of private producer cooperatives or associations, which have emerged, will most likely continue to play an important role in agricultural production and the focus of the smaller farms will continue to be production for own consumption and local markets. The rate of structural reform will also depend on the emergence of functioning land markets, which so far has been hindered by the delay in most countries of the definitive settlement of property rights and still existing limitations on acquisition of land in certain countries.

In the two countries, that already had a large private sector in agriculture structural reform has been less marked. In Poland some increase in the size of private farms is taking place as land from the former state farms is transferred, but overall the small scale and fragmented nature of private farming remains a long term structural handicap. In Slovenia emphasis is being put on promoting the pluri-activity of rural households and on developing a “multipurpose” agriculture with besides a production a conservation function.

2.4 Rural development

Most of the CECs are relatively rural with a relatively large part of the population living in rural communities with a small number of inhabitants, dispersed settlement patterns and a low population density.

Many rural areas are characterised by an ageing population, over-dependence on agriculture and a poor technical and social infrastructure such as limited transport and communications networks, a lack of schools and limited access to health and other services. In some countries the latter was aggravated by the disappearance of the state and collective farms, which also provided social and other services to the local community.

In several CECs there was a net migratory flow to the countryside as general economic conditions worsened during transition and agriculture played the role of buffer allowing people to live off their plots of land in their home villages and supplement other income sources such as retirement pensions. The underemployment and hidden unemployment related to subsistence farming poses large future challenges for a balanced development of the rural economies.

2.5 Agriculture and environment

Agriculture is the dominant form of land use, over 55% of total land area on average in the CECs, and an important factor in managing land, water and air resources (including bio-diversity) and in shaping the countryside.

The main environmental problems related to agriculture in the CECs are erosion, water pollution by agro-chemicals, soil compaction and manure disposal in areas with a heavy concentration of animal production.

The quality of ground and surface water in many CECs has been influenced in the past by overuse of fertilisers and chemicals and by a high concentration of animal production.

During transition the application of fertilisers and agro-chemicals decreased substantially, as has livestock production, relaxing somewhat the pressures on the environment. More recently input use has again started to increase as the crop sector has recovered, but application levels are generally much below EU averages. For the future it remains to be seen how sustainable practices can be balanced with yield requirements.

2.6 Up- and downstream sectors

In the pre-transition era the CEC up- and downstream sectors of agriculture were predominantly in the hands of large state-owned monopolies. The privatisation and breaking up of state monopolies in the input supplying and food processing industries has progressed, albeit to different degrees and in different ways in the different countries.

First to be privatised was generally the end of the food chain, i.e. the distribution and retailing sectors, followed by parts of the food industry (usually not the first processing stages) and certain input supplying industries. In the upstream sector state monopolies were sometimes replaced by private monopolies, which nevertheless under the effects of trade liberalisation were opened up to import competition.

Countries opted for different schemes such as mass privatisation through vouchers (e.g. the Czech Republic), first transforming the state monopolies into joint stock companies, then splitting them up and offering the shares to the general public, heavy involvement of foreign capital (e.g. Hungary) and employee and management buy outs (e.g. Slovenia).

Most advanced in the privatisation and demonopolisation process would seem to be Hungary, the Czech Republic and Slovenia, while in Poland it only started to take off after 1995 and Romania and Bulgaria still have some way to go. In

Slovakia and the Baltic countries privatisation of the up- and downstream sectors was completed on paper in 1997.

Most CECs continue to face overcapacity and restructuring problems in the first processing stages such as milling, slaughterhouses and dairies and much of the equipment is obsolete. Foreign direct investment has tended to concentrate on the higher value added sections of the food industry such as beverages, tobacco and confectionery, but also the sugar industry has attracted western capital, in particular in the Visegrad countries⁴.

For financial services agriculture in most countries depends on the banking sector, although many governments in response to a perceived lack of access to credit and capital due to low profitability of farming and the absence of collateral (in the context of unsettled property rights) have developed instruments to facilitate investment and provide loan guarantees (see also § Structural and rural policy).

⁴ The four countries (Poland, Hungary, Czech and Slovak Republics) originally forming the Central European Free Trade Agreement (CEFTA, see also § Other trade agreements).

3. AGRICULTURAL AND RURAL POLICIES

In most CECs agriculture was quite heavily supported in the pre-transition era. Under the initial price and trade liberalisation support in many countries dropped drastically and even turned into net taxation of agriculture in countries such as the Baltics and Bulgaria. After the initial liberalisation shock, measures were introduced to stabilise the agricultural sector and more recently there has been a tendency in several countries to again increase support. Overall, however, support levels as can be measured by the OECD's producer subsidy equivalent (PSE), tend to be much lower than in the EU. Only for Slovenia PSE calculations carried out outside of the OECD show a level of support similar to the EU.

Table 10: percentage PSE CEC-EU

	1989	1990	1991	1992	1993	1994	1995	1996p	1997e
Poland	5	-15	1	20	15	20	19	23	22
Hungary	31	27	15	20	24	31	21	15	16
Czech R.	55	54	51	30	27	21	15	14	11
Slovenia	-	-	-	-	-	-	-	-	-
Estonia	80	72	57	-91	-30	-6	3	8	9
Romania	-	-	-	-	-	-	-	-	-
Bulgaria	-	-	-	-	-	-	-	-	-
Slovakia	56	57	44	39	35	31	25	19	25
Lithuania	78	71	-259	-113	-33	-10	5	12	18
Latvia	83	77	83	-93	-38	9	8	4	8
EU-12/15	40	47	47	47	49	48	49	43	42

Source: OECD 1998; Slovenia, Romania and Bulgaria not available. EU-15 from 1995.

Across the CECs a wide range of support instruments is applied varying from market price support (border measures and/or domestic floor prices) and several types of direct payments to input subsidies, investment aids and tax exemptions.

Some countries such as Estonia and Latvia initially applied few instruments, but have recently been expanding their policies, as did the Visegrad countries at an earlier stage. The latter and Lithuania apply the full range of instruments.

In Romania and Bulgaria until recently food security and protection of (urban) consumers was a primary concern with the state maintaining a large degree of (administrative) control over prices in the food chain. The downstream sector being still largely state controlled, purchasing prices from the farm sector were kept low. In addition, exports have at times been prevented by taxes or outright bans and imports facilitated by waiving import duties⁵. Support for agriculture

⁵ Also several other countries at the time of high cereals world market prices in 1995/96-1996/97 rationed exports through export licensing.

in both countries has been mainly in the form of subsidised credit, production subsidies and recently input vouchers in Romania. Price controls were officially abolished in both countries in the course of 1997.

Generally agricultural policies in the CECs have not been very stable with frequent changes in instruments and in commodities and activities covered.

3.1 Market and production support

The main market price support instruments applied are border measures (tariffs, import/export licensing and export subsidies) and intervention in the market to underpin minimum or floor prices.

With the exception of Estonia, Romania and Latvia the other countries apply domestic floor prices for one or more of the main commodities, but generally at lower or much lower levels than in the EU, in particular for livestock products.

Table 11: effective support prices selected products 1997/98

	wheat		sugarbeet		milk		beef	
	ECU/t	% EU	ECU/t	% EU	ECU/t	% EU	ECU/t	% EU
Poland	141	115%	25	52%	147	51%	-	-
Hungary	71	58%	-	-	210	73%	1630	58%
Czech R.	103	84%	-	-	179	62%	1858	67%
Slovenia	171	139%	47	98%	-	-	-	-
Estonia	-	-	-	-	-	-	-	-
Romania	-	-	-	-	-	-	-	-
Bulgaria	115	93%	-	-	-	-	-	-
Slovakia	95	77%	-	-	197	69%	2108	76%
Lithuania	98	80%	-	-	100	35%	977	35%
Latvia	-	-	-	-	-	-	-	-
EU-15	123		48		287		2791	

Source: country reports, DGVI.

Although in most cases support prices are still lower than in the EU, the gap has become smaller in recent years as (nominal) support prices have been increased⁶.

⁶ The increase in support prices has in most cases been less than inflation, implying a decrease in support in domestic real terms. For cereals the high world prices in recent years also pushed up support prices. As the currencies of many CECs have been depreciating in nominal terms against the ECU, the domestic price rises have been somewhat mitigated in ECU terms.

In Poland and Slovenia the support prices for wheat are now higher than in the EU. In Bulgaria the government changed tack in 1997 (previously producer prices had been kept at below world market levels) and substantially increased the minimum price for wheat bringing it closer to EU levels. Also the other countries with price support for cereals have moved closer to the EU, for wheat in particular. Price support for cereals is mainly achieved through border protection, government purchases and export subsidies.

For oilseeds market support is mainly limited to border protection.

For sugar, apart from border protection in most countries and export subsidies in a few, only Poland and Slovenia provide direct price support to sugar beet growers, i.e. by setting minimum procurement prices. Poland also has a production quota system for sugar, while Hungary is considering one.

For dairy and beef and to a lesser extent pigmeat and poultry producer prices are supported by intervention buying and/or export subsidies in the Visegrad countries and Lithuania.

The changes in price support, world market developments and some recovery in domestic demand have led to an increase in producer prices, somewhat more so for crop products than for animal products. The price gaps at farm gate level with the EU have tended to decline over time⁷. For cereals, in particular wheat and barley, CEC producer prices exceed or have come within a 80 to 90% range of EU levels. For maize farm gate prices are still generally somewhat lower and for sugarbeet about half the EU level.

⁷ The limitations of making price comparisons should be taken into consideration such as exchange rates which do not reflect economic reality, differing price, product and quality definitions, different price recording periods, live to carcase weight conversions, etc.

Table 12: Producer prices selected crop products CEC-EU 1997

	wheat		maize		barley		rapeseed		sunflower		sugarbeet	
	ECU/t	% EU	ECU/t	% EU	ECU/t	% EU	ECU/t	% EU	ECU/t	% EU	ECU/t	% EU
Poland	137	109%	117	88%	113	95%	234	111%			26	52%
Hungary	98	78%	73	55%	95	80%			197	97%	27	54%
Czech R.	116	92%	120	90%	90	76%	174	83%			25	50%
Slovenia	184	146%	106	79%	124	104%					48	97%
Estonia	123	98%			106	89%						
Romania	130	104%	103	77%	91	77%						
Bulgaria	108	86%	87	65%					152	75%		
Slovakia	111	89%	103	77%	108	91%	178	84%	203	100%	25	50%
Lithuania	146	116%										
Latvia	119	95%			93	78%	192	91%			35	71%
EU-15	126		134		119		211		202		50	

Source: country reports, DG VI

For animal products, in particular dairy and beef, the gaps are generally still larger, although for pigmeat and poultry CEC prices exceed EU levels in certain instances. Where prices for the latter are lower, the gap roughly corresponds to the cereals or feed price gap.

Table 13: Producer prices selected animal products CEC-EU 1997

	milk		butter		smp		beef		pigmeat		poultry	
	ECU/t	% EU	ECU/t	% EU	ECU/t	% EU	ECU/t	% EU	ECU/t	% EU	ECU/t	% EU
Poland	150	50%	2367	64%	1471	70%	1447	54%	1242	74%	1215	94%
Hungary	214	72%					1427	54%	1383	83%	1042	81%
Czech R.	193	65%	2312	63%	1377	66%	1884	71%	1393	83%	996	77%
Slovenia	267	90%					2643	99%	1883	113%	1206	94%
Estonia	166	56%					1145	43%	1605	96%	1561	121%
Romania	275	93%							1850	111%	1155	90%
Bulgaria	177	59%	1681	46%			1680	63%	1354	81%	1276	99%
Slovakia	191	64%	2524	68%	1635	78%	1843	69%	1323	79%	751	58%
Lithuania	119	40%					1145	43%	1304	78%	735	57%
Latvia	141	48%					942	35%	1444	86%	1605	124%
EU-15	297		3693		2091		2662		1672		1290	

Source: country reports, DG VI; smp=skimmed milk powder.

Some countries have been introducing direct aids to support crop and livestock production, e.g. in the form of area and/or headage payments. Estonia launched a direct payment scheme in 1998 for wheat and dairy cows targeted at the more efficient producers. Lithuania subsidises the sale of live cattle and pigs meeting certain quality requirements. In Bulgaria per ha subsidies (for the main arable crops) and per head subsidies (for sows and hens) are paid. The Czech Republic introduced an agricultural area payment in 1998 as a support to farming in general.

Nearly all countries support agricultural production through credit and input subsidies and tax exemptions.

3.2 Trade policy

For the CECs, which are member of the WTO⁸, the border measures underpinning market price support as discussed above, are to a large extent conditioned by their Uruguay Round commitments on market access and export competition. Trade policy is further governed by a number of bilateral and regional trade agreements, such as the association agreements with the EU, CEFTA (the Central European Free Trade Agreement) and BFTA (the Baltic Free Trade Agreement).

3.2.1 WTO

For the WTO tariffs have generally been bound at lower levels than the EU has, the exceptions being Poland and Romania and for the products oilseeds, pigmeat and poultry. Most countries are currently applying tariffs at their bound rates with the exception of Poland and Romania, which both negotiated relatively high protection levels (see Table 14).

Table 15 gives an overview of access commitments for selected main commodities. In particular for cereals and pigmeat total quantities are non-negligible. However, when compared to the commitments on subsidised export volumes (Table 16) net export positions are clearly built in for the main commodities. The potential price gaps (between the domestic and the world market) which can be covered when making full use of the allowed subsidised volumes are relatively limited, in particular for cereals.

⁸ Poland, Hungary, Czech Republic, Slovenia, Romania (with developing country status), Bulgaria (joined in 1997), and Slovakia. The Baltics are in advanced state of negotiation for their WTO membership.

Table 14: CEC-EU tariff protection selected products (ad valorem equivalents)

	WHEAT			OILSEEDS			SUGAR		
	1997	2000		1997	2000		1997	2000	
	applied rate	bound rate	EU=100	applied rate	bound rate		applied rate	bound rate	EU=100
Poland	20.0	76	166	15.0	27		68.0	172	102
Hungary	41.0	32	70	0			69.3/74	68	40
Czech R.	23.1	21	46	66.4	60		64.8	60	35
Slovenia	5.0	5	10	0	0		17.0	12	7
Estonia	0			0			0		
Romania	25	240	522	5	160		50	180	107
Bulgaria	50	50	109	50	50		128	100	60
Slovakia	23.1	21	46	66.4	60		64.8	60	35
Lithuania	30			30			87		
Latvia	25			0.5			60		

	BUTTER			SKIMMED MILK POWDER			CHEESE		
	1997	2000		1997	2000		1997	2000	
	applied rate	bound rate	EU=100	applied rate	bound rate	EU=100	applied rate	bound rate	EU=100
Poland	40.0	166	122	80.0	108	154	35.0	160	184
Hungary	130.5	102	75	70.1	51	73	78.6/86.1	67	77
Czech R.	74.8	68	50	43.3	37	53	9.5	9	10
Slovenia	157.1	141	104	75.7	70	100	132.6	123	142
Estonia	0			0			0		
Romania	60	200	147	60	248	354	60	270	310
Bulgaria	120	60	44				135	96	110
Slovakia	74.8	68	50	43.3	37	53	9.5	9	10
Lithuania	45			20			20		
Latvia	4.5			30			45		

	BEEF			PIGMEAT			POULTRY		
	1997	2000		1997	2000		1997	2000	
	applied rate	bound rate	EU=100	applied rate	bound rate	EU=100	applied rate	bound rate	EU=100
Poland	45.0	182	169	60	64	168	60.0	99	395
Hungary	91.9	72	67	56.5	52	137	49.9	39	156
Czech R.	37.9	34	31	42.2	38.5	101	48.6	43	172
Slovenia	11.5	9.0	8	14.0	10.9	29	14.0	10.9	44
Estonia	0			0			0		
Romania	50	288	267	60	333	876	60	96	384
Bulgaria	161.8	99	91	120	120	316	96	96	384
Slovakia	37.9	34	31	42.2	38.5	101	48.6	43	172
Lithuania	30			30			25		
Latvia	30			45			30		

Source: country reports, DG VI. Specific duties have been converted to ad valorem equivalents using common "world prices" for 1997 and 2000. For Romania bound rates correspond to 2004 (because of its developing country status it has a 10 instead of 6 year implementation period).

Table 15: Minimum access tariff quotas in 2000

	cereals		oilseeds		sugar	
	000 t	tariff (%)	000 t	tariff (%)	000 t	tariff (%)
Poland	882	15-40	36.4	15	84	68
Hungary	396	2-10	4.0	8	1	50
Czech R.			17.9	10-20		
Slovenia	270	0				
CEC-4	1548		58.3		85	
Romania						
Bulgaria	277	5-25	20.0	15	250	5
Slovakia			6.0	10-20		
total	1548		64.3		85	

	butter		milk powder		cheese	
	000 t	tariff (%)	000 t	tariff (%)	000 t	tariff (%)
Poland	16.9	40	5.0	40	5.0	35
Hungary	0.2	50			1.2	50
Czech R.	2.8	32				
Slovenia						
CEC-4	19.9		5.0		6.2	
Romania			0.9	100	2.6	110
Bulgaria	1.5	30			3.4	17.5-25
Slovakia	1.0	32				
total	20.9		5.9		8.8	

	beef		pigmeat		poultry	
	000 t	tariff (%)	000 t	tariff (%)	000 t	tariff (%)
Poland	17.5	30	46.5	30	20.0	30
Hungary	14.0	15-25	20.0	15-25	11.0	15-35
Czech R.	11.1	30	24.7	25-30	3.5	24
Slovenia						
CEC-4	42.7		91.2		34.5	
Romania	6.3	115	6.3	115	6.3	115
Bulgaria	31.0	8.5-10	0.9	40		
Slovakia	3.7	30	9.8	25-30	3.6	24
total	52.7		107.3		44.4	

Source: country reports. For Romania end of period is 2004. Its tariff quota for meat of 19,000 t has been split between the three meats.

Table 16: Export commitments in 2000

	cereals		oilseeds		sugar	
	000 t	outlay	000 t	outlay	000 t	outlay
Poland			341.5	11.2	104.4	27.8
Hungary	2935	15.1	71.0	0.8	32.0	0.6
Czech R.	66	3.1	9.6	3.0	4.9	1.3
Slovenia						
CEC-4	3001	18.2	422.1	15.0	141.3	29.7
Romania	284	29.9	2.8	0.06	147.6	25.5
Bulgaria	117	2.4	4.1	1.3		
Slovakia	109	4.0	5.5	1.2	3.9	1.1
total	3393	52.1	430.4	16.3	292.8	56.3

	butter		milk powder		cheese	
	000 t	outlay	000 t	outlay	000 t	outlay
Poland			37.0	4.9		
Hungary	4.5	0.7	4.5	0.7	4.5	0.7
Czech R.	31.4	13.5	66.9	26.3	31.4	13.5
Slovenia						
CEC-4	35.9	14.2	108.4	31.9	35.9	14.2
Romania	14.5	7.9			11.1	1.4
Bulgaria					5.0	5.2
Slovakia	3.55	2.6	15.0	5.9	3.55	2.6
total	53.9	24.8	123.4	37.8	50.5	18.3

	beef		pigmeat		poultry	
	000 t	outlay	000 t	outlay	000 t	outlay
Poland	40.4	53.7	40.4	53.7	13.0	8.4
Hungary	83.0	7.5	126.0	21.8	111.0	19.6
Czech R.	49.8	6.5	10.1	1.5	22.8	4.9
Slovenia						
CEC-4	173.2	67.8	176.5	77.0	146.8	32.9
Romania	68.8	11.8	68.8	11.8	27.8	10.1
Bulgaria	0.6	0.2	0.6	0.5	6.2	12.8
Slovakia	28.4	4.0	4.7	0.7	11.0	2.5
total	270.4	83.5	250.0	89.5	185.6	45.5

Source: country reports. Outlays are in million ECU. For Romania end of period is 2004. For Hungary the waiver it has been accorded on export commitments is taken into account. For Poland, Romania and Bulgaria global meat commitments have been split between beef and pigmeat, as have global dairy commitments for Hungary and the Czech and Slovak Republics over the different dairy products.

3.2.2 *Other trade agreements*

The association or Europe Agreements between the EU and the CECs grant - in the field of agriculture - asymmetric trade concessions for a number of agricultural products, mainly in the form of tariff quotas at a preferential rate. The agreements were modified to take into account the Uruguay Round Agreement of 1994 and the EU enlargement of 1995.

For the adjustment to the GATT agreement the in-quota preferential rates were set to 20 % of the MFN tariff rate (instead of 40 % of the import levy at the end of the first five year period before). For the second five year period the EU decided to increase the tariff rate quotas by 25% (compared to 50% in the first period).

For the EU enlargement to Austria, Finland and Sweden, the former preferences enjoyed by the CECs in their trade with the EFTA-3 were included.

Most countries have increased their use of the preferential quotas over time. Fully used or to a large extent have been the quotas for dairy products and poultry and for certain fruit and vegetables and wine. Underused have been the quotas for the other meats and live animals (beef, sheep, pigmeat) and for eggs.

The Central European Free Trade Agreement was signed in December 1992 and replaced the "Visegrad Agreement" of February 1991 between Poland, Hungary and former Czechoslovakia. It came into force in March 1993 between four countries (after the split of Czechoslovakia into the Czech and Slovak Republics).

In November 1995 Slovenia became member with a transition period till the end of 1999 and Romania joined in July 1997 with a transition period till end 1998. Bulgaria has applied for membership and will likely join in 1998. Several other countries have also started negotiations to become CEFTA members such as Latvia, Lithuania, FYROM (Former Yugoslav Republic of Macedonia) and Croatia. However, under CEFTA rules, only candidates that have an Association Agreement with the EU and are members of the WTO are eligible for membership.

CEFTA encompasses all merchandise trade. For industrial products all barriers will be abolished by the end of 2000. For agricultural and food products a grouping of products according to sensitivity is used with different degrees of liberalisation. Depending on the latter, a certain push towards convergence in price support policies could be expected, although lately there have been problems with the interpretation of rules and a resort to unilateral measures.

The Baltic Free Trade Agreement between Estonia, Latvia and Lithuania was signed in 1993 and came into effect in 1994. Since 1997 it includes free trade in domestically produced agricultural products. At this stage it is not entirely clear

how the BFTA copes with the quite different agricultural support policies of its members and the implementation of rules of origin.

3.3 Structural and rural policy

In addition to the legal framework that covers farm structures (land and farm privatisation) various structural and rural policy instruments are being developed by the CECs such as support for agricultural investment and for farming in less favoured areas. Policies and support instruments for off farm investment and economic diversification in rural areas are generally still limited.

The perceived lack of access to capital has led many governments to set up farm investment programmes in the form of grants, interest rate subsidies and loan guarantees either allocated directly by the ministry of agriculture or channelled through the commercial banking system. Investment items covered are usually equipment and machinery, buildings and land improvement.

Many countries have schemes to support farming in less favoured areas often in the form of area and/or headage payments, which can absorb a significant part of the agricultural budget (e.g. Slovakia and the Czech Republic).

In most countries rural policy formulation is still at an early stage and limited to village renewal and improving the technical infrastructure, although some countries are developing programmes for small and medium sized enterprises, tourism and local processing of raw materials to promote economic diversification.

4. COMMODITY SITUATION AND OUTLOOK

In this chapter an overview will be presented of the current situation and expected developments in the medium term for the main commodity sectors, starting with the evolution of land use and livestock numbers during transition.

For each of the countries tentative projections of supply and demand up to the year 2003⁹ have been made based on detailed country analyses. In building the scenarios for agriculture in the country reports the following main (and often interrelated) elements were considered:

- the general economic environment, i.e. degree of macro-economic stabilisation, progress in privatising the economy, rate of economic and income growth as one of the determinants of food demand;
- rate of structural reform in agriculture and of restructuring in the up- and downstream sectors; credit and (foreign) capital availability; settlement of (land) property rights;
- input intensities; productivity increases;
- likely development of support policies (border measures, direct subsidies), budgetary and GATT constraints, alignment to EU policies; share of household income spent on food;
- world market developments;
- population growth.

For the CEC bloc as a whole an annual average GDP growth of 4 to 5% over the projection period is expected, with Poland and the Baltic countries at the higher end of the range (around 6 to 7%) in the next few years, Romania and the Czech Republic at the lower end (around 2 to 3%) and the others in between.

The general income growth in the CECs will contribute to some growth of demand for agricultural products, although the pre-transition levels of per capita consumption will likely not be reached, in particular for livestock products. Some growth in animal production will also increase the feed demand for cereals.

In most countries land reform, including the establishment of functioning land markets, and restructuring of the food chain will continue during the projection

⁹ The assumed minimum pre-accession period, before the first CECs join the EU.

period. The evolution of farm structures can be expected to be slow in view of the agricultural sector's weak financial situation and limited capability to attract investment.

Although several countries recently increased their agricultural budgets significantly, further substantial increases in agricultural support do not seem likely in view of the budgetary constraints many countries face. Budgetary transfers to agriculture might increasingly be used for direct payments as the scope for increasing price support is limited by GATT and regional trade agreements. The extent to which domestic prices can rise is also limited by the still relatively high share of household income spent on food and by the still relatively high inflation rates in most countries. CAP like instruments will increasingly be put in place as countries (in particular those expecting to be in the first wave of entrants) align their policies to the EU, although not necessarily the levels of support for the reasons mentioned above.

The use of inputs is recovering and will contribute to an increase in productivity, but is not likely to attain pre-transition levels, when taking into account the development of input-output price relationships and the waste of inputs previously.

The translation of these (often qualitative) elements using mainly expert judgement into supply balance projections for individual commodities is prone to a high margin of error and the results should be taken as only indicative of the direction developments could take.

For comparison EU-15 commodity projections for 2003 are included, which were taken from 1997's long term prospects working document¹⁰. The EU projections are based on a no change in policy assumption (thus they do not take into account the Agenda 2000 CAP reform proposals).

4.1 Land use

Total arable land has remained relatively stable or declined slightly during transition in most CECs. The combined arable base of 42 mio ha in 1997 amounts to 55% of the EU's arable area with cereals and oilseeds area representing 65% and 50% respectively of the corresponding EU area.

Over the period 1989-97 there has been a certain shift towards cereals, which has increased its area and now accounts for nearly 60% of CEC arable area

¹⁰ DG VI CAP 2000 working document "Long term prospects grains, milk and meat markets", April 1997.

(compared to a share of 50% in the EU). Area planted to wheat has generally tended to increase, although barley in Poland and the Czech Republic, rye in Poland, and maize in Hungary and Romania remain important.

Other arable crops, in particular potatoes and sugarbeets, have dropped in area. Potato feeding, especially practised in the Visegrad countries, has declined with livestock numbers, while sugar consumption has declined in most CECs. Potato area remains, however, significant and exceeds the EU area. Poland on its own has a potato area coming close to that of the EU. Oilseeds are relatively important in Hungary and Bulgaria and have more or less maintained their share in CEC land use. In the Baltic countries cereals are relatively less important, a large part of arable land is used for fodder crops. No further major shifts in arable land use patterns are expected in coming years.

Table 17: Arable land use

		cereals		oilseeds		potatoes		sugarbeet		other		total arable	
		1989	1997	1989	1997	1989	1997	1989	1997	1989	1997	1989	1997
Poland	000 ha	8311	8857	570	317	1859	1306	423	419	3237	3188	14400	14087
	% arable	58%	63%	4%	2%	13%	9%	3%	3%	22%	23%		
Hungary	000 ha	2805	2935	465	573	72	69	120	98	1251	1038	4713	4713
	% arable	60%	62%	10%	12%	2%	1%	3%	2%	27%	22%		
Czech R.	000 ha	1662	1686	122	276	115	73	127	92	1207	961	3232	3089
	% arable	51%	55%	4%	9%	4%	2%	4%	3%	37%	31%		
Slovenia	000 ha	123	95	2	0.4	30	9	4	6	88	62	247	172
	% arable	50%	55%	1%	0%	12%	5%	2%	3%	36%	36%		
Estonia	000 ha	396	325	1	8	52	32	0	0	527	536	976	902
	% arable	41%	36%	0%	1%	5%	4%	0%	0%	54%	59%		
CEC-I	000 ha	13297	13898	1159	1175	2128	1489	674	615	6310	5785	23568	22963
	% arable	56%	61%	5%	5%	9%	6%	3%	3%	27%	25%		
Romania	000 ha	5978	6316	1072	871	351	255	256	129	1801	1768	9458	9339
	% arable	63%	68%	11%	9%	4%	3%	3%	1%	19%	19%		
Bulgaria	000 ha	2151	2026	240	453	40	44	41	5	1385	1770	3856	4298
	% arable	56%	47%	6%	11%	1%	1%	1%	0%	36%	41%		
Slovakia	000 ha	814	853	62	139	55	33	55	47	517	387	1503	1459
	% arable	54%	58%	4%	10%	4%	2%	4%	3%	34%	27%		
Lithuania	000 ha	1006	1162	11	22	120	121	34	35	1129	1526	2300	2866
	% arable	44%	41%	0%	1%	5%	4%	1%	1%	49%	53%		
Latvia	000 ha	666	483	2	1	85	70	14	11	919	438	1685	1002
	% arable	40%	48%	0%	0%	5%	7%	1%	1%	55%	44%		
CEC-II	000 ha	10615	10839	1387	1486	651	523	399	227	5751	5889	18802	18964
	% arable	56%	57%	7%	8%	3%	3%	2%	1%	31%	31%		
CEC-10	000 ha	23912	24737	2546	2661	2779	2012	1073	842	12061	11674	42370	41927
	% arable	56%	59%	6%	6%	7%	5%	3%	2%	28%	28%		
EU-15	000 ha	40866	37913	4896	5349	1928	1408	2039	2042	29065	29588	78794	76300
	% arable	52%	50%	6%	7%	2%	2%	3%	3%	37%	39%		
CEC/EU	%	59%	65%	52%	50%	144%	143%	53%	41%	41%	39%	54%	55%

Source: country reports, DG VI

4.2 Livestock

In contrast to the crop sector, the livestock sector experienced a considerable liquidation of herds over the period under consideration, which in several CECs has not yet stopped.

Table 18: Livestock numbers

		cattle		cows		pigs		poultry		sheep/goats	
		1989	1997	1989	1997	1989	1997	1989	1997	1989	1997
Poland	000	10733	7303	4990	3487	18835	18135	51740	56300	4409	491
	97/89		0.68		0.70		0.96		1.09		0.11
Hungary	000	1690	909	568	390	8327	5289	61604	32300	2231	924
	97/89		0.54		0.69		0.64		0.52		0.41
Czech R.	000	3481	1866	1248	702	4685	4080	32479	27572	399	121
	97/89		0.54		0.56		0.87		0.85		0.30
Slovenia	000	546	484	243	207	576	589	13300	5800	30	73
	97/89		0.89		0.85		1.02		0.44		2.43
Estonia	000	819	343	301	172	1099	298	6897	2325	135	45
	97/89		0.42		0.57		0.27		0.34		0.33
CEC-I	000	17269	10905	7350	4958	33522	28391	166020	124297	7204	1654
	97/89		0.63		0.67		0.85		0.75		0.23
Romania	000	6416	3236	1704	1769	14351	7133	127561	78478	17288	9647
	97/89		0.50		1.04		0.50		0.62		0.56
Bulgaria	000	1613	582	648	358	4119	1500	41805	16227	9045	3869
	97/89		0.36		0.55		0.36		0.39		0.43
Slovakia	000	1622	848	559	313	2708	1900	16584	14692	630	441
	97/89		0.52		0.56		0.70		0.89		0.70
Lithuania	000	2435	1054	850	586	2705	1128	17486	7775	105	45
	97/89		0.43		0.69		0.42		0.44		0.43
Latvia	000	1472	509	544	277	1555	460	10320	3790	175	64
	97/89		0.35		0.51		0.30		0.37		0.37
CEC-II	000	13558	6229	4305	3303	25438	12121	213756	120962	27243	14066
	97/89		0.46		0.77		0.48		0.57		0.52
CEC-10	000	30827	17134	11655	8261	58960	40512	379776	245259	34447	15720
	97/89		0.56		0.71		0.69		0.65		0.46
EU-15	000	85845	84344	36009	33610	101841	118183			101439	94354
	97/89		0.98		0.93		1.16				0.93
CEC/EU	%	36%	20%	32%	25%	58%	34%			34%	17%

Source: country reports, DG VI. Livestock numbers as recorded at the beginning of the year.

Most affected have been cattle and sheep numbers, which have been more or less halved for the CECs combined. Cow, pig and poultry numbers generally dropped less (30 to 35% for the CEC-10) and the latter two categories have started to recover in a number of countries.

The CEC total cattle number of 17 million heads in 1997 represents 20% of the EU cattle herd. Total cow numbers are about 38% of the EU dairy cow herd¹¹, while pigs represent 34% of the EU herd and sheep 17% of the EU flock.

Any rebuilding of herds in the CECs can be expected to be a slow process given the investment requirements and longer planning horizon compared to the crop sector.

4.3 Arable crops

Crop production generally declined during transition as input levels were drastically cut, in many cases by more than half, due to the difficult financial situation in agriculture (price-cost squeeze partly induced by the removal of input subsidies). In some countries the general disarray during transition and breakdown of irrigation systems further contributed to the decline.

In more recent years, however, increases in area and a certain recovery in yields as input use has again increased have led to higher production levels for the main crops, but generally still below pre-transition levels.

Despite the increase in area planted to **cereals**, now exceeding pre-transition levels, total CEC-10 production stood at 81 million t in 1997. Although domestic demand has recently started to rise again, it initially fell much sharper than production, turning the region from a net importer to a net exporter. With some further projected increase in area and yields CEC-10 production could reach about 90 million t by the end of the projection period, which combined with slower growth in domestic use would lead to a surplus of 7 to 8 million t (compared to a projected EU surplus of over 30 million t under status quo policy). A significant part of the CEC surplus would have to be exported at world prices in view of GATT commitments (see Table 16).

¹¹ Most CECs have dual purpose breeds for milk and beef production and no or only limited beef races. In the EU one third of the cows are suckler cows used for specialised beef production.

Table 19: Cereals supply balance

	area (000 ha)			yield (t/ha)			production (000 t)			domestic use (000 t)			balance (000 t)		
	1989	1997	2003	1989	1997	2003	1989	1997	2003	1989	1997	2003	1989	1997	2003
Poland	8311	8857	9275	3.2	2.9	3.3	26888	25351	30831	28942	27078	30435	-2054	-1727	396
Hungary	2805	2935	2850	5.5	4.8	5.0	15417	14114	14164	13205	11837	10385	2212	2277	3779
Czech R.	1662	1686	1650	4.7	4.1	4.4	7793	6983	7317	7840	6797	6886	-47	186	431
Slovenia	125	95	102	4.2	5.4	5.9	527	517	602	870	974	1076	-343	-457	-474
Estonia	396	325	352	2.4	1.9	2.1	967	615	741	1400	715	795	-433	-100	-54
CEC-I	13299	13898	14229	3.9	3.4	3.8	51592	47580	53655	52257	47401	49577	-665	179	4078
Romania	5978	6316	5920	3.1	3.2	3.3	18309	20058	19553	17651	18000	17792	658	2058	1761
Bulgaria	2151	2026	2380	4.4	2.7	3.3	9485	5548	7948	9364	5350	7134	121	198	814
Slovakia	814	853	878	5.2	4.4	4.8	4232	3741	4229	4219	3644	3588	13	97	641
Lithuania	1006	1162	1222	3.0	2.6	2.8	3023	3052	3427	3760	2746	3118	-737	306	309
Latvia	666	483	548	2.4	2.1	2.3	1570	1038	1246	2357	929	983	-787	109	263
CEC-II	10615	10839	10948	3.4	3.1	3.3	36619	33437	36403	37351	30669	32615	-732	2768	3788
CEC-10	23914	24737	25177	3.7	3.3	3.6	88211	81017	90058	89608	78070	82192	-1397	2947	7866
EU-15	40866	37913	36300	4.6	5.4	5.7	188506	203667	207297	159300	175200	175857	29206	28467	31440

Source: country reports, DG VI. Years are marketing years, e.g. 1989=1989/90.

For **oilseeds** the projected area and yield increases would lead production to outpace increases in domestic crushing capacities, resulting in some seed export potential.

Table 20: Oilseeds supply balance

	area (000 ha)			yield (t/ha)			production (000 t)			domestic use (000 t)			balance (000 t)		
	1989	1997	2003	1989	1997	2003	1989	1997	2003	1989	1997	2003	1989	1997	2003
Poland	570	317	550	2.8	1.9	2.3	1585	595	1244	1095	798	994	490	-203	250
Hungary	465	573	601	2.0	1.3	2.1	915	737	1259	797	730	1039	118	7	220
Czech R.	106	238	260	3.0	2.5	2.8	322	584	718	322	569	665	0	15	54
Slovenia	2.0	0.4													
Estonia	0.6	8.2		1.8	1.2		1	10							
CEC-I	1144	1137	1411	2.5	1.7	2.3	2823	1926	3221	2214	2097	2698	609	-171	524
Romania	968	1012	1100	1.0	1.2	1.3	979	1212	1458	1024	1192	1389	-45	20	69
Bulgaria	240	453	500	1.9	1.0	1.2	458	446	600	478	409	508	-19	37	92
Slovakia	62	139	150	2.4	1.9	2.2	147	269	330	121	198	217	26	71	113
Lithuania	11	22		1.7	1.7		19	37							
Latvia	1.9	0.9		1.2	1.4		4	1							
CEC-II	1283	1627	1750	1.3	1.2	1.4	1607	1965	2388	1623	1799	2114	-16	166	274
CEC-10	2426	2763	3161	1.8	1.4	1.8	4430	3891	5609	3836	3896	4812	594	-6	798
EU-15	4896	5742	5573	2.4	2.5	2.3	11636	14526	12741	22797	27588	29000	-11161	-13062	-16259

Source: country reports, DG VI. Years are marketing years, e.g. 1989=1989/90.

For **sugar** a decline in beet area would be compensated by an increase in yields (field and plant combined inter alia under the influence of western investment), stabilising beet sugar production at around 3.8 million t. With some further increase in demand in the countries with lower per capita consumption such as Romania and Bulgaria, which are large importers of raw sugar for their refineries, and with less production foreseen in high cost producer Poland, the beet sugar deficit of the CEC region would tend to increase.

Table 21: Beet sugar supply balance

	beet area (000 ha)			sugar yield (t/ha)			sugar production (000 t)			domestic use (000 t)			balance (000 t)		
	1989	1997	2003	1989	1997	2003	1989	1997	2003	1989	1997	2003	1989	1997	2003
Poland	423	419	340	4.1	4.9	5.5	1730	2060	1860	1663	1665	1750	67	395	110
Hungary	120	98	92	4.1	4.9	5.2	497	480	482	445	435	450	52	45	32
Czech R.	127	92	95	4.5	5.8	5.9	567	532	564	495	450	434	72	82	131
Slovenia	4	6	8	6.0	6.7	6.5	21	44	56	72	92	95	-51	-48	-39
Estonia										70	44	43	-70	-44	-43
CEC-I	673	615	535	4.2	5.1	5.5	2815	3116	2962	2746	2686	2771	69	430	191
Romania	256	129	130	2.2	1.8	3.0	556	237	385	635	559	636	-79	-322	-251
Bulgaria	41	5	2	2.2	2.3	3.0	89	12	6	437	268	303	-349	-256	-297
Slovakia	55	47	38	3.4	4.6	5.8	188	218	222	248	189	210	-60	29	12
Lithuania	34	35	38	2.8	3.4	4.0	96	118	152	152	90	115	-56	28	37
Latvia	14	11	12	3.4	4.5	3.2	33	49	39	128	69	80	-95	-20	-41
CEC-II	399	227	220	2.4	2.8	3.6	962	634	804	1601	1175	1344	-639	-541	-540
CEC-10	1072	842	755	3.5	4.5	5.0	3777	3750	3766	4346	3861	4115	-570	-111	-349
EU-15	2201	2041	2040	7.2	8.7	8.5	15881	17789	17340	13616	12700	12734	2265	5089	4606

Source: country reports, DG VI. Years are marketing years, e.g. 1989=1989/90. Slovenia processes some beet from Hungarian border areas.

4.4 Other crops

As for the arable crops the area used for fruit and vegetables and wine production has remained fairly stable or declined somewhat in most CECs during transition. The volume of fruit and vegetable production has however fallen, as was the case for arable products.

Total CEC-10 **fruit** production - mainly apples, but also soft red fruit, e.g. berries in the Visegrad and Baltic countries and some stone fruit in Romania and Bulgaria - amounted to 6.5 million t in 1997 (compared to an EU production of around 23 million t). **Vegetable** production (tomatoes, cucumbers, peppers, cabbage, onions and others) amounted to 12.3 million t (compared to an EU production of 51 million t). Some further development of the production of fresh and processed fruit and vegetables for the domestic and export markets can be expected.

Table 22: Fruit, vegetable and wine area and production

	FRUIT				VEGETABLES				WINE					
	area (000 ha)		production (000 t)		area (000 ha)		production (000 t)		area (000 ha)		yield (t/ha)		production (000 hl)	
	1989	1997	1989	1997	1989	1997	1989	1997	1989	1997	1989	1997	1989	1997
Poland	265	265	2083	2700	260	291	5436	5413						
Hungary	94	94	1574	889	105	95	1993	1690	110	99	34	45	3711	4472
Czech R.	27	21	615	415	35	34	629	541	11	11	74	45	819	500
Slovenia	36	35	38	115	15	10	225	200	20	23	31	43	629	995
Estonia	12	12	22	15	5	4	19	7						
CEC-I	434	427	4332	4134	420	435	8302	7851	141	133	37	45	5159	5967
Romania	240	219	1580	1416	253	208	3727	2427	213	255	22	23	4632	5800
Bulgaria	165	101	750	567	104	100	1729	992	139	106	23	22	3261	2300
Slovakia	11	8	242	140	31	41	671	509	24	20	33	40	800	800
Lithuania	45	44	113	258	15	27	404	415						
Latvia	25	16	75	31	11	13	220	147						
CEC-II	486	388	2760	2412	414	389	6751	4490	376	381	23	23	8693	8900
CEC-10	919	814	7092	6546	834	824	15053	12341	517	514	27	29	13852	14867
EU-15	3036	3490	23000	22850	1975	1928	45400	51300	3854	3360	47	47	181600	157724

Source: country reports, DG VI. Years are marketing years, e.g. 1989=1989/90.

Wine production, the main producers and exporters being Hungary, Romania and Bulgaria, has increased to close to 15 million hl under the influence of better yields (compared to an EU production volume of about 160 million hl). Production potential could increase further, in particular if in Romania and Bulgaria yield improving investments could be made.

4.5 Dairy and meat

The Visegrad and the Baltic countries traditionally had a surplus of **milk** exported in the form of butter, milk powder and cheese. The reduction in dairy herds during transition drove down production faster than the fall in demand, resulting in a decrease of the surplus.

In most CECs the reduction in the dairy herd has slowed down. Yields per cow have recovered and will continue to improve, leading to some increase in milk production by the end of the projection period. Domestic demand for dairy products is however expected to rise faster, reducing the surplus to around 2 million t (compared to a projected EU surplus of around 9 million t in 2003 under status quo policy). For some countries and some dairy products the GATT limits on subsidised exports could be constraining.

Table 23: Milk supply balance

	dairy cows (000)			yield (kg/cow)			production (000 t)			domestic use (000 t)			balance (000 t)		
	1989	1997	2003	1989	1997	2003	1989	1997	2003	1989	1997	2003	1989	1997	2003
Poland	4990	3487	3588	3291	3451	3777	16420	12032	13551	16420	11419	12881	0	613	670
Hungary	568	386	445	5039	4948	5357	2862	1910	2384	2753	1978	2382	109	-68	2
Czech R.	1242	619	538	4018	4454	5090	4991	2757	2736	3570	2208	2486	1421	549	250
Slovenia	243	207	197	2473	2894	3365	601	599	663	459	515	557	142	84	106
Estonia	300	172	174	4252	4070	4511	1277	700	785	950	680	758	327	20	27
CEC-I	7343	4871	4942	3561	3695	4071	26151	17998	20119	24152	16800	19064	1999	1198	1055
Romania	1704	1769	1601	1950	2898	3305	3323	5126	5292	3362	4709	5321	-39	417	-29
Bulgaria	648	389	420	3295	2985	3300	2135	1161	1386	2418	1436	1699	-283	-275	-313
Slovakia	559	310	265	3676	3839	4189	2055	1190	1110	1158	1036	1023	897	154	87
Lithuania	850	586	636	3806	3104	3415	3235	1819	2172	2300	822	980	935	997	1192
Latvia	543	277	274	3637	3560	3778	1976	986	1034	1694	938	988	282	48	46
CEC-II	4304	3331	3196	2956	3087	3440	12724	10282	10994	10932	8941	10011	1792	1341	983
CEC-10	11648	8202	8137	3338	3448	3824	38875	28280	31113	35084	25741	29075	3791	2539	2038
EU-15	27848	21990	19438	4562	5498	6110	127032	120903	118768	119002	112112	109522	8030	8791	9246

Source: country reports, DG VI. Figures are in milk equivalent.

With the overall CEC dairy herd still slightly decreasing, the projected (small) increase in **beef** production would partly have to come from developing specialised beef herds as some countries have started to do and from higher slaughter weights (and/or less live exports). With the projected increase in demand most CECs would be close to self-sufficiency or slightly in deficit. Only Poland would continue to be a clear net exporter (the “beef” being mainly in the form of live animals). With the exception of the Baltic countries and Slovenia per capita beef consumption is relatively low in the other CECs compared to the EU.

Table 24: Beef supply balance

	production (000 t)			domestic use (000 t)			balance (000 t)			domestic use (kg pc)		
	1989	1997	2003	1989	1997	2003	1989	1997	2003	1989	1997	2003
Poland	720	487	527	653	431	455	67	56	72	17	11	11
Hungary	114	72	84	82	72	94	32	0	-10	8	7	9
Czech R.	272	153	146	253	142	145	19	10	1	24	14	14
Slovenia	50	50	55	40	57	57	10	-7	-2	20	29	29
Estonia	75	22	23	40	52	23	35	-31	0	25	17	18
CEC-I	1231	783	835	1068	755	774	163	28	61	17	12	12
Romania	220	229	261	248	234	278	-28	-5	-17	11	10	12
Bulgaria	125	66	77	139	66	82	-14	0	-6	15	8	10
Slovakia	127	58	66	69	54	59	58	4	7	13	10	11
Lithuania	224	83	93	93	83	94	131	0	-1	25	22	25
Latvia	129	28	32	67	37	42	62	-9	-9	23	15	18
CEC-II	825	464	529	615	474	555	210	-10	-26	14	11	13
CEC-10	2056	1247	1364	1683	1229	1329	373	18	35	16	12	13
EU-15	8310	7886	7989	7959	7109	7263	351	777	726	22	19	19

Source: country reports, DG VI. Figures are in carcass weight equivalent; pc= per capita.

Of the meats **pigmeat** is the most preferred by consumers in the CECs with per capita consumption in Hungary, the Czech Republic and Slovenia currently even higher than in the EU. Production is expected to expand faster than demand, leading to an increase in export availability, in particular of Poland, Hungary and Bulgaria. A significant part of this surplus production would have to find outlets

(possibly towards the Russian and other FSU markets) without export subsidisation.

Table 25: Pigmeat supply balance

	production (000 t)			domestic use (000 t)			balance (000 t)			domestic use (kg pc)		
	1989	1997	2003	1989	1997	2003	1989	1997	2003	1989	1997	2003
Poland	1854	1724	2190	1845	1591	2000	9	133	190	49	41	50
Hungary	1014	604	740	828	568	630	186	36	110	79	56	62
Czech R.	552	483	495	543	471	495	10	11	0	52	46	48
Slovenia	62	62	69	70	88	88	-8	-26	-19	35	45	45
Estonia	125	30	33	73	38	40	53	-8	-8	46	25	29
CEC-I	3608	2903	3526	3358	2756	3253	250	147	274	54	44	51
Romania	798	693	753	764	649	761	34	44	-8	33	29	34
Bulgaria	412	262	338	344	262	278	68	0	61	38	32	33
Slovakia	267	204	227	234	207	226	33	-3	1	44	38	41
Lithuania	250	92	113	149	92	118	101	0	-5	40	25	32
Latvia	154	45	50	96	66	71	58	-22	-21	38	27	30
CEC-II	1881	1296	1481	1587	1276	1453	294	19	28	36	30	34
CEC-10	5489	4198	5007	4945	4032	4706	543	167	301	47	38	44
EU-15	15238	16255	17276	14676	15480	16594	562	775	682	40	41	44

Source: country reports, DG VI. Figures are in carcass weight equivalent; pc= per capita.

Per capita consumption of poultry meat is expected to continue to rise rapidly with production following at a slightly lower pace, reducing the overall export availability. Hungary would by far remain the region's biggest net exporter.

Table 26: Poultry supply balance

	production (000 t)			domestic use (000 t)			balance (000 t)			domestic use (kg pc)		
	1989	1997	2003	1989	1997	2003	1989	1997	2003	1989	1997	2003
Poland	383	520	717	363	548	732	20	-28	-15	10	14	18
Hungary	436	370	380	244	234	297	192	136	83	23	23	29
Czech R.	149	143	175	135	155	185	14	-12	-10	13	15	18
Slovenia	73	61	73	54	46	47	19	15	26	27	23	24
Estonia	25	5	10	14	18	20	11	-13	-10	9	12	14
CEC-I	1067	1098	1356	810	1001	1281	257	97	74	13	16	20
Romania	339	293	397	332	295	401	7	-2	-4	14	13	18
Bulgaria	188	94	115	153	94	104	35	0	11	17	11	13
Slovakia	84	80	94	76	84	91	8	-4	3	14	16	17
Lithuania	57	26	29	30	28	37	27	-2	-8	8	8	10
Latvia	43	8	10	29	19	22	13	-11	-11	5	8	9
CEC-II	711	501	646	621	520	655	90	-19	-9	14	12	16
CEC-10	1778	1599	2001	1431	1521	1936	347	78	65	13	14	18
EU-15	6452	8489	9303	6209	7869	8906	243	620	397	17	21	23

Source: country reports, DG VI. Figures are in dead weight; pc= per capita.

5. GENERAL CONCLUSION AND OUTLOOK

In most CECs agriculture has lived through a deep crisis of adjustment since 1989/90 and is only now starting to refind its bearings. Crop production is on the rise, while the decline of the livestock sector would seem to have bottomed out. Land reform and privatisation have on paper been completed in most countries, although the definitive settlement of property rights, the establishment of functioning land markets and the restructuring of farms and farm management is still an ongoing process far from complete. In particular the absorption of surplus labour from the farm sector in the rural economies will pose a major challenge for most CECs.

Similarly the up- and downstream sectors have been privatised, but still face major overcapacity and restructuring problems. In many CECs the agrofood sector as a whole furthermore faces an uphill road in creating market institutions, (re)establishing marketing and distribution chains, meeting EU veterinary and phytosanitary standards and in building the administrative capacity to accompany this process.

Support for agriculture through border protection, market intervention and structural aid has generally increased. Farm prices have increased, in particular for crop products. The price gap between the CECs and the EU for cereals, pigmeat and poultry has narrowed considerably and could be expected to disappear if the EU's Agenda 2000 CAP reform plans are implemented. Several CECs might face the need to adjust their price support downward for these products. For sugar, dairy and beef price gaps are still bigger, for the livestock products also partly due to quality differences. For the latter Agenda 2000 would reduce the EU prices.

The projections for the main commodities show that the CECs could be expected to somewhat increase their surplus production of cereals, oilseeds and pigmeat until 2003. The export of these surpluses would mostly have to be at world market prices. The traditional dairy surplus would be somewhat reduced, while for beef and poultry the region would be more or less self-sufficient.

In a post-accession situation the agrofood sector in the first CECs joining the EU would be subjected to the full competitive force of the single market. In particular the livestock sector in these countries could be expected to face problems in dealing with the competitive pressure under single market requirements.