

Agricultural Situation and Prospects in the Central and Eastern European Countries



SUMMARY REPORT



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Agricultural situation and prospects in the Central and Eastern European Countries

SUMMARY REPORT

<p>Bulgaria Czech Republic Estonia Hungary Latvia Lithuania Poland Romania Slovakia Slovenia</p>
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The manuscript was prepared by Rob Peters with the assistance of the other country report authors. The author and unit VI-01 accept full responsibility for any errors which could still remain in the text. The closing date for data collection was end of June 1995.

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Introduction

The European Union has expressed its intention to offer membership to those countries in central and eastern Europe with which it has an association agreement (see box below). Agriculture has been identified as an important issue for future accession, due to its relative size in some of the Central and Eastern European Countries (CEECs) and to the difficulties there might be in extending the Common Agricultural Policy in its current form to these countries.

A series of ten country reports on the agricultural situation and prospects in the CEECs has been prepared by the services of the European Commission in collaboration with national experts and with the help of scientific advisers. The ten countries covered are Bulgaria, the Czech Republic, Hungary, Poland, Romania and Slovakia, which are associated to the European Union through the Europe Agreements, and Estonia, Latvia, Lithuania and Slovenia, which are in the process of being associated.

The country reports attempt to provide an objective analysis of the current situation in agriculture and the agro-food sector in the CEECs and an assessment of the developments to be expected in the medium term. They were not meant to provide policy recommendations.

This summary report provides an overview of the main findings in the country reports.

Extract conclusions Copenhagen summit of 22-23 June 1993

"The European Council today agreed that the associated countries in Central and Eastern Europe that so desire shall become members of the European Union. Accession will take place as soon as an associated country is able to assume the obligations of membership by satisfying the economic and political conditions required.

Membership requires that the candidate country has achieved stability of institutions guaranteeing democracy, the rule of law, human rights and respect for and protection of minorities, the existence of a functioning market economy as well as the capacity to cope with competitive pressure and market forces within the Union. Membership presupposes the candidate's ability to take on the obligations of membership including adherence to the aims of political, economic and monetary union."

About the data....

The data used in the summary and country reports are derived from a CEEC dataset established by DG VI in cooperation with other services of the European Commission and with external experts. Data have been selected after a number of analyses carried out by both external research institutes¹ and DG VI services. They originate from various sources: FAO, OECD, World Bank, United Nations, USDA, national statistics, economic institutes and the European Commission (DG II, Eurostat).

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

For the agricultural data, the starting point of the analysis was the work carried out by Prof. Jackson (Institute for Central and East European Studies, Katholieke Universiteit Leuven, Belgium), who compared figures from OECD, FAO and the national statistics of Poland, Hungary, the Czech Republic, Slovakia, Bulgaria and Romania. The conclusion of this study was that the FAO was the most reliable source because these data were standardized, which was not the case for the two other sources.

Moreover, DG VI services compared FAO and USDA data and although for the crop sector there were no important differences, this was not the case for the animal sector where big discrepancies were apparent. This is due to different methodological approaches and also to different coefficients used to transform live animal weight in carcass weight.

In general the FAO data for agriculture 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 and with FAO statisticians. In such cases, FAO coefficients and standards were used to avoid a break in the time series.

Despite all efforts to create a coherent, reliable and up to date dataset, all figures presented in this report 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, according to some experts^{1,2}, 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.

¹ - M. JACKSON and J. SWINNEN (1995) : A statistical analysis and survey of the current situation of agriculture in the Central and Eastern European Countries, report to DG I, European Commission.

- W.J. STEINLE (1994) : First Study on Data Collection on "Visegrad" Countries and ECO Countries, Empirica Delasasse, Eurostat.

² S. TANGERMANN and T. JOSLING (1994): Pre-accession agricultural policies for central Europe and the European Union, study commissioned by DG I, European Commission.

Executive summary

Combined the ten CEEC countries presented in this report have a population of about 106 mio and a land area of 1.1 mio square km. This is about 29% of EU-15 population and 33% of EU-15 area.

General economy

The economy of most CEECs is showing signs of recovery after having experienced a significant contraction in output in the first years of transition. Fuelled by an increase in private sector activities, which in most countries now represent over half of all economic activity, growth prospects in 1995 for most CEECs are favourable. Lagging somewhat behind are Hungary, which is experiencing problems in stabilizing the economy, and the Balkan countries, which in addition seem less advanced in their transition to market economies.

Importance of agriculture

In terms of area, contribution to GDP and in particular share in total employment agriculture is relatively more important in the CEECs than in the EU. On average over 25% of the work force is employed in agriculture, ie a total number 9.5 mio (compared to 6% or 8.2 mio in the EU). Agriculture still contributes 8% to GDP (compared to 2.5% in the EU).

Agricultural output developments

Although there are signs of a start of recovery, in particular in the crop sector, agricultural output is generally still much below pre-transition levels in all CEECs except Slovenia and Romania. Output was affected by the fall in demand as consumer subsidies were removed and the general economic situation deteriorated and by the price-cost squeeze agriculture faced (ie input prices rising much faster than output prices). The crop sector generally resisted better than the livestock sector.

Agrofood trade

Most CEECs, with the exception of Hungary, Bulgaria and Estonia, have become net importers of agricultural and food products in recent years. The most important trade partner for many CEECs is the EU, in particular on the import side, but also as export market. All CEECs except Hungary are net importers of agrofood products from the EU. The agrofood balance has been developing in favour of the EU, moving from a deficit in 1992 to an increasing surplus in 1993 and 1994. Nevertheless, all six associated countries increased their exports to the EU in 1994, which is partly a reflection of better use of the tariff quotas under the Europe Agreements, although utilization still falls some way short of maximum take up. For many CEECs the share of agrofood exports going to the FSU increased again in 1994, after having dropped in the early transition years.

Structural reform

In most CEECs 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.

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 slowly diminishing. 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.

The degree of privatization and demonopolization achieved in the up- and downstream sectors differs between countries. Delays in the privatization and in the breaking up of the large state monopolies in the up- and downstream sectors was one of the reasons for the price-cost squeeze the farm sector experienced in the first years of transition. A return to profitability of farming will to a large extent depend on a competitive downstream sector and on a reorganization of the farm sector itself, eg in bundling supply and strengthening its negotiating position vis-à-vis the food processing industry and distribution channels.

Support policies

In most CEECs measures have been introduced to stabilize the agricultural sector, in the wake of the disruptions the early years of transition brought. Depending on the country support to agriculture has taken various forms ranging from CAP like intervention and border measures to administrative controls still close to those used under central planning.

When considering the low level of farm gate prices in the CEECs, the downstream inefficiencies in many countries should be taken into account, eg for wheat a doubling or more of the farm gate price to get the product to the border is not exceptional. The low dairy and beef prices reflect the fact that the decrease in supply is only now matching the fall in demand and for beef also the lower quality of production based on dairy herds as most CEECs have no specialized beef herds.

Over time the price gap can be expected to be eroded to a certain extent by a relatively high inflation (not fully compensated by currency depreciation) and by a rise in domestic agricultural prices as food demand recovers somewhat more quickly than supply. In a situation of rising output, production costs will be more fully reflected.

GATT

Further agricultural policy developments in the CEECs will be conditioned by their GATT Uruguay Round commitments on domestic support, market access and export subsidization.

The Aggregate Measurement of Support (AMS) commitments might become constraining for those countries which have bound their AMS in national currencies. Tariffs have generally been bound at higher levels than the protection applied at the beginning of the transition, but are for most products and countries still lower than in the EU. Potentially the most constraining are the export subsidy commitments, in quantity as well as budget outlay terms.

Conclusion and outlook

The general income growth in the CEECs will lead to a certain recovery of demand for agricultural products, in particular for livestock products, although the pre-transition levels of per capita consumption will likely not be reached. A rise in animal production will also increase the feed demand for cereals.

In most countries completion of land reform and restructuring of the food chain will take at least till the end of the decade, while farm structures could be expected to evolve even slower as the capability of agriculture to attract investment will remain limited.

In view of the budgetary constraints in many countries state support to agriculture is not expected to increase much above current levels, limiting the possibilities of market intervention and structural aid. Use of import protection within GATT limits can be expected to increase, although the scope for domestic price rises is limited by the still high share of household income spent on food and by the still excessive inflation rates in most countries.

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.

By the end of the decade supply and demand patterns in CEEC agriculture could be expected to have adjusted to the transition shock. In the crop sector there would be a certain shift towards cereals and oilseeds with an increased net export potential compared to the pre-transition situation. In the livestock sector the recovery would be less marked. For dairy the net export potential would be significantly lower than in the pre-transition period, while for the meats supply and demand would be more or less in balance, but at a lower level than in the pre-transition period.

The to some extent still low producer prices in the CEECs should be seen in relation to the deep economic recession of the last five years. With the growth of incomes and rising demand, as well as the border protection allowed under GATT, prices should rise further in coming years. The price gap between the CEECs and the EU can however be expected to continue to exist for the foreseeable future, even if it will decrease more or less noticeably, depending on the product.

When taking all these elements together the CEECs would be less in need of a high level of price and income support for their farmers, than of targeted assistance for the restructuring, modernization and diversification of their productive capacity in agriculture and the downstream sectors and for improvement of their rural infrastructure.

1. General overview

The ten Central and Eastern European Countries (CEECs) presented in this report together form an important part of Europe in geographical and demographical terms. Combined the CEEC-10 have a population of about 106 mio and a land area of 1.1 mio square km. This is about 29% of EU-15 population and 33% of EU-15 area.

Table 1: CEEC-10 in comparison with EU-15

	popul.	tot. area	agric. area		arable area		GDP	GDP pc	
	(mio)	(mio ha)	(mio ha)	(% total)	(mio ha)	(ha pc)	(bio ECU)	(ECU)	(ECU PPP)
Poland	38.5	31.3	18.6	59	14.3	0.37	73.4	1907	4838
Hungary	10.3	9.3	6.1	66	4.7	0.46	32.5	3150	5967
Czech Rep.	10.3	7.9	4.3	54	3.2	0.31	26.7	2586	7507
Slovak Rep.	5.3	4.9	2.4	49	1.5	0.28	8.7	1643	6367
Slovenia	1.9	2.0	0.9	43	0.2	0.13	9.8	5018	7697
CEFTA+	66.4	55.4	32.3	58	24.0	0.36	151.1	2277	5635
Romania	22.7	23.8	14.7	62	9.3	0.41	21.8	961	2941
Bulgaria	8.5	11.1	6.2	55	4.0	0.48	9.4	1110	3754
Balkan	31.2	34.8	20.9	60	13.3	0.43	31.2	1001	3163
Lithuania	3.8	6.5	3.5	54	2.3	0.62	2.3	627	n.a
Latvia	2.6	6.5	2.5	39	1.7	0.65	2.2	850	n.a
Estonia	1.6	4.5	1.4	31	1.0	0.63	1.5	938	n.a
Baltics	7.9	17.5	7.4	43	5.0	0.63	6.0	757	n.a
CEEC-10	105.5	107.7	60.6	56	42.3	0.40	188.3	1786	n.a
EU-15	369.7	323.4	138.1	43	77.1	0.21	5905.1	15972	15879
CEEC/EU	29%	33%	44%		55%		3%	11%	

Source PPP data: WIIW (The Vienna Institute for Comparative Economic Studies)

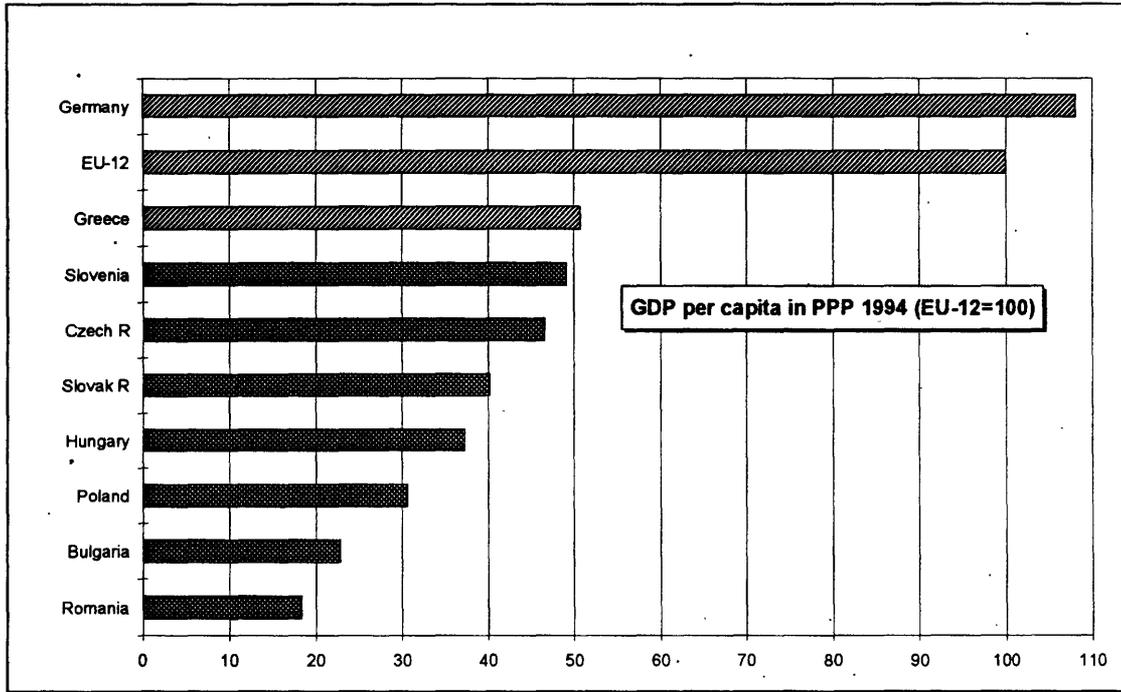
All figures are for 1993. PPP US\$/ECU '93=1.033. CEFTA+ includes Slovenia (see footnote 3)

In terms of agricultural area it is even more important, ie 44% of EU-15 total agricultural area and 55% of arable land. On average the CEECs dispose of twice as much arable land per inhabitant as does the EU.

In economic terms the combined GDP of the CEEC-10 only represents 3% of the EU-15 output, while the average GDP per capita is around 11% of the average EU level. When exchange rates adjusted for purchasing power parity (PPP) are used the gap in living standards is reduced to around a third of the average EU-level for the CEFTA+³ group of countries and to a fifth of the EU level for the two Balkan countries. Some of the higher income CEECs, such as Slovenia and the Czech Republic are at a level coming close to that of Greece in purchasing power.

³ The Central European Free Trade Agreement formed between the countries of the Visegrad group (Poland, Hungary, Czech Republic and Slovak Republic) was signed on 21 December 1992. Slovenia and the Baltic states were invited in November 1994 to join the Visegrad group from 1995. Slovenia is currently still negotiating the terms of the free trade agreement with Poland, while the agreement with Hungary and the Czech and Slovak Republics became operative in 1994. For the purpose of this analysis the Baltics as former part of the Soviet Union are treated separately.

Graph 1: CEEC per capita purchasing power relative to EU-12



Source data: WIIW (no data available for the Baltics)

According to PPP projections elaborated by the Vienna Institute for Comparative Economic Studies (WIIW) GDP per capita in the year 2010 would be at nearly 80% of the EU average in Slovenia and at nearly 75% in the Czech Republic, while in Romania and Bulgaria it would be at 29% and 36%, respectively (compared to 51% of the EU average for Greece), assuming a 3 point growth rate differential between the CEECs and the EU.

2. Macro-economic situation

Most CEECs are showing signs of recovery after having experienced a significant contraction in output in the first years of transition.

Table 2: CEEC GDP growth

	1990	1991	1992	1993	1994(e)	1995(f)
Poland	-11.6	-7.0	2.6	3.8	5.0	5.0
Hungary	-3.3	-11.9	-4.3	-2.3	2.0	0.3
Czech Republic	-1.2	-14.2	-6.4	-0.9	2.6	4.2
Slovak Republic	-2.5	-14.4	-5.8	-4.1	4.8	4.5
Slovenia	-4.7	-8.1	-5.4	1.3	5.0	5.0
CEFTA+	-6.2	-9.7	-1.5	1.0	3.9	3.9
Romania	-5.6	-12.9	-10.1	1.2	2.4	2.6
Bulgaria	-9.1	-11.7	-5.8	-4.2	0.2	1.0
Balkan	-7.0	-12.6	-8.8	-0.4	1.9	2.2
Lithuania	-3.3	-13.1	-34.0	-27.1	2.0	5.0
Latvia	2.9	-10.4	-34.9	-14.9	-2.2	5.0
Estonia	-6.5	-8.1	-14.3	-8.2	4.0	5.0
Baltics	-1.0	-11.0	-30.9	-18.1	1.2	5.0
CEEC-10	-6.2	-10.1	-3.5	0.2	3.4	3.7
EU-15	2.9	1.6	1.0	-0.5	2.8	3.2

The transition induced decline in economic activity bottomed out for the CEEC-10 in 1993 as growth rebounded in the bigger economies such as Poland and Romania, which together account for over 50% of CEEC output. In 1994 all CEECs, except Latvia, experienced growth, led by the CEFTA+ group (representing 80% of CEEC output) and followed at a distance by the two Balkan countries (17% of CEEC output) and the Baltics (3% of CEEC output). The Polish economy contracted least during transition, while the Baltics as part of the former Soviet economy experienced the sharpest decline in economic activity.

Fuelled by an increase in private sector activities, which in most countries now represent over half of all economic activity, growth prospects in 1995 for most CEECs are favourable. Lagging somewhat behind are Hungary, which is experiencing problems in stabilizing the economy, in particular public finances and the current account, and the Balkan countries, which in addition seem less advanced in their transition to market economies.

Table 3: Other main economic indicators

	inflation		unemployment		budget balance		government debt		current account	
	% change cpi*		% labour force		% GDP		% GDP		% GDP	
	1994	1995(f)	1994	1995(f)	1994	1995(f)	1994	1995(f)	1994	1995(f)
Poland	32.2	25.0	16.1	16.0	-2.6	-3.1	70.4	63.5	-1.0	
Hungary	19.1	28.0	10.5	12.0	-5.8	-3.5	91.1**		-9.6	-6.6
Czech Rep.	10.0	9.0	3.2	4.0	1.0	0.0	15.3	13.1	0.8	
Slovak Rep.	13.4	12.0	14.8	15.0	-5.7	-4.7	18.2		5.7	
Slovenia	19.8	10.0	13.8	13.3	-0.2	-0.2	35.0	35.0	3.3	
Romania	62.0	29.0	10.8	11.6	-4.4	-3.3				
Bulgaria	121.9	80.0	12.4	15.0	-6.7	-6.0	83.0		1.1	
Lithuania	45.0	25.0	3.8	6.2	-2.0	-2.0				
Latvia	25.0	20.0	6.5	10.0	-2.2	-2.0				
Estonia	48.0	30.0	5.3	6.0	-2.2					
EU-15	3.2	3.2	11.2	10.7	-5.5	-4.5	68.1	70.3	0.2	0.3

* consumer price index; **1993

Although inflation rates have been brought down sharply from the peaks in 1991 and 1992 (the first years of price liberalization), they remain high compared to the average level in the EU. Only the Czech Republic and possibly Slovenia seem to be moving to the single digit range.

Unemployment has tended to rise during transition and is generally not expected to fall significantly in the short run as restructuring of the economy continues. In some countries it could even continue rise as the overmanned state sector is further privatized. The officially recorded unemployment rates are however not out of line with those seen in the EU.

Achieving fiscal balance continues to be a problem for Bulgaria and to a lesser extent for Hungary and Slovakia. The former two in addition have a high level of government and external indebtedness.

Hungary was still running a large current account deficit in 1994 and its external debt reached 73% of GDP. Bulgaria's current account became positive in 1994 (from -11% of GDP in 1993), but its external debt still stood at 116% of GDP.

3. Agriculture in the overall economy

In terms of area, contribution to GDP and in particular share in total employment agriculture is relatively more important in the CEECs than in the EU.

Table 4: Importance of agriculture

	agric. area		agric. production*		agric. employment		trade		food exp.
	(mio ha)	(% tot. area)	(bio ECU)	(% GDP)	(000)	(% tot. empl.)	(% tot. exp.)	(% tot. imp.)	(% hh. income)
Poland	18.6	59	4.648	6.3	3661	25.6	12.2	11.1	30
Hungary	6.1	66	2.068	6.4	392	10.1	21.8	7.4	31
Czech Rep.	4.3	54	0.871	3.3	271	5.6	7.7	9.6	32
Slovak Rep.	2.4	49	0.512	5.8	178	8.4	5.9	9.3	38
Slovenia	0.9	43	0.250	4.9	90	10.7	4.7	8.2	28
CEFTA+	32.3	58	8.349	5.5	4592	22.1			
Romania	14.7	62	4.500	20.2	3537	35.2	6.8	9.9	60
Bulgaria	6.2	55	1.131	10.0	694	21.2	20.7	10.6	48
Balkan	20.9	60	5.631	18.0	4231	32.9			
Lithuania	3.5	54	0.259	11.0	399	22.4	12.8	10.8	58
Latvia	2.5	39	0.232	10.6	229	18.4			45
Estonia	1.4	31	0.266	10.4	89	8.2	11.0	16.7	39
Baltics	7.4	43	0.757	10.7	717	19.4			
CEEC-10	60.6	56	14.7	7.8	9540	26.7			
EU-15	138.1	43	208.8	2.5	8190	5.7	8.0	9.5	22

Area, production and employment figures are for 1993, trade and food expenditure 1994. EU=EU12 for trade. Food expenditure in Hungary, the Czech Republic and the EU includes beverages and tobacco, while in Romania and Bulgaria home consumption is included.

* as measured by Gross Agricultural Product (GAP)

Most dependent on agriculture are Romania and Bulgaria followed by the Baltics. The share of agriculture in GDP has generally been declining in the CEECs since 1989 with the exception of Romania, where it increased at the start of transition. The relative decline of agriculture was mainly due to a worsening terms of trade of agriculture in relation to the rest of the economy (price-cost squeeze, see also chapter 4). In the CEFTA+ countries the contribution of agriculture to GDP more or less halved between 1989 and 1994, but is still double the average EU's share of agriculture in GDP. In the other CEECs the decrease in the part of GDP derived from agriculture has been less steep.

For agricultural employment the pattern is more mixed. Its share in total employment increased during transition in the Balkan and Baltic countries, where agriculture played a buffer role in a generally deteriorating economic situation. In Poland its share has remained stable, while in the other CEFTA+ countries the share of agriculture in total employment declined.

Although the absolute level of employment in agriculture decreased in most CEECs during transition, the total number of 9.5 mio is still very high compared to the EU's 8.2 mio⁴. On average in the CEECs 27% of the work force is generating only 8% of GDP⁵, implying that if the same relative level of labour productivity as in the EU were to be attained in agriculture another third of the agricultural work force would

⁴ The 9.5 mio could be somewhat inflated due to non-adjustment of total labour figures for part timers in certain countries. On the other hand the growing private sector in agriculture tends to be underrecorded.

⁵ The inverse situation in Estonia, ie 8% of the work force generating 10% of GDP, is due to the fact that only professional farmers have been included in the agricultural work force, not taking into account the labour of part time workers.

Share of the agricultural sector
in GDP and Employment (1993 or 1994) in
CENTRAL and EASTERN EUROPE

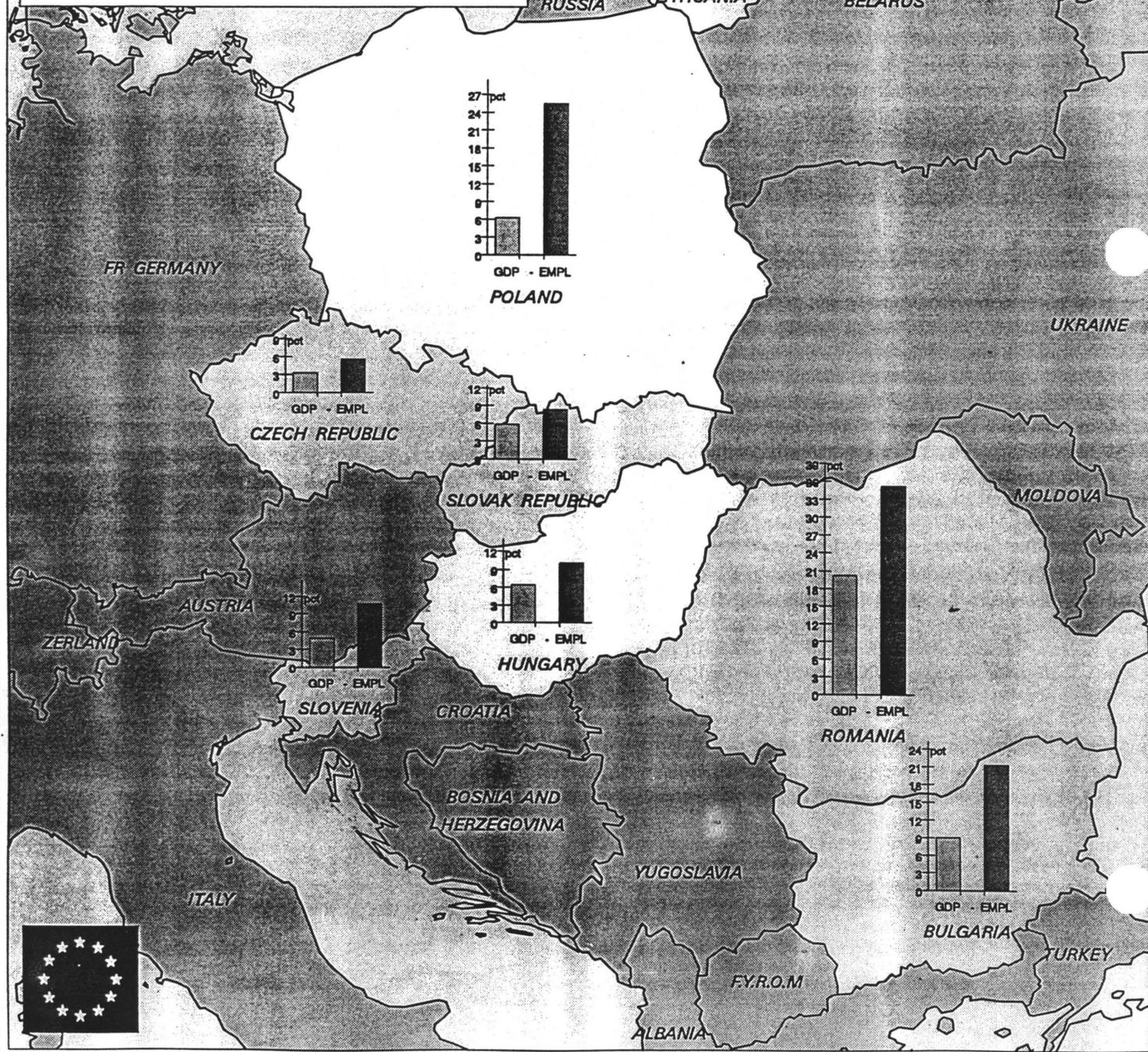
compared to the European Union



NOTE:
EMPL for Estonia includes professional farmers only

SOURCE: Geographical data : EUROSTAT-GISCO
Attribute data : VI/01

CARTOGRAPHY: EC-GIS-VI -07/95



have to be shed (ie over 3 mio persons). Economic diversification in rural areas will therefore be a major concern in the coming years.

Agrofood exports as percentage of total exports are in particular of importance to Hungary and Bulgaria and to a lesser extent to Poland and the Baltics. Estonia has a relatively high share of agrofood in its imports. In most CEECs the share of agrofood exports in total exports increased in the surplus situation of the first years of transition, following the sharp drop in demand as prices were liberalized and consumer subsidies abolished. The share of agrofood imports in total imports has remained stable or has in some cases started to increase, following the drop in production in more recent years.

The part of household income spent on food has tended to increase significantly in the Balkan and Baltic countries (rising up to 60%), which experienced a large decline in income during transition, while in the CEFTA+ countries it has remained more or less stable (around 30%). In most CEECs food is an important item of household expenditure, potentially limiting the scope for policy makers to increase agricultural price support.

4. Agricultural output

With the exception of Slovenia and Romania, where the volume of agricultural output is back at the pre-transition level, all other CEECs were still substantially below this level in 1994. In the Baltics and the Czech Republic the contraction of agricultural production even continued in 1994, while in Hungary, Slovakia and Bulgaria the drop in production seems to have bottomed out, although this was mainly due to a rise in crop production after two bad harvests. In Poland drought affected crop production in 1994 (as it did in 1992), again reducing overall output after a first recovery in 1993.

Table 5: Real Gross Agricultural Output⁶

	Total GAO (1989=100)					crops					livestock				
	1990	1991	1992	1993	1994	1990	1991	1992	1993	1994	1990	1991	1992	1993	1994
Poland	94.5	93.0	82.9	84.5	78.6	95.1	90.7	68.2	88.7	74.1	94.2	94.1	90.2	78.8	81.6
Hungary	95.3	89.4	71.6	64.7	65.6	90.7	94.3	69.7	63.3	69.6	99.8	84.2	74.4	66.6	60.0
Czech Rep	97.7	89.0	78.3	76.4	72.2	99.3	96.4	79.9	83.7	78.7	96.6	83.9	77.2	71.4	67.6
Slovak Rep	92.8	85.9	74.0	68.4	74.6	88.4	93.5	79.8	75.3	89.7	96.2	79.9	69.4	62.6	62.6
Slovenia	104.2	101.1	90.5	98.0	118.2	98.6	94.2	73.1	92.8	133.3	102.2	105.5	96.4	97.3	96.5
Romania	97.1	97.9	84.9	95.7	101.0	92.8	96.7	82.4	98.3	107.4	102.1	98.2	87.9	90.5	91.3
Bulgaria	94.0	93.7	82.5	67.5	70.2	92.6	109.8	95.8	75.7	93.1	95.4	77.7	69.3	56.9	48.3
Lithuania	91.1	87.2	66.4	61.1	47.7	82.2	89.6	59.5	67.3	47.6	95.6	85.5	69.9	58.9	50.7
Latvia	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a
Estonia	86.9	83.4	67.9	62.7	56.4	75.3	80.8	68.8	76.1	n.a	92.0	82.8	65.5	52.3	n.a

There are a number of common factors underlying the sharp decline in agricultural production in most CEECs⁷.

Apart from abnormal climatic conditions (eg the drought which affected crop production in many countries in 1992 and to a lesser extent in 1993), the general drop in demand, both domestic and external, led to a surplus situation in the first years of transition and prevented agricultural output prices from rising as fast as other prices in the general inflation, following price liberalization. Also the gap between farm gate and retail prices tended to increase as demonopolization of the downstream sector had yet to start.

Thus rising food prices (in particular at the retail level), declining incomes as the general economic situation deteriorated, and abolition of consumer subsidies combined to reduce domestic demand for food products. On the external front the disintegration of COMECON led to the loss of traditional eastern markets, in particular for agricultural exporters such as Hungary and Bulgaria, as was the case for the Baltics traditionally exporting to Russia.

Agricultural input prices such as for energy and fertilizer, which in the past were often artificially cheap, tended to move to world market levels, generally rising much faster than producer prices. The resulting price-cost squeeze in many cases led to a

⁶ Value of sold production plus own producer consumption at constant prices.

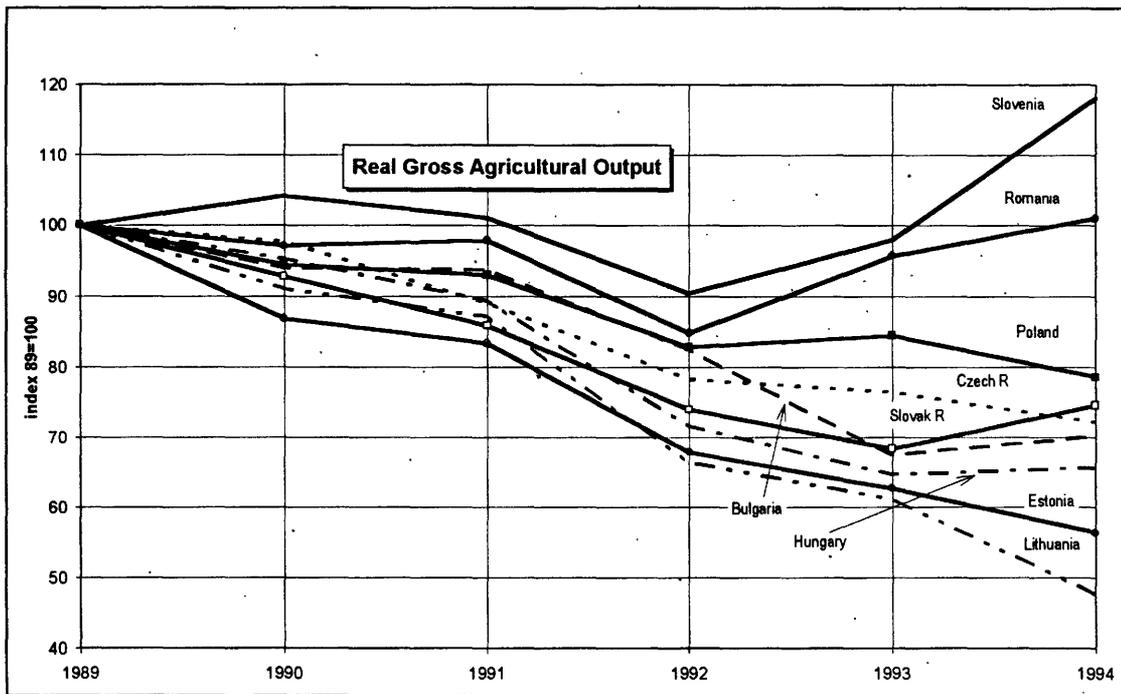
⁷ Only in Romania, where the government had a deliberate policy to stimulate production, and in Slovenia, which already had a large private sector in agriculture and suffered less disruption from structural reform, this sharp decline did not manifest itself.

sharp decline of profitability in farming. For the more recent years there are indications that the output-input price relationships are stabilizing in a number of countries (e.g. Poland, Hungary and Romania). As a consequence returns to agriculture are again increasing, in particular in the crop sector, although at globally low levels with still a notable share of loss making farms.

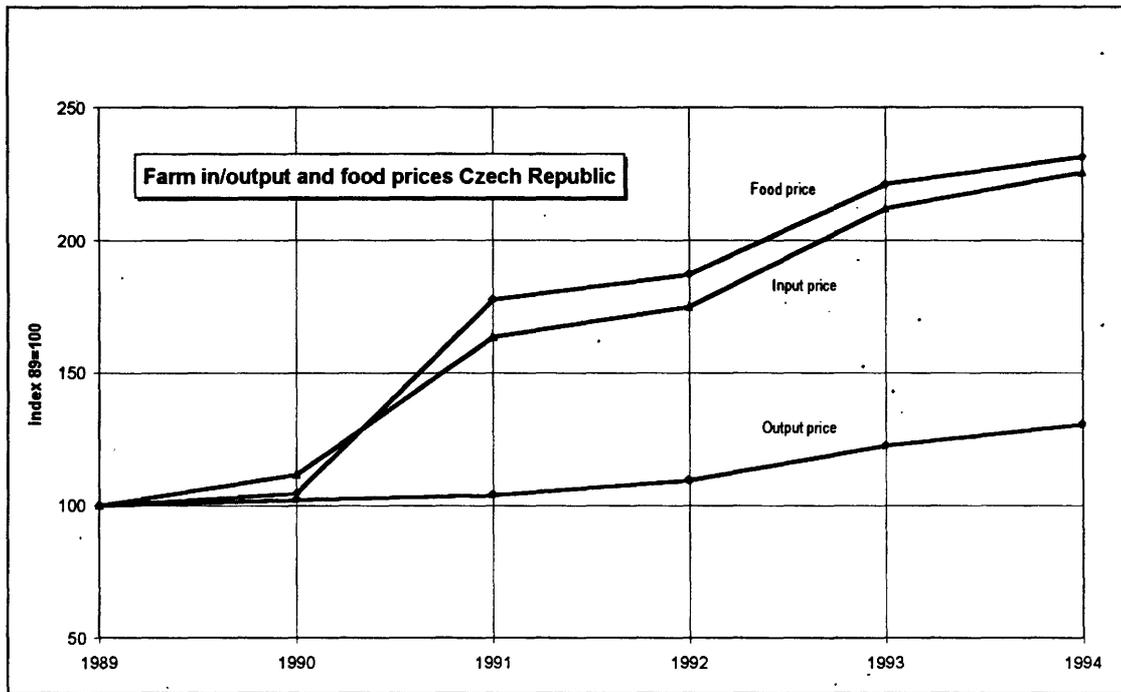
The restructuring of agriculture, ie the transformation of cooperatives and privatization of state farms, created further uncertainties as ownership and sometimes farms were fragmented (see § 6.1).

The following graphs provide an illustration of the development of agricultural production in the CEECs during transition and of price movements in the Czech case, which can be regarded as typical for most CEECs (except Romania where farm output prices have risen faster than input prices since 1991).

Graph 2: Agricultural Output in the CEECs



Graph 3: Price movements "the Czech example"



Most affected by the above mentioned developments has been the livestock sector in many CEECs. Relative to income per capita consumption of livestock products, in particular meat, was high in the pre-transition period due to a high rate of subsidization and has been specifically hit by the fall in demand as subsidies were removed. On the production side livestock farming was in many countries concentrated in very large and inefficient units, which have been subject to restructuring in the transformation process. For crops it was possible to adapt by drastically cutting inputs. For livestock adaptation meant decapitalization without the possibility to rebuild herds, which would need larger investments than crop production and a longer planning horizon.

As a consequence the weight of the crop sector in total agricultural output has tended to increase significantly during transition.

5. Agriculture and food trade

Most CEECs, with the exception of Hungary, Bulgaria and Estonia, have become net importers of agricultural and food products in recent years. Large exporters in value terms are Hungary and Poland, while Poland is also a large importer of agrofood products, followed by the Czech Republic.

Apart from Lithuania, Latvia, Slovenia and the Czech Republic (the latter experienced problems in its exports to Slovakia) the other CEECs saw their agrofood balance slightly improving in 1994 as exports increased more than imports. In Romania a decline in imports reduced the agrofood deficit by more than half.

Table 6: Agrofood trade in the CEECs

mio ECU	exports						imports						net trade					
	1989	1990	1991	1992	1993	1994	1989	1990	1991	1992	1993	1994	1989	1990	1991	1992	1993	1994
Poland	1706	1504	1998	1490	1403	1751	1293	526	1685	1524	1924	2006	413	978	313	-33	-520	-255
Hungary	2043	1831	2185	2067	1697	1976	709	546	571	542	689	911	1334	1285	1614	1525	1008	1065
Czech Rep.	659	471	570	584	874	864	967	598	513	658	877	1090	-308	-127	58	-74	-3	-225
Slovak Rep.	80	165	216	234	300	330	187	164	146	156	483	509	-106	1	70	78	-183	-179
Slovenia	n.a.	n.a.	178	336	248	285	n.a.	n.a.	226	426	465	568	n.a.	n.a.	-48	-90	-217	-293
Romania	479	81	199	223	281	334	333	880	622	761	826	556	146	-799	-423	-538	-545	-222
Bulgaria	2180	1601	609	603	629	762	925	451	269	206	349	386	1255	1150	339	367	281	375
Lithuania	n.a.	n.a.	n.a.	n.a.	245	223	n.a.	n.a.	n.a.	n.a.	251	271	n.a.	n.a.	n.a.	n.a.	-6	-48
Latvia	n.a.	n.a.	n.a.	n.a.	151	107	n.a.	n.a.	n.a.	n.a.	115	137	n.a.	n.a.	n.a.	n.a.	36	-30
Estonia	n.a.	n.a.	n.a.	n.a.	161	245	n.a.	n.a.	n.a.	n.a.	154	231	n.a.	n.a.	n.a.	n.a.	7	13

The most important trade partner for many CEECs is the EU, in particular on the import side, but also as export market. All CEECs except Hungary are net importers of agrofood products from the EU. The agrofood balance has been developing in favour of the EU, moving from a deficit in 1992 to an increasing surplus in 1993 and 1994. Only Poland succeeded to increase its exports more than its imports in 1994, while Romania sharply reduced its agrofood imports from the EU in that year.

All six associated countries increased their exports to the EU in 1994, which is partly a reflection of the economic upturn in the EU and partly the result of a better use of the tariff quotas under the Europe Agreements, although utilization still falls some way short of maximum take up. Further improvement of utilization is expected.

Table 7: Agrofood trade CEEC-EU

mio ECU	exports to EU-15						imports from EU-15						net trade					
	1989	1990	1991	1992	1993	1994 (e)	1989	1990	1991	1992	1993	1994 (e)	1989	1990	1991	1992	1993	1994 (e)
Poland	979	1198	1174	1032	896	959	826	678	1104	1037	1196	1207	153	519	71	-5	-300	-248
Hungary	910	867	1089	1005	865	964	151	155	216	299	439	556	759	712	874	706	426	407
Czech Rep.*	267	286	285	326	271	305	191	174	306	486	483	627	76	112	-11	-160	-211	-322
Slovak Rep.*	267	286	285	326	52	62	191	174	306	486	131	149	76	112	-11	-160	-79	-87
Slovenia				118	96	84				139	235	331				-21	-139	-247
CEFTA*				2482	2180	2373				1961	2484	2871				520	-304	-497
Romania	120	49	90	91	97	119	84	280	260	352	342	203	36	-231	-170	-262	-245	-84
Bulgaria	180	182	223	214	198	217	112	98	166	142	239	279	48	83	57	72	-41	-62
Balkan	280	230	312	305	295	336	195	378	425	494	582	482	84	-148	-113	-190	-286	-145
Lithuania				33	62	37				127	167	182				-94	-105	-146
Latvia				17	56	17				82	97	135				-64	-42	-119
Estonia				22	32	36				85	126	151				-63	-94	-116
Baltics				72	150	89				294	380	469				-222	-240	-380
CEEC-10				2858	2626	2798				2749	3456	3821				109	-830	-1023

* 1989-1992 Czechoslovakia

For the EU agrofood exports to the ten CEECs represent nearly 8% of total agrofood exports, while imports from the CEECs represent nearly 5% of total EU agrofood imports.

The second trade partner for many CEECs (and in the case of Bulgaria the first) is the former COMECON. In particular for the Baltics the Former Soviet Union (FSU) is still the most important export market for agricultural products, while for Slovenia it is former Yugoslavia. For many CEECs the share of agrofood exports going to the FSU increased again in 1994, after having dropped in the early transition years.

The Czech Republic and the Slovak Republic form a customs union since 1 January 1993 (when Czechoslovakia was split) and are as such important trade partners for each other. In 1994 agricultural trade between the two countries was hindered by the introduction of a certification requirement on the Slovak side, affecting in particular Czech exports.

Trade in agricultural products within CEFTA (ie between Hungary and Poland and the Czech/Slovak customs union with Slovenia as a potentially new member) has been limited, but this could change, if the plans, announced by the agriculture ministers in early 1995 to reduce customs duties on agrofood imports by 50% from 1 January 1996 and to eliminate them by 1 January 1998, materialize.

The commodity breakdown of the agrofood trade flows between the CEECs and the EU shows that the main export items for the CEECs are live animals and meat and fruit and vegetables, which together (including preparations) account for over 60% of the export value to the EU. The share of meat in agrofood exports to the EU has however decreased as livestock production has dropped, while meat imports from the EU increased. Other main import items are fruits and in particular processed foods (under the category other) and cereals in the drought years 1992 and 1993.

Table 8: Commodity breakdown CEEC-EU agrofood trade

% tot. trade	CEEC-10 exports to EU-12			CEEC-10 imports from EU-12		
	1992	1993	1994	1992	1993	1994
Live Animals	13.6	13.6	13.8	1.2	0.8	1.5
Meat	18.1	17.2	16.2	2.5	4.6	9.2
Dairy Prod.	1.4	2.6	3.4	4.2	3.3	3.4
Vegs	10.2	9.1	8.8	3.1	3.9	3.9
Fruits	7.7	8.8	8.9	8.2	9.0	11.1
Cereals	1.3	1.3	2.4	14.5	13.6	2.4
Oilseeds	7.1	7.6	7.4	2.6	2.1	2.2
Fats & Oil	1.9	1.8	1.6	6.8	5.3	6.3
Meat & Fish Prep.	6.2	6.4	5.7	1.6	1.5	1.7
Sugar	1.4	1.3	1.3	5.7	6.6	4.0
Vegs & Fruit Prep.	8.3	7.3	10.1	2.3	2.7	3.8
Beverages	5.3	5.6	4.3	7.3	7.5	8.7
Other	17.6	17.3	16.2	39.9	39.0	41.7

The CEEC-10 trade pattern is largely determined by the CEFTA+ countries which make out 85% of agrofood exports to the EU and account for 75% of imports from the EU. The share of processed products (meat and fruit and vegetable preparations) in CEFTA+ exports to the EU is higher than in other countries. Romania and Bulgaria have a higher share for exports of beverages (ie wine), while the Baltics have a high share for exports of dairy products. On the import side the Baltics have a high share for beverages (33% of the import value from the EU in 1994).

6. Agricultural policy

6.1 Structural reform and privatization

AGRICULTURE

In most CEECs 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 model¹, 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 (eg 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 (eg 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 privatized (or are earmarked for privatization), 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 farms and to reconstitute the land to the former owners or their heirs prior to collectivisation, a process which is still far from completed. Together with newly formed private cooperatives and similar informal structures the state controlled farms in liquidation still have an important share of agricultural area.

¹ In the Baltics there was no real distinction between sowkhoses (state farms) and kolkhoses (collective farms) in management and integration in central planning, while in Bulgaria collective and state farms were integrated in the seventies into very large scale agro-industrial complexes, followed by a certain decentralization in the eighties.

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 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 a cooperative type of associations of producers and fairly widespread small scale private farming.

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, eg 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.

In the two countries that already had a large private sector in agriculture structural reform has been less marked. In Poland a certain increase in the size of private farms is expected as some land from the former state farms is transferred, but overall the small scale of private farming will remain a 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.

Table 9: CEEC farm structure

	share in total agricultural area (%)					
	cooperatives*		state farms**		private farms***	
	pre-transition	current	pre-transition	current	pre-transition	current
Poland	4	4	19	18	77	78
Hungary	80	55	14	7	6	38
Czech Rep.	61	48	38	3	1	49
Slovak Rep.	68	63	26	16	6	13
Slovenia			8	7	92	93
Romania	61	35	14	14	25	51
Bulgaria		41	90	40	10	19
Lithuania		35	91	1	9	64
Latvia		17	96	2	4	81
Estonia		33	96		4	67
	average size (ha)					
	cooperatives*		state farms**		private farms***	
	pre-transition	current	pre-transition	current	pre-transition	current
Poland	335	400	3140	2000	6.6	6.7
Hungary	4179	1702	7138	1976	0.3	1.9
Czech Rep.	2561	1430	6261	498	4.0	16.0
Slovak Rep.	2654	1665	5162	2455	0.3	1.0
Slovenia			470	303	3.2	4.1
Romania	2374	170	5001	2002	1.5	1.8
Bulgaria		750	13000	1100	0.4	0.6
Lithuania		450	2773	124	0.5	2.6
Latvia		706	3000	547	0.5	5.8
Estonia		567	3500		0.5	2.1

The share in agricultural area of the different farm types is according to land use (and not ownership)

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

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

*** household plots/small individual farms pre-transition, individual (part time) farms and other business entities (joint stock, limited liability) currently.

UP- AND DOWNSTREAM

The degree of privatization and demonopolization achieved in the up- and downstream sectors differs between countries. Most CEECs started by privatizing the retail sector in which state influence has declined considerably. The privatization of input industries (manufacturing and supply of machinery, seeds, fertilizers and other agro-chemicals) and of the food processing sector is most advanced in countries such as the Czech Republic, Hungary and Poland, although even these countries are experiencing problems in reducing overcapacity and in privatizing the primary processing of agricultural products (eg mills, slaughter houses and dairies).

Delays in the privatization and in the breaking up of the large state monopolies in the up- and downstream sectors was one of the reasons for the price-cost squeeze the farm sector experienced in the first years of transition. A return to profitability of farming will to a large extent depend on a competitive downstream sector and on a reorganization of the farm sector itself, eg in bundling supply and strengthening its negotiating position vis-à-vis the food processing industry and distribution channels.

BANKING SYSTEM

In most CEECs also the banking sector is being privatized, although in many countries state control remains predominant. Private specialized financial services for agriculture have in most cases not yet developed. Many governments have however recently set up specialized (state) agencies offering preferential credit, either directly (which is the case in most countries) or through the commercial banking system by providing loan guarantees (which is the case in the Czech Republic). In the former case the state remains responsible for allocation of credit subsidies, in the latter allocation is determined by commercial criteria. See also the next section.

6.2 Support policies

In most CEECs measures have been introduced to stabilize the agricultural sector, in the wake of the disruptions the early years of transition brought.

Depending on the country support to agriculture has taken various forms ranging from CAP like intervention and border measures to administrative controls still close to those used under central planning.

In the Visegrad countries, after the initial price and trade liberalization in the first years of transition, market support in the form of intervention buying, export subsidies and border protection has been progressively introduced for the main commodities such as cereals, sugar, dairy products, beef and pork. Intervention and price support levels are however much lower than in the EU and targeted at the farm level (eg meat intervention prices are expressed in live weight).

Table 10: Intervention prices in the Visegrad countries and the EU in 1994*

	wheat		beef		pork		milk**	
	ECU/t	% EU	ECU/t	% EU	ECU/t	% EU	ECU/t	% EU
Poland	89	69%	1110	30%	1261		87	28%
Hungary	66	51%	1609	44%	1050		201	65%
Czech Rep.	87	67%	1566	43%	-		171	55%
Slovak Rep.	92	71%	1546	42%	-		179	58%
EU	129		3680		-		310	

* wheat marketing year 1994/95; beef and pork intervention prices in the Visegrad-4 have been converted into carcase weight.

** EU target price, fixed/minimum producer price in Visegrad-4

In Romania and Bulgaria food security and protection of (urban) consumers has been 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 have been kept low. In addition exports have at times been prevented by taxes or outright bans and imports facilitated by waiving import duties. Support for agriculture has been mainly in the form of subsidized credit.

Slovenia is still applying administered prices for a number of products such as wheat, sugar and milk. In the Baltics support ranges from minimum prices for grain, milk and beef in Lithuania, to only border measures in Latvia (relatively high protection and export subsidies for some surplus products) and to no market support or border measures in Estonia, although introduction is under discussion.

Most countries provide input and investment subsidies, directly or through credit subsidies or guarantees, although at modest levels in view of the limited budget resources. Access to credit for working capital or investment purposes has been difficult for the farm sector due to underdevelopment or non-existence of rural credit systems. Banks have been reluctant to lend owing to lack of collateral (property rights not settled, no functioning land market) and low profitability of farming in the transition years.

Some countries have special programmes for farming in less favoured areas, eg in the Czech Republic and the Slovak Republic a significant part of the agricultural budget is reserved for these purposes.

The following table provides a tentative comparison² of commodity prices in the EU, the CEECs and on the world market.

Table 11: Selected CEEC, EU and world commodity prices in 1994

	wheat			maize			milk		beef		pork		poultry	
	ECU/t	% EU	% world	ECU/t	% EU	% world	ECU/t	% EU	ECU/t	% EU	ECU/t	% EU	ECU/t	% EU
Poland	98	73%	104%				103	33%	1240	40%	1320	103%	1179	88%
Hungary	75	56%	80%	72	52%	97%	220	70%	1630	52%	1260	98%	1038	77%
Czech R	88	66%	94%	100	72%	135%	172	54%	1850	59%	1200	94%	910	68%
Slovak R	84	63%	89%	93	67%	126%	164	52%	1580	50%	1130	88%	987	74%
Slovenia	175	131%	186%	123	89%	166%	292	92%	2510	80%	1710	134%	1090	81%
Romania	81	60%	86%	75	54%	101%	179	57%						
Bulgaria	54	40%	57%	71	51%	96%	114	36%	750	24%	680	53%	590	44%
Lithuania	60	45%	64%				66	21%	680	22%	1040	81%		
Latvia	121	90%	129%				83	26%	560	18%	980	77%		
Estonia	75	56%	80%				83	26%	360	12%	550	43%		
EU	134		143%	138		186%	316		3130		1280		1340	
World	94	70%		74	54%									

Wheat, maize and milk prices are farm gate prices. The world wheat and maize prices are notional farm gate prices by deducting 10 ECU/t from the fob export price (Argentine and US Gulf price, respectively). EU beef and pork prices are wholesale prices; CEEC meat prices are farm gate prices converted from liveweight.

In Romania and Bulgaria and to a certain extent in the Baltics prices are still depressed and often far below world market levels (and most likely below long term production costs).

In the Visegrad countries crop products and pork and poultry are around or above world market levels, while milk and beef are below. When compared to the EU the relative price levels of cereals and of pork and poultry indicate a lower degree of (feed conversion) efficiency in the production of white meats (ie cereals are cheaper than in the EU, but in particular pork and to a lesser extent poultry prices are close to EU levels). Slovenia has price levels comparable to the EU and for some commodities even exceeding the EU level.

When considering the relatively low level of farm gate prices in the CEECs (not counting Slovenia), the downstream inefficiencies in many countries should be taken into account, eg for wheat a doubling or more of the farm gate price to get the product to the border is not exceptional. The low dairy and beef prices reflect the decapitalization of herds (the costs to maintain production potential in quantity and quality terms are not being met) as the decrease in supply has not yet matched (or

² The limitations of such an exercise should be taken into consideration such as exchange rates which do not reflect economic reality, differing price, product and quality definitions, and different price recording periods.

only started to match depending on the country) the fall in demand and for beef also the lower quality of production based on dairy herds as most CEECs have no specialized beef herds.

Over time the price gap can be expected to be eroded to a certain extent by a relatively high inflation (not fully compensated by currency depreciation) and by a rise in domestic agricultural prices as food demand recovers somewhat more quickly than supply. In a situation of rising output, production costs will be more fully reflected.

Further agricultural policy developments in the CEECs will be conditioned by their GATT Uruguay Round commitments³ on domestic support, market access and export subsidization.

The Aggregate Measurement of Support (AMS) commitments might become constraining for those countries which have bound their AMS in national currencies as a result of inflation (although an "excessive" rate of inflation clause can be invoked). Only Poland and Slovenia made their commitments in US dollar and ECU, respectively. Romania is a special case as it has no base AMS and is therefore allowed to have a level of support not exceeding 10% of agricultural output.

Tariffs have generally been bound at higher levels than the protection applied at the beginning of the transition, but are for most products and countries still lower than in the EU. The exceptions are Romania and Poland, and potatoes and poultry, for which higher rates are applied than in the EU in most CEECs.

³ Poland, Hungary, the Czech Republic, the Slovak Republic, Slovenia and Romania are World Trade Organization (WTO) members, while the other CEECs are in various stages of application for membership. Romania obtained developing country status, allowing inter alia for longer implementation periods of the Uruguay Round commitments.

Table 12: CEEC tariff bindings for selected products relative to the EU

	rates applied in 1995		GATT Tariff binding ad valorem equivalent (max. bound rates)		% of EU		rates applied in 1995		GATT Tariff binding ad valorem equivalent (max. bound rates)		% of EU		rates applied in 1995		GATT Tariff binding ad valorem equivalent (max. bound rates)		% of EU				
			1995	2000					1995	2000					1995	2000				1995	2000
CROP PRODUCTS																					
WHEAT (common)						WHITE SUGAR						POTATO									
EU	100	100	100			100	100	100			100	100	100								
Poland	173	174	148			101	101	103			1112	1112	1113								
Hungary	60	60	59			39	39	49			300	300	385								
Czech Republic	31	31	39			34	34	43			917	917	870								
Slovakia		31	39				34	43				917	870								
Slovenia	36	132	143				87	91				390	391								
Romania		377	489				99	134				1172	1635								
MEAT																					
BEEF						PORK						POULTRY									
EU	100	100	100			100	100	100			100	100	100								
Poland	169	169	169			140	140	162			268	268	292								
Hungary	59	59	70			73	73	111			136	137	150								
Czech Republic	23	23	33			55	55	82			125	124	165								
Slovakia		23	33				55	82				124	165								
Slovenia	28	73	81				72	89				98	119								
Romania		176	257				452	740			200	366	468								
DAIRY PRODUCTS																					
BUTTER						MILKPOWDER						CHEESE									
EU	100	100	100			100	100	100			100	100	100								
Poland	91	89	83			177	177	159			162	162	216								
Hungary	89	89	83			78	78	80			66	68	91								
Czech Republic	47	47	55			49	49	58			7	7	11								
Slovakia		47	55				49	58				7	11								
Slovenia		84	103				91	95				101	128								
Romania		146	179				284	404				205	381								

Table 12 is based on the normal tariff rates, comparing the general CEEC and EU protection levels. A more detailed overview of these rates can be found in annex 1. For the bilateral trade EU-CEEC in many products preferential rates apply, laid down in the association agreements.

Potentially the most constraining are the export subsidy commitments, in quantity as well as budget outlay terms (the latter in particular in countries which have expressed their commitments in national currency). These and the minimum market access requirements have been taken into account in the supply and demand projections presented in the next chapter.

7. 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 2000 have been made based on detailed country analyses. In building the scenarios for CEEC agriculture in the country reports the following main (and often interrelated) elements were considered:

- the general economic environment, ie degree of macro-economic stabilization, progress in privatizing 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; share of household income spent on food;
- world market developments;
- population growth.

For the CEFTA+ countries an annual GDP growth in the range of 4 to 5% till the end of decade is expected, with Hungary, which is experiencing problems in stabilizing the economy, and possibly Slovakia, where the continuation of privatization is at issue, lagging somewhat behind. For the Baltics, recovering from a deep recession, a similar growth rate (ie 4 to 5%) is expected, while in Romania and Bulgaria the economy would grow at half this rate, as they experience delays in structural reform.

The general income growth in the CEECs will lead to a certain recovery of demand for agricultural products, in particular for livestock products, although the pre-transition levels of per capita consumption will likely not be reached. A rise in animal production will also increase the feed demand for cereals.

In most countries completion of land reform and restructuring of the food chain will take at least till the end of the decade, while farm structures could be expected to evolve even slower as the capability of agriculture to attract investment will remain limited.

In view of the budgetary constraints in many countries state support to agriculture is not expected to increase much above current levels, limiting the possibilities of market intervention and structural aid. Use of import protection within GATT limits can be expected to increase, although the scope for domestic price rises is limited by the still high share of household income spent on food, and by the still excessive inflation rates in most countries.

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.

7.1 Land use

Total arable land has remained relatively stable during transition in most CEECs. The combined arable base of 42.3 mio ha in 1994 amounts to 55% of the EU's arable area.

Over the period 1989-94 there has been a certain shift towards cereals, which now account for nearly 60% of CEEC arable area (compared to a share of 45% in the EU⁴). 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 potato and sugarbeet, have dropped in area. Potato feeding, especially practised in the CEFTA+ countries, has declined with livestock numbers, while sugar consumption has declined in most CEECs. Potato area remains, however, significant. Poland on its own has a larger potato area than the EU. Oilseeds are relatively important in Hungary, Romania and Bulgaria and have more or less maintained their share in CEEC land use. In the Baltics cereals are relatively less important, a large part of arable land is used for fodder crops. An overview of arable land use developments is given in table 13.

7.2 Livestock

In contrast to the crop sector, the livestock sector experienced a considerable liquidation of herds over the 1989-94 period, which in most CEECs seems to have not yet stopped.

Most affected have been cattle and sheep in the CEFTA+ countries, cattle and poultry in the Balkan countries and pigs and sheep in the Baltic countries. Most resistant has generally been the dairy sector with a drop in cow numbers⁵ of around 20% in most countries.

In the Baltics, which specialized in livestock production for the Russian market, livestock numbers (except dairy) have halved. In the Balkan countries the sheep sector remains relatively important, while in the CEFTA+ countries pig numbers have declined relatively less (except in Hungary). An overview of livestock number developments is given in table 14.

The CEEC total cattle number of 18.6 mio head in 1994 still represents 24% of the EU cattle herd. Total cow numbers (mostly dairy) are about half of the EU dairy cow numbers, while pigs represent 39% of the EU herd and sheep 19% of the EU flock.

⁴ The introduction of obligatory set aside with the 1992 reform reduced cereals area in the EU.

⁵ Most CEECs 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 specialized beef production.

Table 13: CEEC arable land use

		cereals		oilseeds		potatoes		sugarbeet		pulses		other		total arable	
		1989	1994	1989	1994	1989	1994	1989	1994	1989	1994	1989	1994	1989	1994
Poland	000 ha	8377	8481	570	370	1859	1697	423	401	386	394	2799	2957	14414	14300
	% arab.	58.1	59.3	4.0	2.6	12.9	11.9	2.9	2.8	2.7	2.8	19.4	20.7		
Hungary	000 ha	2805	2940	465	472	72	58	120	106	163	63	1088	1075	4713	4714
	% arab.	59.5	62.4	9.9	10.0	1.5	1.2	2.5	2.2	3.5	1.3	23.1	22.8		
Czech R.	000 ha	1662	1750	122	249	115	82	127	91	58	71	1148	920	3232	3158
	% arab.	51.4	55.4	3.8	7.9	3.6	2.6	3.9	2.9	1.8	2.2	35.5	29.1		
Slovak R.	000 ha	818	860	65	88	55	40	55	32	43	68	474	395	1509	1483
	% arab.	54.2	58.0	4.3	5.9	3.6	2.7	3.6	2.2	2.8	4.6	31.4	26.6		
Slovenia	000 ha	123	111	2	3	30	23	4	5	8	3	80	104	247	247
	% arab.	49.8	44.9	0.8	1.2	12.1	9.3	1.6	2.0	3.2	1.2	32.4	42.1		
CEFTA+	000 ha	13785	14142	1224	1182	2131	1900	729	635	658	599	5590	5451	24115	23902
	% arab.	57.2	59.2	5.1	4.9	8.8	7.9	3.0	2.7	2.7	2.5	23.2	22.8		
Romania	000 ha	5978	6328	966	612	351	216	256	130	311	66	1596	1986	9458	9338
	% arab.	63.2	67.8	10.2	6.6	3.7	2.3	2.7	1.4	3.3	0.7	16.9	21.3		
Bulgaria	000 ha	2150	2282	261	505	40	47	41	8	87	54	1270	1204	3848	4100
	% arab.	55.9	55.7	6.8	12.3	1.0	1.1	1.1	0.2	2.3	1.3	33.0	29.4		
Balkan	000 ha	8128	8610	1227	1117	391	263	297	138	398	120	2866	3190	13306	13438
	% arab.	61.1	64.1	9.2	8.3	2.9	2.0	2.2	1.0	3.0	0.9	21.5	23.7		
Lithuania	000 ha	1006	1178	11	6	120	120	34	27	119	9	1010	956	2300	2300
	% arab.	43.7	51.2	0.5	0.3	5.2	5.2	1.5	1.2	5.2	0.4	43.9	41.5		
Latvia	000 ha	666	489	2	1	85	80	14	12	15	3	904	1103	1685	1688
	% arab.	39.5	29.0	0.1	0.1	5.0	4.7	0.8	0.7	0.9	0.2	53.6	65.3		
Estonia	000 ha	396	320	1	3	52	47	0	0	0	0	527	582	976	992
	% arab.	40.6	32.3	0.1	0.3	5.3	4.7	0.0	0.0	0.0	0.0	54.0	58.6		
Baltics	000 ha	2068	1987	14	10	257	247	48	39	134	12	2441	2640	4961	4980
	% arab.	41.7	39.9	0.3	0.2	5.2	5.0	1.0	0.8	2.7	0.2	49.2	53.0		
CEEC-10	000 ha	23981	24739	2465	2309	2778	2410	1073	813	1190	731	10896	11281	42382	42320
	% arab.	56.6	58.5	5.8	5.5	6.6	5.7	2.5	1.9	2.8	1.7	25.7	26.7		
	% EU	59	71	50	38	144	172	49	40	80	53	40	36	54	55
EU-15	000 ha	40866	34795	4896	6137	1928	1400	2201	2027	1480	1386	27423	31540	78794	77100
	% arab.	51.9	45.1	6.2	8.0	2.4	1.8	2.8	2.6	1.9	1.8	34.8	40.9		

Table 14: CEEC livestock numbers*

	cattle		cows		pigs		poultry		sheep	
	1989	1994	1989	1994	1989	1994	1989	1994	1989	1994
Poland (000)	10391	7270	4885	3666	18835	17422	66188	53330	4409	891
94/89		0.70		0.79		0.92		0.81		0.20
Hungary (000)	1690	999	568	420	8327	5001	61604	33612	2215	1252
94/89		0.59		0.74		0.60		0.55		0.57
Czech R. (000)	3481	2161	1248	830	4685	4071	32479	24974	399	196
94/89		0.62		0.67		0.87		0.77		0.49
Slovak R. (000)	1594	993	568	386	2698	2179	16369	12234	648	411
94/89		0.62		0.68		0.81		0.75		0.63
Slovenia (000)	546	478	243	210	576	591	13279	10592	24	20
94/89		0.88		0.86		1.03		0.80		0.83
CEFTA+ (000)	17702	11901	7512	5712	35121	29264	189919	134742	7695	2770
94/89		0.67		0.76		0.83		0.71		0.36
Romania (000)	6416	3597	1704	1500	14351	9262	138661	76532	16210	11499
94/89		0.56		0.88		0.65		0.55		0.71
Bulgaria (000)	1615	750	648	419	4132	2071	41805	18211	9045	4439
94/89		0.46		0.65		0.50		0.44		0.49
Balkan (000)	8031	4347	2352	1919	18483	11333	180466	94743	25255	15938
94/89		0.54		0.82		0.61		0.52		0.63
Lithuania (000)	2435	1384	850	678	2705	1196	17486	8728	105	40
94/89		0.57		0.80		0.44		0.50		0.38
Latvia (000)	1472	551	543	312	1555	501	10321	3662	197	86
94/89		0.37		0.57		0.32		0.35		0.44
Estonia (000 ha)	819	463	300	227	1099	424	6923	3226	100	50
94/89		0.57		0.76		0.39		0.47		0.50
Baltics (000)	4726	2396	1693	1217	5359	2121	34730	15616	402	176
94/89		0.51		0.72		0.40		0.45		0.44
CEEC-10 (000)	30459	18646	11557	8648	58963	42718	405115	245101	33352	18884
94/89		0.61		0.77		0.72		0.61		0.57
% EU	35	24	32	26	58	39			33	19
EU-15 (000)	85845	78747	36009	33617	101841	110937			101439	97753
94/89		0.92		0.93		1.09				0.96

* beginning of the year

7.3 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.

Although the picture is somewhat blurred by successive drought years in different countries, yields appear to be recovering in the last two years and there are indications that input use is increasing again. Production levels in 1994 for the main crops were, however, still significantly below pre-transition levels.

Despite the increase in area planted to cereals total CEEC-10 production in 1994 amounted to only 74 mio t, over 14 mio t less than in 1989. Domestic use fell even sharper, turning the region from a net importer into a net exporter. With area projected to remain nearly stable a further increase in yields would bring production to over 85 mio t in 2000. Although domestic use (in particular feed demand) would increase, it would not rise as fast as production, leading to a six fold increase of the surplus in 2000 to over 6 mio t⁶. An important part of the surplus

⁶ Cereals demand, and thus the calculation of the surplus, is quite sensitive to the assumptions made on livestock production developments and on feed conversion rates (on which information is scarce). The projected increase in the

would have to be exported at world market prices in view of the GATT limits on subsidized exports, in particular for the CEFTA countries.

Table 15: CEEC cereals supply balance

	area (000 ha)			yield (t/ha)			production (000 t)			domestic use (000 t)			balance (000 t)		
	1989	1994	2000	1989	1994	2000	1989	1994	2000	1989	1994	2000	1989	1994	2000
Poland	8377	8481	8600	3.2	2.6	3.3	26958	21764	28200	28315	22225	27500	-2357	-461	700
Hungary	2805	2941	2810	5.5	3.9	4.6	15388	11569	12900	13033	11085	10919	2355	484	1981
Czech R.	1662	1750	1750	4.7	4.1	4.5	7793	7210	7856	7840	6793	7418	-47	417	438
Slovak R.	818	860	870	5.2	4.3	5.1	4249	3700	4409	4239	3637	3876	11	64	533
Slovenia	125	111	132	4.2	5.1	5.6	527	564	739	870	1041	1016	-343	-477	-277
CEFTA+	13787	14142	14162	4.0	3.2	3.8	54915	44807	54104	55296	44780	50729	-381	27	3375
Romania	5978	6328	5950	3.1	2.9	3.0	18309	18184	17850	17551	17150	17539	758	1034	311
Bulgaria	2150	2282	2300	4.4	3.0	4.0	9484	6919	9200	10681	6902	6902	-1197	17	2298
Balkan	8128	8610	8250	3.4	2.9	3.3	27793	25103	27050	28232	24052	24441	-439	1051	2609
Lithuania	1006	1178	1033	3.0	2.0	2.5	3023	2412	2622	3760	2076	2278	-737	336	344
Latvia	666	489	595	2.4	1.8	2.0	1570	901	1182	2357	1082	1306	-787	-181	-124
Estonia	396	320	360	2.4	1.6	2.1	967	509	744	1400	716	835	-433	-207	-91
Baltics	2068	1987	1988	2.7	1.9	2.3	5560	3822	4548	7517	3874	4419	-1957	-52	129
CEEC-10	23983	24739	24400	3.7	3.0	3.5	88268	73732	85702	91045	72706	79589	-2777	1026	6113
EU-15	40866	34795	34375	4.6	4.9	5.5	188506	171297	187500	159300	154500	157500	29206	16797	30000

Oilseeds production and use has shown a similar pattern as cereals. Area is however projected to increase in 2000, in particular in the CEFTA+ countries. Combined with a recovery in yields this would lead to a production and net export potential exceeding the pre-transition level, even with an increase in domestic crushing above 1989 levels. Exports would be at world market prices as is currently the case.

Table 16: CEEC oilseeds supply balance

	area (000 ha)			yield (t/ha)			production (000 t)			domestic use (000 t)			balance (000 t)		
	1989	1994	2000	1989	1994	2000	1989	1994	2000	1989	1994	2000	1989	1994	2000
Poland	570	370	550	2.8	2.0	2.3	1586	756	1265	1096	685	850	490	71	415
Hungary	465	472	574	2.0	1.6	2.1	915	756	1177	871	555	1029	44	201	148
Czech R.	121	249	250	2.8	2.1	2.3	339	512	585	339	462	539	0	50	46
Slovak R.	65	87	105	2.3	1.8	2.2	147	155	233	121	154	162	26	1	71
Slovenia	2	3	3	2.0	1.7	2.4	5	5	7	5	6	5	0	0	2
CEFTA+	1223	1181	1482	2.4	1.8	2.2	2992	2184	3267	2431	1861	2585	561	323	682
Romania	966	612	650	1.0	1.2	1.2	978	761	780	964	966	957	14	-205	-177
Bulgaria	261	505	600	1.8	1.2	1.7	480	604	1020	541	504	504	-61	100	516
Balkan	1227	1117	1250	1.2	1.2	1.4	1458	1365	1800	1505	1470	1461	-47	-105	339
Lithuania	11	6		1.7	1.3		19	8							
Latvia	2	1		1.4	1.0		3	1							
Estonia	1	3		1.0	0.7		1	2							
Baltics	14	10	10	1.6	1.1	1.2	23	11	12				0	0	0
CEEC-10	2464	2308	2742	1.8	1.5	1.9	4473	3560	5079				514	218	1021
EU-15	4896	6137	5900	2.4	2.0	2.1	11636	12497	12400	24646	30300	30300	-13010	-17803	-17900

For sugar the net import needs of the CEEC-10 are expected to increase, in particular in Romania and Bulgaria. The poor efficiency at farm and plant level with yields at

surplus might furthermore be somewhat artificial due to an overestimation of domestic use in Bulgaria in 1994, where illegal exports might have taken place to circumvent the export ban. To compensate for this overestimation domestic use has been held stable in 2000. A similar reasoning applies to sunflower seed use in Bulgaria.

one third of the EU level in the case of the two Balkan countries and the Baltics makes beet sugar production an unattractive proposition and imports of raw sugar to keep the refineries turning a better alternative.

Table 17: CEEC beet sugar supply balance

	beet area (000 ha)			sugar yield (t/ha)			sugar production (000 t)			domestic use (000 t)			balance (000 t)		
	1989	1994	2000	1989	1994	2000	1989	1994	2000	1989	1994	2000	1989	1994	2000
Poland	423	401	315	4.1	3.3	5.2	1730	1329	1650	1703	1155	1600	28	174	50
Hungary	121	106	86	4.5	4.3	5.9	540	456	507	444	467	475	96	-11	32
Czech R.	127	91	71	4.5	4.1	5.2	567	375	370	495	413	368	72	-38	2
Slovak R.	55	32	35	3.4	3.8	4.8	188	122	167	268	239	234	-80	-118	-67
Slovenia	4	5	6	6.0	4.6	6.8	21	23	40	72	72	73	-51	-50	-33
CEFTA+	728	635	513	4.2	3.6	5.3	3046	2304	2734	2982	2347	2750	64	-42	-16
Romania	256	130	150	3.0	2.7	2.7	778	350	405	483	700	694	295	-350	-289
Bulgaria	41	8	41	1.8	1.6	2.1	74	13	87	381	127	451	-307	-114	-364
Balkan	296	138	191	2.9	2.6	2.6	852	363	492	864	827	1145	-12	-464	-653
Lithuania	34	27	25	2.8	2.4	2.5	96	64	63	152	86	86	-56	-22	-23
Latvia	14	12	10	2.4	1.3	1.4	33	16	14	128	92	89	-95	-76	-75
Estonia	0	0	0				0	0	0	70	47	47	-70	-47	-47
Baltics	48	39	35	2.7	2.0	2.2	129	80	77	351	225	222	-222	-145	-146
CEEC-10	1072	812	739	3.8	3.4	4.5	4027	2747	3303	4197	3399	4117	-170	-652	-815
EU-15	2201	2027	1974	7.2	7.6	7.8	15881	15402	15402	13616	12717	12600	2265	2685	2802

Potato area is projected to decline further in CEFTA+ countries, where it is a relatively important crop. Although yields can vary widely from one year to another a return to the long term average of around 19 t/ha is expected, increasing production from its low 1994 levels (very poor yields). On average the region (ie Poland) is expected to maintain a net export potential.

Table 18: CEFTA+ potato supply balance

	area (000 ha)			yield (t/ha)			production (000 t)			domestic use (000 t)			balance (000 t)		
	1989	1994	2000	1989	1994	2000	1989	1994	2000	1989	1994	2000	1989	1994	2000
Poland	1859	1697	1550	18.5	13.6	19.0	34391	23058	29450	33602	22953	28750	789	105	700
Hungary	72	58		18.6	14.2		1332	823		1302	900		31	-77	0
Czech R.	115	82	69	21.1	16.4	19.6	2422	1342	1350	2176	1392	1352	246	-50	-2
Slovak R.	55	40	27	13.6	9.6	19.7	745	382	531	975	493	545	-230	-111	-14
Slovenia	30	23	25	12.2	17.5	20.0	365	402	500	340	398	410	25	4	90
CEFTA+	2131	1900		18.4	13.7		39255	26006		38395	26136		861	-130	774

7.4 Other crops

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

Total CEEC-10 fruit production - mainly apples, but also soft red fruit, eg berries in the CEFTA+ and Baltic countries and some stone fruit in the Balkan countries - amounted to 7.4 mio t in 1994. Vegetable production (tomatoes, cucumbers, peppers, cabbage, onions and others) amounted to 12.3 mio t. Some further development of the production of fresh and processed fruit and vegetables for the domestic and export markets can be expected.

Table 19: CEEC fruit, vegetables and wine production

	FRUIT				VEGETABLES				WINE					
	area (000 ha)		production (000 t)		area (000 ha)		production (000 t)		area (000 ha)		yield (hl/ha)		production (000 hl)	
	1989	1994	1989	1994(e)	1989	1994	1989	1994(e)	1989	1994	1989	1994	1989	1994(e)
Poland	265	265	2083	2111	260	291	5436	5107						
Hungary	94	93	1589	1250	105	102	1993	1300	110	107	33.7	34.0	3710	3638
Czech R.	27	23	616	391	35	34	629	523	11	10	74.5	56.0	819	560
Slovak R.	21	19	231	123	31	34	571	486	24	22	33.4	44.9	800	1007
Slovenia	36	35	38	86	15	15	225	230	20	22	31.5	40.6	629	893
CEFTA+	443	435	4557	3961	446	476	8854	7645	165	161	36.1	37.8	5958	6098
Romania	318	290	2474	3000	253	204	3926	3070	182	249	25.4	24.1	4630	6000
Bulgaria	96	54	1050	264	102	63	1662	1017	122	121	26.8	24.8	3261	3000
Balkan	414	344	3524	3264	365	267	5588	4087	304	370	26.0	24.3	7891	9000
Lithuania	45	43	113	108	15	28	404	283						
Latvia	25	18	75	34	11	18	220	223						
Estonia	12	12	23	21	5	4	144	70						
Baltics	82	73	211	163	31	50	768	576						
CEEC-10	938	852	8292	7388	832	793	15210	12308	469	531	29.6	28.4	13849	15098
EU-15*	3036	2961	23000	23300	1975	1914	45400	48100	3854	3457	47.1	44.4	181600	153600

*fruit area is EU-12, other EU-15 fruit and vegetable figures are for 1993 instead of 1994

Wine output - the main producers and exporters being Romania, Hungary and Bulgaria, has remained relatively stable at around 15 mio hl per year on average. Some further potential is present to develop exports to the EU if investments in quality and marketing can be made.

7.5 Dairy and meat

The CEFTA 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 and the deterioration in yields per cow during transition drove down production faster than the fall in demand. In most CEECs the dairy herd has however started to stabilize and yields are recovering. With the dairy sector remaining to be one of the most supported sectors, the net export potential of in particular the CEFTA+ countries can be expected to again increase, although to a much lower level than pre-transition. For some countries and some dairy products the GATT limits on subsidized exports could be constraining.

Table 20: CEEC milk supply balance

	dairy cows (000)			yield (kg/cow)			production (000 t)			domestic use (000 t)			balance (000 t)		
	1989	1994	2000	1989	1994	2000	1989	1994	2000	1989	1994	2000	1989	1994	2000
Poland	4885	3866	4000	3358	3083	3500	16404	11920	14000	15741	12320	13825	663	-400	175
Hungary	568	420	540	5043	4762	4944	2862	2000	2670	2806	2060	2448	56	-60	222
Czech R.	1228	788	641	4064	4057	4702	4991	3197	3014	3570	2589	2764	1421	608	250
Slovak R.	564	364	339	3647	2253	3760	2055	820	1276	1446	1068	1166	609	-248	110
Slovenia	243	210	195	2473	2676	3451	601	562	673	437	486	495	164	76	178
CEFTA+	7487	5648	5715	3595	3275	3785	26913	18499	21633	24000	18522	20699	2913	-23	935
Romania	1704	1500	1462	1950	2000	2120	3323	3000	3100	3329	3019	3150	-6	-19	-50
Bulgaria	606	419	450	3523	2709	3500	2135	1135	1575	2135	1135	1530	0	0	45
Balkan	2310	1919	1912	2363	2155	2445	5458	4135	4675	5484	4154	4680	-6	-19	-5
Lithuania	850	678	734	3808	2448	3010	3235	1660	2209	2300	1247	1611	935	413	598
Latvia	543	312	351	3637	3003	3382	1976	937	1187	1215	969	1148	760	-32	39
Estonia	300	227	231	4252	3401	3823	1277	772	883	950	667	767	327	105	116
Baltics	1693	1217	1316	3832	2768	3252	6488	3369	4279	4465	2883	3526	2022	486	753
CEEC-10	11490	8784	8944	3382	2960	3420	38859	26003	30587	33929	25560	28905	4930	443	1683
EU-15	27848	23273	20224	4562	5156	5905	127032	120002	119431	119002	113957	112634	8030	6045	6797

With dairy herds stabilizing and even increasing in some CEECs over the projection period beef production would also tend to recover from its current low levels. Some additional supply could be expected from the countries developing specialized beef herds. In the CEFTA+ countries, in particular in Poland and Hungary, demand for beef is projected to pick up faster than production, increasing net imports. In Romania and in particular in the Baltics net export potential would increase, but remain under pre-transition levels.

Table 21: CEEC beef supply balance*

	production (000 t)			consumption (000 t)			balance (000 t)			per cap. cons. (kg)		
	1989	1994	2000	1989	1994	2000	1989	1994	2000	1989	1994	2000
Poland	637	450	550	691	464	593	-54	-14	-43	18.2	12.0	15.0
Hungary	114	80	80	91	95	128	23	-15	-48	8.8	9.2	12.5
Czech R.	272	184	215	254	165	176	18	19	39	24.5	16.0	17.0
Slovak R.	147	73	68	79	64	70	68	9	-2	14.9	12.0	12.7
Slovenia	50	35	57	38	42	47	12	-7	10	20.0	21.4	24.0
CEFTA+	1219	822	970	1153	830	1014	67	-8	-44	18.7	12.9	15.3
Romania	220	266	306	252	271	270	-32	-5	36	10.9	12.0	12.0
Bulgaria	123	97	97	138	106	106	-15	-9	-9	15.4	12.5	12.5
Balkan	343	363	403	390	377	376	-47	-14	27	12.5	12.1	12.1
Lithuania	224	120	181	93	82	89	131	38	92	25.0	22.0	24.0
Latvia	129	68	74	67	68	66	62	0	8	25.0	26.5	26.0
Estonia	75	28	65	40	42	41	35	-14	24	25.0	26.5	26.0
Baltics	428	216	320	199	192	196	228	24	124	25.0	24.6	25.1
CEEC-10	1990	1401	1693	1742	1399	1586	248	2	107	18.0	14.3	15.8
EU-15	8298	7857	8338	8136	7725	8191	162	132	147	22.2	20.8	21.6

* in carcase weight equivalent

Of the meats **pork** is the most preferred by consumers in the CEECs with per capita consumption even currently still higher than in the EU in Poland, Hungary and the Czech Republic⁷. Especially in Poland and to a lesser extent in some of other CEFTA countries production is projected to lag behind the increase in demand, implying that the net import position of the CEFTA+ group will be maintained.

⁷ The very high level of per capita use in Hungary might be explained by the fact that part of production is exported in processed form and does not enter the supply balance sheet, which is cut off at the first processing stage. In reality per capita consumption is lower.

Table 22: CEEC pork supply balance*

	production (000 t)			consumption (000 t)			balance (000 t)			per cap. cons. (kg)		
	1989	1994	2000	1989	1994	2000	1989	1994	2000	1989	1994	2000
Poland	1854	1609	1785	1866	1705	1896	-12	-96	-111	49.1	44.2	48.0
Hungary	1014	600	699	882	598	714	132	2	-15	85.0	58.2	70.0
Czech R.	552	465	522	543	480	512	9	-15	10	52.4	46.4	49.2
Slovak R.	274	172	186	232	177	191	41	-4	-5	44.0	33.0	34.7
Slovenia	62	48	65	67	73	76	-5	-25	-11	35.0	37.6	38.5
CEFTA+	3756	2894	3257	3590	3033	3389	166	-139	-132	57.8	46.5	51.9
Romania	800	739	765	766	657	715	34	82	50	33.0	28.9	31.8
Bulgaria	412	214	280	409	217	280	3	-3	0	45.6	25.7	33.8
Balkan	1212	953	1045	1175	874	995	37	79	50	37.4	28.1	32.4
Lithuania	250	83	110	149	86	99	101	-3	11	40.0	23.0	27.0
Latvia	154	54	77	96	66	77	58	-12	0	36.0	26.0	30.1
Estonia	125	37	52	73	31	36	53	6	16	46.0	20.0	23.0
Baltics	529	174	239	318	183	212	211	-9	27	40.2	23.6	27.4
CEEC-10	5497	4021	4541	5083	4090	4596	415	-69	-55	52.0	41.5	46.5
EU-15	15238	16010	16569	14676	15029	16069	562	981	500	40.1	40.5	42.4

* in carcase weight equivalent

In most CEECs production of poultry meat has already started to recover and the rise in output is expected to continue at a slightly higher rate than the increase in domestic consumption, leading to a partial recovery of the pre-transition net export position.

Table 23: CEEC poultry supply balance*

	production (000 t)			consumption (000 t)			balance (000 t)			per cap. cons. (kg)		
	1989	1994	2000	1989	1994	2000	1989	1994	2000	1989	1994	2000
Poland	362	335	455	343	381	494	19	-46	-39	9.0	9.9	12.5
Hungary	436	341	420	258	261	284	178	80	136	24.9	25.4	27.8
Czech R.	149	124	164	135	119	139	14	5	25	13.0	11.5	13.3
Slovak R.	82	60	76	74	61	69	8	-2	7	14.0	11.4	12.5
Slovenia	73	46	50	51	33	39	22	13	11	27.0	16.6	20.0
CEFTA+	1102	906	1165	862	855	1025	241	50	140	15.9	15.2	17.1
Romania	339	268	350	331	302	329	8	-34	21	14.3	13.3	14.6
Bulgaria	188	74	131	153	80	131	35	-6	0	17.1	9.4	15.4
Balkan	527	342	481	484	382	460	43	-40	21	15.2	12.5	14.8
Lithuania	57	25	34	30	15	27	27	10	7	8.0	4.0	7.4
Latvia	43	11	20	29	6	15	13	5	5	11.0	2.5	5.7
Estonia	25	7	21	14	6	12	11	1	9	9.0	4.0	7.4
Baltics	125	43	75	73	28	53	52	15	22	9.4	3.7	6.9
CEEC-10	1754	1291	1721	1419	1265	1538	335	26	183	15.3	14.1	16.1
EU-15	6452	7376	8211	6209	6879	7911	243	497	300	17.0	18.5	20.9

* carcase weight

By the end of the decade supply and demand patterns in CEEC agriculture could be expected to have adjusted to the transition shock. In the crop sector there would be a certain shift towards cereals and oilseeds with an increased net export potential compared to the pre-transition situation. In the livestock sector the recovery would be less marked. For dairy the net export potential would be significantly lower than in the pre-transition period, while for the meats supply and demand would be more or less in balance, but at a lower level than in the pre-transition period.

8. General conclusion and outlook

1. All CEECs have lived through a deep crisis of adjustment since 1989/90 of the economy as a whole as well as of the agricultural sector. It will take decades before the average income per capita in these countries will reach 75% of the EU's average. There are however substantial differences between the CEECs examined in this report and at least some of them clearly have a better starting position than others.
2. The adjustment crisis in agriculture was in part linked to a strong decline in production. Nearly everywhere the decrease was more marked for the livestock sector than for the crop sector. The heavy rate of subsidization in the past, the sharp fall in demand for livestock products and the structural inefficiency of the sector can be seen as the main reasons.
3. Since 1993 and even more since 1994 some bright spots have however appeared for most countries. The deep point of the recession seems to have passed. The economy is growing again and in some countries even growing strongly. As far as macro-economic stabilization is concerned some successes can be noted, although most CEECs are still a long way from fulfilling the Maastricht criteria.
4. Economic growth implies income growth, and income growth implies a rise in demand also for food products. This could have positive effects on CEEC agriculture in the coming years, but with higher incomes consumer requirements also tend to rise, a phenomenon which could further favour western European exports. In this respect the success of the EU's food industry on CEEC markets in recent years speaks for itself. The domestic food industry in most of the CEECs examined here is still inefficient and not really in a position to meet growing demands regarding quality, variety and general marketing of products. But also here the situation is different from country to country and in some countries and sectors dynamic developments are taking place.
5. Even though the adjustment process in agriculture is far from completed, some bright spots have appeared in the meantime. Since 1992 the dissipation of the initially still available stocks in some countries with the fall in production, the beginning of a demonopolization of the up- and downstream sectors (at least in some countries), as well as the (re)introduction of border protection and other support measures has led to a stabilization and in some cases even a noticeable rise of market prices for agricultural products. Overall farm gate prices are however still clearly below EU levels.
6. Since 1993/94 agricultural production is again increasing, chiefly (annual) crop production (cereals, oilseeds and field vegetables), after two drought affected years. The search for activities profitable in the short term in view of uncertainty over property rights and short leasing periods contributed to this development. Livestock production is still generally decreasing, although the rate of decrease has diminished since 1993. In some countries the situation already seems to have stabilized in 1994. With incomes improving the demand for and production of livestock products can be expected to again increase in the future. To that extent the current situation does not represent a new durable equilibrium level.

7. Agricultural production can be expected to continue to grow in coming years, albeit at a slow rate. Undoubtedly, the CEECs have a significant production potential. The big structural difficulties to realize this potential in the foreseeable future should however not be overlooked. Three key problem areas can be distinguished in this regard:

a) Lack of capital

Although investments are urgently needed to modernize production and to improve the rural infrastructure there is no money. The self-financing capacity of most enterprises is weak. The possibilities of the countries concerned to assist with public money are very limited. The demands for credit exceed the availabilities and the farm sector is relatively unattractive for investors due its low profitability. The delay in the definitive settlement of property rights makes it difficult to use land as collateral. For the same reason no functioning land market exists in most countries and administrative regulations make it difficult for potential investors, in particular those from abroad, to invest in agriculture.

b) Farm structural problems

In the early years of transition agriculture served in some CEECs as an employment buffer (and partially still does) as industry was being restructured. This contributed to the creation or reinforcement of micro scale farming for subsistence purposes, which in the longer would probably only be viable as additional source of income, but at the same time complicates the task of modernizing agriculture. Furthermore, in some countries overdimensioned structures continue to exist, which in the longer run would not seem to be economically viable. To these economic and social problems, to which the polarization of structures can lead, can be added a qualitative problem in most countries. Farmers, in particular in the small holdings, are relatively old in comparison to the average age structure of the population, with little training and hardly prepared for a market economy environment.

c) Downstream structural problems

The privatization and reorganization of the food industry is slowly progressing in most countries, but the urgently needed foreign investment and know how is often lacking. With the exception of some sectors the general picture is still that of an industry weighed down by inefficiency. In several countries the downstream sectors closest to agriculture are still semi-state controlled with monopolistic tendencies. In many cases the international competitiveness seems to be lacking. In spite of low producer prices, around or below world market levels, exports are often subsidized.

The individual country analyses show that these three basic constraints to the further development of agriculture are being addressed to a lesser or greater extent, but also that structural change will take at least another 5 to 10 years, if not longer.

8. The to some extent still low producer prices in the CEECs should be seen in relation to the deep economic recession of the last five years. With the growth of incomes and rising demand, as well as the border protection allowed under GATT, prices should rise further in coming years, a development which with some exceptions can already be observed since 1992/93. In addition, the low prices are often related to products of a quality considerably below western European

standards. This is in particular the case for livestock products, eg dairy and beef. Improvement of quality standards in coming years would also push prices up. There are however limits to a price rise. As long as food expenditure still makes out 30 to 60% of household income and as long as inflation rates still lie above 10 to 30% (and even higher) a rapid increase in agricultural and food prices would be economically damaging and socially dangerous. The price gap between the CEECs and the EU can therefore be expected to continue to exist for the foreseeable future, even if it will decrease more or less noticeably, depending on the product.

9. When taking all these elements together the CEECs would be less in need of a high level of price and income support for their farmers, than of targeted assistance for the restructuring, modernization and diversification of their productive capacity in agriculture and the downstream sectors and for improvement of their rural infrastructure.

ANNEX 1: CEEC and EU tariff bindings for selected products

	rates applied in 1995				GATT Tariff binding ad valorem equivalent (max. bound rates)				reduction year 1-6			
	in 1995				(max. bound rates)				year 1-6			
	%	%	%	%	1995	2000	1995	2000	%	%	%	%
ARABLE CROP PRODUCTS												
WHEAT (common; CN-Code 1001)				BARLEY (CN-Code 1003)				CORN (CN-Code 1005.9000)				
EU *	78	78	54	35	152	152	114	29	101	101	77	28
Poland	135 *	136 *	80 *	46 *	191 *	185 *	108 *	47	171	169	104	43
Hungary	47	47	32	36	38	40	33	20	47	47	32	36
Czech Republic	24	24	21	15	24	24	21	15	20	20	17	15
Slovakia		24	21	15		24	21	15		20	17	15
Slovenia	28	103	77	29		130	96	31	11	113	86	28
Romania *		294	264	12		294	264	12		294	264	12
RAPESEED (CN-Code 1205)				SUNFLOWERSEED (CN-Code 1206)				WHITE SUGAR (CN-Code 1701.9910)				
EU	0	0	0	-	0	0	0	-	200 *	200	140	35
Poland	42	42	27	40	14	14	9	40	201 *	202 *	144 *	34
Hungary	0	0	0	-	0	0	0	-	78	78	68	15
Czech Republic	71	71	60	17	47	47	40	17	69	68	60	15
Slovakia		71	60	17		47	40	17		68	60	15
Slovenia	5	-	-	-	10	27	27	0		174	127	32
Romania *		48	38	24		196	176	12		198	188	6
ANIMAL PRODUCTS												
BEEF (carc. and half carc.; CN-Code 020110)				PORK (CN-Code 0203.11)				POULTRY (chicken; CN-Code 0207.1011)				
EU	177	177	103	48	81	81	47	48	42	42	26	43
Poland	300	299	174	48	113	113	76	37	113	113	76	37
Hungary	105	105	72	36	60	59	52	15	57	57	39	36
Czech Republic	40	40	34	18	45	45	39	16	52	52	43	21
Slovakia		40	34	18		45	39	16		52	43	21
Slovenia	49	129	83	42	30	58	42	32		41	31	29
Romania *		311	265	17		366	348	6		154	122	24
BUTTER (CN-Code 0405.0010; max. 85% fat)				MILKPOWDER (CN-Code 0402.1011)				CHEESE (cows; CN-Code 0406.1020)				
EU	168	168	123	55	96	96	64	36	145	145	74	54
Poland	153	150	102	36	170 *	170 *	102	44	235	235	160	36
Hungary	150	149	102	36	75	75	51	36	96	99	67	36
Czech Republic	79	79	68	17	48	48	37	25	10	10	9	15
Slovakia		79	68	17		48	37	25		10	9	15
Slovenia		141	127	40		87	61	32		146	95	39
Romania *		245	220	12		272	259	6		297	282	6

* see next page

ANNEX 1 continued

- * **Poland:**
 1. wheat: GATT Schedule 1995 e.g. 94% (min. 141 ECU/t);
This minimum amount requires, with a world market price for wheat of 104 ECU/t (see below), a duty rate of 136%.
 2. barley: GATT Schedule 1995 e.g. 75.2% (min. 136.3 ECU/t);
This minimum amount requires, with a world market price for barley of 73.5 ECU/t (see below), a duty rate of 185%.
 3. sugar: GATT Schedule 1995 e.g. 116% (min. 513.3 ECU/t);
This minimum amount requires, with a world market price for sugar of 254 ECU/t (see below), a duty rate of 202%.
 4. milkpowder: GATT Schedule 1995 e.g.: 150.3% (min.2685.5 ECU/t);
This minimum amount requires, with a world market price for milkpowder of 1579 ECU/t (see below), a duty rate of 170%.

- * **EU:** Rate is calculated by taking into account that the duty-paid price can not be greater than the effective intervention price (1995/96: 119.19 ECU/t) increased by 55% (world market prices below are used).

- * **Romania:** The commitment for a reduction of tariff bindings is spread over a period of 10 rather than 6 years. Therefore the data in the tables represent only one tenth each year and not the whole reduction until 2004. Other duties and charges of 0.5% for all imports are not taken into account.

- Hungary:** 2% clearance fee and 3% statistic fee for all imports are not taken into account.

EU; Poland; Slovenia: Fixed amounts in ECU are converted to comparable duty rates by using the following prices:

	<u>beef</u>	<u>pork</u>	<u>poultry</u>	<u>SMP</u>	<u>butter</u>	<u>cheese</u>	<u>wheat</u>	<u>barley</u>	<u>corn</u>	<u>sugar</u>
1994	1595	942	888	1533	1091	1819	101	71	90	246
1995	1642	970	914	1579	1654	1873	104	73	92	254
2000	1952	1137	999	1952	1546	2511	120	86	105	299

ANNEX 2: Phare Assistance to CEEC Agriculture

The PHARE Agriculture programmes have three basic strategic priorities: policy convergence between the CEECs and the EU, productivity and income growth, and the development of external trade.

In the first years of the PHARE Programme (1990-1994), nearly 438 mio ECU has been provided for agricultural projects, restructuring and land reform, including assistance for the improvement of land registration, but excluding food aid. Poland received the highest amount of (nearly 39% of the total commitments in the 1990-94 period), followed by Romania, Hungary and Bulgaria. Smaller amounts have been committed to the Baltic States, the Slovak Republic, the Czech Republic and Slovenia.

Table 1 : Phare Assistance by country (mio ECU)*

	1990	1991	1992	1993	1994	Total
Poland	100	17	23	30	nil	170
Romania	nil	39	32	5	nil	76
Hungary	20	13	5	30.5	nil	68.5
Bulgaria	16	25	10	nil	nil	51
Albania	nil	nil	15	10	5	30
Lithuania	nil	1.5	0.65	5	4.6	11.75
Latvia	nil	1.25	0.95	5	3	10.2
Slovak Republic	nil	nil	1.36	3	5	9.36
Czech Republic	nil	nil	2	nil	4.5	6.5
Estonia	nil	3.2	0.3	0.9	nil	4.4
Slovenia	nil	nil	nil	0.15	nil	0.15
Total	136	99.95	90.26	89.55	22.1	437.86

The major part of PHARE Assistance is provided in the form of technical assistance related mainly to provision of advice on strategic planning, project implementation and coordination, land reform and extension of banking services. In many cases support has been provided in cooperation with other donors in the regions, notably international financial institutions (World Bank, EBRD, etc.). The programmes were developed gradually over time; individual country's circumstances and operational experience in the field resulted in a refinement of their structure and content.

Approximately 30% of total agricultural commitments have been initially (1990-1992) spent on farm input supply programmes (machinery and consumables supplies), including imports of animal feed ingredients, crop protection chemicals, tractor and farm machinery.

To promote private-sector development in agriculture, another 15 % (*Capital assistance*, 66 mio ECU) has been committed to the establishment of credit lines and rural credit guarantee funds for medium and long term loans aimed at private farmers and

* Including fisheries, but excluding food aid funded from other EU sources, eg FEOGA.

agrobusinesses. Technical assistance has been provided to set up the institutional and legal framework for creating these funds in Hungary, Poland, and Romania.

Further projects concerned land reform (*Land cadastration and policy support*, more than 53 mio ECU), and aimed at the establishment of land markets, land registration mechanisms and a nation-wide land information system.

Phare assistance for agriculture has also included nearly 22 mio ECU on expert assistance to help to formulate initial reform strategies and policies, to make sector studies and to assist with project implementation and coordination.

Table 2 : Phare Assistance by sector (mio ECU)

	1990	1991	1992	1993	1994	Total
Input supplies	84.60	34.00	12.5	0	0	131.10
Capital assistance	37.00	7.00	12.00	10.00	0	66.00
Land cadastration and policy support	2.00	10.60	13.46	15.70	11.50	53.26
Rural bank development	3.70	3.50	8.00	14.30	2.50	32.00
Business plan, market information, statistical services	1.30	9.00	10.70	4.48	1.90	27.38
Project implementation	1.10	6.25	6.90	8.07	3.10	25.42
State enterprises and farm privatisation	0	7.20	10.90	6.70	0	24.80
Economic studies and strategy development	1.80	9.60	3.75	5.80	0.70	21.65
Development of rural coops	0	8.30	4.25	4.00	0	16.55
Advisory and R&D services	3.00	4.20	4.60	2.60	1.70	16.10
Other rural enterprises projects	0	0	0	8.30	0	8.30
Harmonization of food, veterinary standards, etc with laws EU	1.50	0	1.25	3.00	0	5.75
Regional development and diversification	0	0	0	5.60	0	5.60
Restructuring food processing industry	0	0	0.75	2.00	1.00	3.75
Restructuring fish processing industry	0	0.30	0.20	0	0.40	0.90