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Agriculture and rural development

Agricultural Situation and Prospects

in the Central and Eastern European Countries

Hungary

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European Commission
Directorate General for Agriculture (DG VI)

Hungary

Agricultural Situation and Prospects in the Central European Countries

Working Document

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

Cataloguing data can be found at the end of this publication.

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Introduction

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

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

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

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

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

About the data...

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

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

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

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

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

Executive summary

General economic situation

After the severe recession in the first years of transition, Hungary's economy started to recover in 1994. The macro-economic adjustment programme undertaken since 1995 has paved the way for a sustainable growth in GDP, which reached 4.4% in 1997.

The public deficit was reduced to 3.3% of GDP in 1996. The average trade deficit for 1996-97 (-1.9 bio ECU) was lower than in 1993-94 (-3.2 bio ECU). The heavy external public debt has been reduced, but still represented 68% of GDP in 1997. Inflation (18%) and interest rates are still high, but are on a downward trend. Unemployment is also down, from 10% in 1994-96 to less than 9% in 1997.

Together with macro-economic adjustment, the privatisation process has progressed well. Among the CECs, Hungary enjoys the highest rate of foreign direct investment (over 1000 ECU/inhabitant). This has been a great help in modernising production structures and improving competitiveness. Export-oriented sectors have driven the economic recovery, and agriculture's role in this has not been insignificant.

Agriculture in the national economy

Hungary benefits from many natural features which provide favourable conditions for agriculture: fertile plains, an advantageous climate, availability of water - the quantity of flowing water per inhabitant is said to be the largest in the world.

Although agriculture's share in the economy has decreased in recent years, it is still significant: in 1996, agriculture and forestry accounted for 6.6% of the GDP, and provided employment for more than 8% of the working population. The food industry's share in GDP was 3.8% in 1996.

Recession in the agricultural sector was worse than for the overall economy. However, once the general recovery started in 1994, growth in agriculture was faster and more pronounced.

Taken together, agriculture and the food industry represent the only major sectors for which Hungary is a net exporter. Over the period 1990-96, agricultural and food products fell from 25% to 20% of total exports but, while their share declined, they still represent an important and fairly stable source of foreign exchange earnings.

The agricultural economy

The volume of agricultural production, measured in Gross Agricultural Output (GAO), is still far below pre-transition levels. On a 100 index for 1989, GAO in 1997 was 72: 80 for crops and 60 for livestock production.

After the years of recession (1991-93), and severe droughts in 1992 and 1993, the growth of GAO was driven by crop production, which resumed its growth, while the livestock sector's output has not yet stabilised. In 1997, a fresh drop in livestock production, combined with a modest growth for crops, resulted in an overall decrease in GAO.

This divergent evolution has resulted in crops having a nearly 60% share of GAO in recent years, compared with around 50% pre-transition. This progressive predominance of crops over livestock can be explained by changes in agricultural and consumer policies, and the fact that crop production is less capital-intensive than livestock rearing and more profitable.

Agricultural production and consumption

Two-thirds of Hungary's total area (9.3 Mio ha) is devoted to agriculture. Crops cover more than 5 Mio ha, which represents 80% of the agricultural area, while less than 1.5 Mio ha is permanent grassland.

The arable area remained fairly stable, amounting to 4.7 Mio ha in 1996, as in 1989. However, since 1994, 4% has been withdrawn from production.

Cereals are the main crops, covering around 60% of the arable land. From 1989-1997, the areas under wheat and maize were roughly the same (ranging from 1 to 1.25 Mio ha in recent years). In terms of production, maize has tended to dominate wheat, with an average for 1994-96 of more than 5 Mio t, compared with 4 Mio t for wheat. These two crops account for 85% of cereals production and for 90% of cereals exports.

Sunflower is well adapted to Hungary's agri-climatic conditions, and sunflower-seeds are exported world-wide. Over the last ten years sunflower has enjoyed an overall increase in both area and production.

The area planted to sugarbeet has varied considerably over the decade, falling below 100 000 ha in 1997.

Vineyards, orchards and vegetables also cover about 100 000 ha each.

For most crops, with the exception of barley and sunflower, average production volumes have been lower in recent years than pre-transition. Developments in areas and production of the main crops are summarised in table S.1. Except for vineyards, there has been no serious decrease in cultivated areas. The fall in production was therefore mainly due to a decline in yields, which can be explained by a variety of structural and short-term factors: the lack of inputs, uncertainty due to the privatisation process, successive droughts.

Table S.1 : Evolution of crop production

Main crops	Average 1994-96 Average 1987-89 = 100		1997	
	Areas	Production	Areas 1000 ha	Production 1000 t
Cereals	100	77	2 935	14 114
Oilseeds	112	95	573	737
Sugar-beet	98	87	98	737
Sugar		106		480
Wine	77	96	99	4 472 (1000 hl)

Table S.2 : Evolution in the livestock sector

Sector	Average 1994-96 Average 1987-89 = 100		1997 1000 units
	Livestock units	Meat production *	Livestock units
Cattle	56	70	909
Pigs	57	60	5 289
Poultry	56	80	32 300
Sheep and goats	48	17	924

* indigenous production, excluding external trade in live animals

Contraction in the livestock sector has been even more severe, in terms of both numbers and output. Restructuring has resulted in a significant down-sizing. Livestock units decreased sharply until 1994, and evolution since then has been irregular, but the average numbers of animals for 1996-1998 are significantly lower than in the pre-transition years.

Table S.2 gives an indication of the scale of decline in livestock numbers and meat production.

While the number of cattle, pigs and poultry decreased by the same rate, the fall in meat production was more pronounced in the pig sector. This sector underwent important changes during the transition years, and has not yet stabilised. Nevertheless, pig meat still dominates supply and demand, as illustrated in table S.3 (next page).

Table S.3 : Production, exports and consumption of milk and meat (average 1994-96)

Type of animal product	Production 1000 t c.w.	Share in meat production %	Exports 1000 t	Utilisation/cap. Kg/capita
Beef	68	6	22	8
Pigmeat	641	60	124	55
Poultry	366	34	106	23
Milk	1999	-	29	75

The poultry sector ranks second in importance, taking into account production, consumption and exports. Hungary is a traditional exporter of poultry meat and products (30% of the meat produced is exported), but exports have fallen sharply over the decade.

While beef meat production is not in itself high, 30% is exported, as well as a significant number of live animals; exports can therefore be regarded as relatively important. Furthermore, as cattle production is milk oriented, beef production has to be considered together with milk supply. Both production and consumption of milk have fallen by 30%, compared with pre-transition.

Agricultural trade

Hungary is traditionally a net exporter of agricultural and food products. In the first years of transition, they accounted for 25% of total exports, but for only 7% of imports. In the last two years (average 1996-97) these shares fell, but agri-food exports still amounted to 2.3 bio ECU, while the corresponding figure for imports was only 0.8 bio ECU, giving a 1.5 bio ECU positive balance.

Despite the drop in agricultural production, agri-food exports since transition have remained above 2 bio ECU, except in 1993. As the contraction in domestic food consumption has been sharper than the fall in production, surplus quantities have been available for export. The Hungarian government has also given a political priority to maintaining or increasing agri-food exports.

In terms of value, meat, processed fruit and vegetables, cereals and wine together account for more than half of agri-food exports. On the import side, animal fodder ranks first, followed by tropical products and tobacco.

The EU is by far the most important trading partner for agri-food products, accounting for nearly half the value of exchanges. However, the EU's share is declining, while trade with CEFTA and other CECs is developing. At present, Hungary, together with Bulgaria, is the only CEC to have a positive trade balance with the EU in agri-food products.

Farm structures

Privatisation of the 1 200 collective farms is almost complete, but restructuring is still underway. Of the 120 state farms, the majority have been privatised, one third have been liquidated, and a quarter are still under state ownership.

The market for land is embryonic, but there is an active rental market. It is therefore more worthwhile to look at changes in land use than land ownership: 1.2 Mio individual farms use more than half the agricultural area and ensure nearly 60% of the output. Only 5% of these farms are full time holdings. Corporations and

newly created co-operatives occupy respectively 18% and 28% of the land, and their joint share in output is estimated at 43%.

Privatisation and restructuring have not resulted in farm structures breaking up. A dual structure is still apparent, but between the large-scale farms (which have been down-sized) and the traditional very small holdings, new, medium-sized, commercial farms are gradually emerging.

Rural development and structural policy

In 1996, Hungary's GDP per capita was about 36% of the EU-15 average. This national average masks considerable disparities between regions, and the same applies for unemployment.

The role of agriculture in employment is particularly important in the East and the South of the country, where it accounts for more than 12% of regional employment.

Around 40% of Hungary's 10.1 Mio inhabitants live in small towns and villages, a share which has increased in recent years.

By adopting the Act on Regional Development and Physical Planning (ARDPP) in 1996, Hungary became one of the first CECs to establish a legal framework that has clear similarities with the EU's regional policy. However, Hungary's regional policy still lacks financial means.

While the ARDPP applies to rural areas, a specific rural development policy was not laid down within this framework. The basic principles of a rural policy were approved by the Government in 1997, as part of the National Agricultural Programme (see below, under Agricultural and Rural Policies).

Agriculture and the environment

Under the old regime, industrial farming practices were particularly harmful for the environment: intensive livestock rearing with no natural grazing, excessive or incorrect use of fertilisers and pesticides, large-scale plots reducing bio-diversity. Liberalisation and recession have led to a general reduction in intensity: the use of inputs has fallen, the livestock sector has down-sized, and pressures on the environment have accordingly lessened. However, with recovery, restructuring and increased productivity, pressures on the environment could again increase.

The 1995 Act on Environmental Protection and the related programme, which was adopted in 1997, introduced policies for key socio-economic sectors, including agriculture.

Forests now cover 19% of Hungary's territory, which is slightly more than before the transition, thanks to increased afforestation by the State.

Up and downstream

On the upstream side, the fall in the use of inputs has been very severe, resulting both from the general recession and the reduction in input subsidies. Input prices have increased, in real terms, while prices for agricultural products fell in the first years of transition or have only enjoyed a limited increase in recent years. Organisations that formerly provided inputs have been privatised, mainly through joint-ventures between input suppliers and users.

Decline in the food industry was less pronounced than in the agricultural sector. Here, too, recovery started in 1994. Privatisation of the food industry has been quite rapid: by 1996 private ownership had risen to 90%, from 25% in pre-transition years. More than half the food industry's assets are now owned by foreign investors. Foreign investment has played a major role in modernising production structures as well as management, and has increased competitiveness.

Extensive foreign investment has also gone into the retail food sector, which is evolving rapidly. Competition is becoming stronger in this sector. At the same time, market power of the retail sales sector has grown vis-à-vis the food industry.

Agricultural and rural policy

In March 1997, the government initiated a public debate on agricultural and rural policy by adopting and publishing the "basic principles of the National Agricultural Programme". The Programme's aim is to prepare the agricultural sector for accession to the EU. Besides the overall goal of increased competitiveness, the Programme's most important objectives are:

- rural development;
- the supply of good quality food at a reasonable price;
- a fair income for farmers;
- the use of natural resources through environmentally-friendly technology.

In 1997, a budget equivalent to 1.3% of Hungary's GDP was allocated to agriculture. While this does not include rural development, allocations for structural measures including investment aid, rural credit subsidies, and per hectare aid in less favoured areas are covered by this budget. Similarly, some environmental measures are financed under the farm budget: support for organic farming, soil conservation, rare breeds, and afforestation.

Market and trade policy

Market policy absorbs 42% of the agricultural budget. There are two main types of market regime.

Direct market regulations combining border measures and guaranteed prices within maximum guaranteed quantities were introduced in 1994 for wheat and maize, slaughter pigs and cattle, and cow's milk.

For another group of products (sunflower, the sugar sector and poultry) indirect support only is provided by trade measures.

The agri-food industry also benefits from investment grants and export subsidies.

The gap between Hungary and the EU has closed, for both support and producer prices. Hungarian support prices are still lower than the corresponding EU prices, but the gap will narrow if the Agenda 2000 proposals are implemented. As far as producer prices are concerned, sunflower prices are at world market level in both the EU and Hungary. For wheat, pig- and poultry-meat the gap is around 20%.

Trade policy has been redesigned via a series of multilateral and bilateral agreements, which have influenced the flow of trade.

The outcome for Hungary of the Uruguay Round Agreement can be summarised as follows. On the import side, Hungary was able to bind relatively high tariffs. On the export side, Hungary requested a revision of the initial commitments, claiming that they were based on erroneous calculations. After a two-year consultation, Hungary obtained a waiver applicable until 2002, under which the export subsidy commitments are based on the actual situation in 1995, with some exceptions and conditions. Given the overall fall in support resulting from the transition to a market economy, combined with the application of the clause of excessive inflation, commitments on internal support do not make further reductions mandatory.

After the breakdown of the COMECON, the CECs made new regional trade agreements. As one of the three founding members of the CEFTA, Hungary is benefiting from the development of agri-food trade in this context. The Europe Agreement concluded with the EU in 1992 also resulted in increased trade with the EU. Hungary recently presented a trade programme aimed at the development of trade with the Newly Independent States.

Medium-term outlook

A possible medium-term scenario for Hungarian agriculture has been built up, based on the following assumptions:

- general economic background: macro-economic stabilisation and structural adjustment result in sustainable and enhanced growth;
- after the slight drawback in 1997, agriculture resumes its growth, but at a lower pace than the overall economy. Agriculture's share in the economy is declining slightly, as the result of structural adjustment. Investment in primary production is still limited, while the relative dynamism of the food industry offers the prospect of increased outlets and prices;
- thanks to increased incomes, the domestic demand for food is recovering. There is also a change in the structure of consumption;
- agricultural policy follows the basic principles of the National Agricultural Programme, the underlying assumption being preparation for EU accession. In particular, as increased exports count among the main objectives of the Programme, it is assumed that export refunds will still be used, within the GATT limits – as laid down in the waiver.

Projected balance-sheets have been established for the main products. The assumptions made about inputs and the results obtained for the evolution of outputs are summarised in the following tables, in qualitative terms (table S.4).

The prospects for Hungarian agriculture appear to be favourable. Production will increase in every sector, except sugar, compared with 1996. A comparison with pre-transition levels highlights a significant difference between crops and animal products. By 2003, crop production should have recovered and be even higher than in pre-transition years for oilseeds and for wine. In contrast, the output for animal products will be lower than pre-transition. The picture for exports points to the same result: crops are expected to increase, while exports of animal products will be stable, or even lower than in recent years.

These results indicate an increased specialisation in crops, corresponding to Hungary's comparative advantage in this sector. However, a fair balance should be maintained between the two major sectors, as they are inter-dependent not only for market reasons, but also from an environmental and territorial point of view.

Tables S. 4 :
Crop Outlook for 2003, compared with 1994-96

	Area	Yield	Production	Export capacity
Cereals	=	++	++	+++ but = to 1995
Oilseeds	+	++	+++	Seeds - ; Oil +
Sugar	--	+++	=	= to 1995
Wine	-	+++	++	+++

Livestock outlook for 2003, compared with 1994-96

	Animal number	Production	Per capita consumption	Export capacity
Milk	+	++	++	--
Beef/veal	=	++	+	---
Pigmeat	++	+	+	=
Poultrymeat	=	=	+	-

1. General Overview

1.1 The Hungarian economy

1.1.1 Background

Hungary has an area of 93 000 km² and a population of 10.1 million (on 1.1.98), representing respectively 2.9% and 2.7% of the present European Union.

Hungary joined the General Agreement for Tariffs and Trade (GATT) in 1973, and was a founder member of the Central European Free Trade Agreement (CEFTA) in 1992 and of the World Trade Organisation (WTO) in 1995. In 1996 Hungary joined the Organisation for Economic Co-operation and Development (OECD); it also belongs to many other international organisations. Hungary presented its application for membership of the European Union on 31 March 1994.

The general elections held in May 1998 resulted in a change of government: the new centre-right led coalition is formed by three main partners: Fidesz (Young Democrats Hungarian Civic Party), which has the highest number of seats in the new Parliament, the Democratic Forum and the Independent Smallholders, an agrarian-based party.

Since the first free elections in 1990, Hungary has experienced successive changes from right-wing (1990-94) to left-wing (1994-96) coalitions. The new Fidesz-led government is not expected to pursue a radically different economic policy to that of the socialists (table 1.1.1).

1.1.2 After a severe recession, economic recovery is visible

Hungary experienced a severe recession from 1990-93, with a cumulative fall in GDP of 18%. The decline came to an end in 1994, with a positive growth of 2.9%, but the persistence of a large public finance deficit and the continuing deterioration of the external accounts was endangering economic stabilisation.

Table 1.1.1 : Main macro-economic indicators

		1990	1991	1992	1993	1994	1995	1996	1997 (e)
GDP (current prices)	Bio HUF		2498	2943	3548	4365	5614	6845	8454
GDP (current prices)	Bio ECU		27	28.7	32.9	34.9	34.2	35.3	40
GDP (real terms)	% change	-3.3	-11.9	-4.3	-2.3	2.9	1.5	1.3	4.4
GDP per head	000 ECU		2.6	2.8	3.2	3.4	3.3	3.5	3.9
PPS per head	% EU average				33	36	37	37	
inflation	% change	28.9	35	23	22	18.8	28.2	23.6	18.3
unemployment	% labour force	1.3	5.8	9.3	11.3	10.4	10.4	9.9	8.7
unemployment	% (ILO)				11.3	10.2	9.5	9.2	7.2
budget balance	% GDP	0.5	-2.4	-7.7	-6.5	-8.2	-6.8	-3.3	-4.6
public debt	% GDP		74.3	78.5	89	86.2	85.1	74.1	68
trade balance	Mio ECU	759	-990	-341	-3184	-3265	-1911	-1918	-1863
current account	Mio ECU	298	349	250	-2951	-3289	-1897	-1322	-861
long term interest rates	%		34.3	25.4	25.2	26.7	31.6	25.6	22
exchange rate	HUF/ECU	80	92.3	102.4	107.6	125.1	164.5	193.7	211.6

From early 1995 onwards, the socialist government implemented a macro-economic adjustment programme and accelerated the privatisation process. A restrictive monetary and fiscal stance, together with a sharp fall in real wages, kept domestic demand low and led to a significant improvement of the external and fiscal accounts. Divestiture of utilities, banks and industrial enterprises attracted the largest inflows of foreign capital in the region and contributed to the reduction of foreign debt.

Present results suggest that the economy is back to a sustainable growth: GDP growth for 1997 is estimated at 4.4% after 1.5% in 1995 and 1.3% in 1996. In 1997, the recovery gained strength as exports surged, investment accelerated, and household incomes and private consumption grew again, after being in decline (see map "Main economic data I").

1.1.3 External trade is improving

For the moment, growth is largely export-driven, leading to an improved trade balance and current account. The tourism balance continues to strengthen. The gross and net foreign debt keeps on falling, with the public sector accounting for a diminishing share of the total. Backed by these positive developments, the government further reduced the pace of depreciation of the Forint [1] exchange rate, to 1% per month (August 1997) and 0.9% (January 1998), and respected its commitment to abolish the temporary import surcharge by July 1997.

The growth in Hungary's trade with the EU, which has more or less tripled since 1989, has been one of the more remarkable developments of recent years. Combined with a decline in trade with the former COMECON countries, this meant that in 1996 over 60% of Hungary's foreign trade was with the EU.

These changes in the direction of trade have been accompanied by shifts in the product composition of Hungary's exchanges with the EU. Exports of machinery, spare parts and semi-finished products have increased their share, while agricultural products are now less important in Hungary's exports to the EU. Imports of machinery and capital goods from the EU have shown above average growth, while consumer goods now represent a smaller share of total imports from the EU than in the first years of transition.

1.1.4 Domestic demand increasing only gradually, unemployment stabilising

Household consumption fell substantially during the recession, but is now slowly recovering under the influence of better wages and economic growth. Consumer price inflation has resumed its downward trend and the 1997 target of 18% was met.

Employment also fell dramatically during the recession, by over 1 million in a labour force of around 5 million. Job losses in the state sector were only partly compensated by private sector job growth. Withdrawals from the labour market, facilitated by relatively generous disability and early retirement schemes, also played a significant role in reducing total employment.

Unemployment peaked at 11% [2] of the labour force in early 1993. It has since fallen to less than 10%, mainly due to the decline in the labour force participation rate (see map "Main economic data II").

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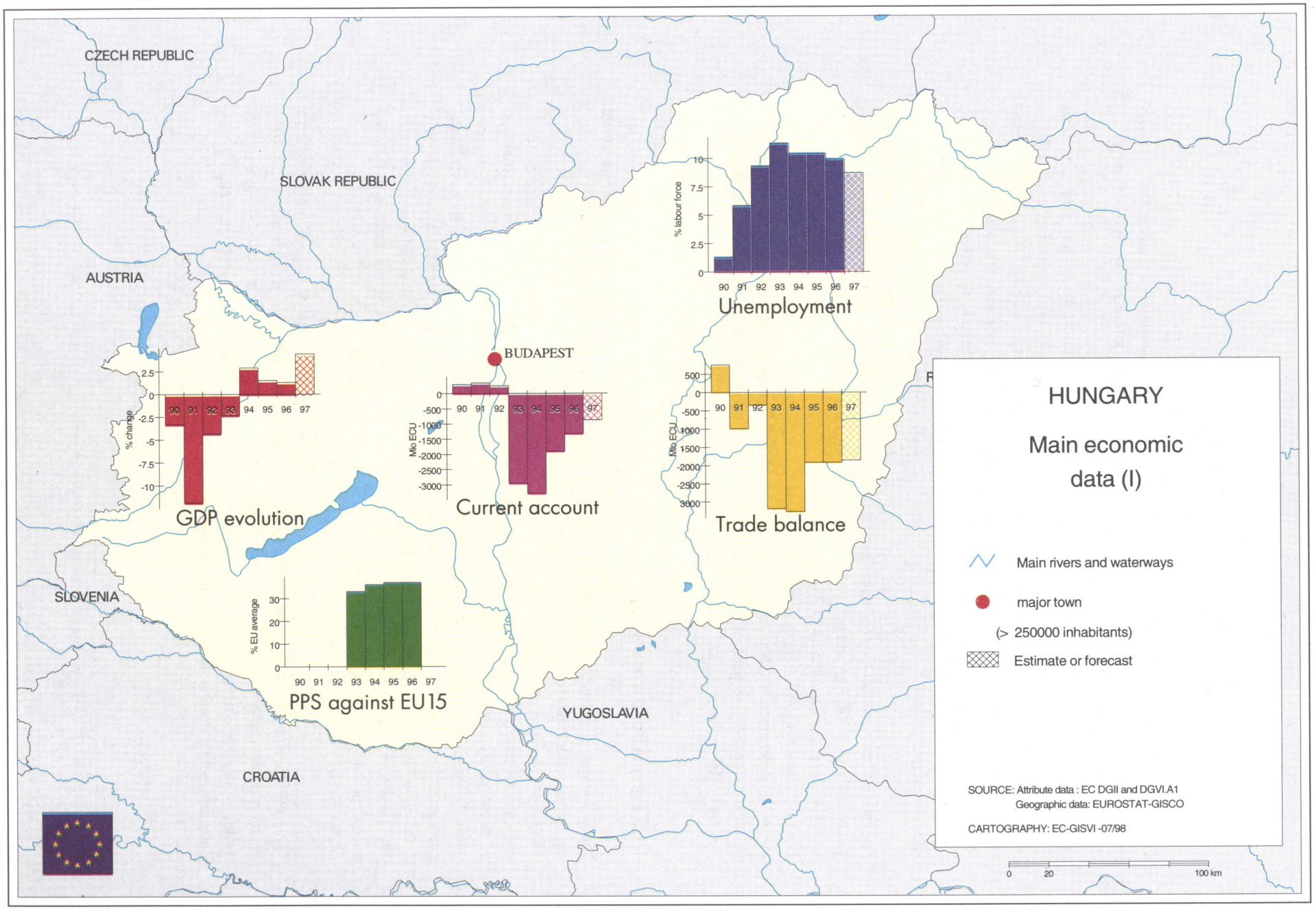
[1] The value of the Forint (Ft or HUF) results both from its linkage to a basket of foreign currencies (30% weight for the US dollar and 70% weight for the ECU) and from a crawling peg mechanism.

[2] According to ILO (International Labour Organisation)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Trade balance
% EU average
PPS against EU15
HUNGARY
Main economic data (I)
Main rivers and waterways
major town
(> 250000 inhabitants)
Estimate or forecast
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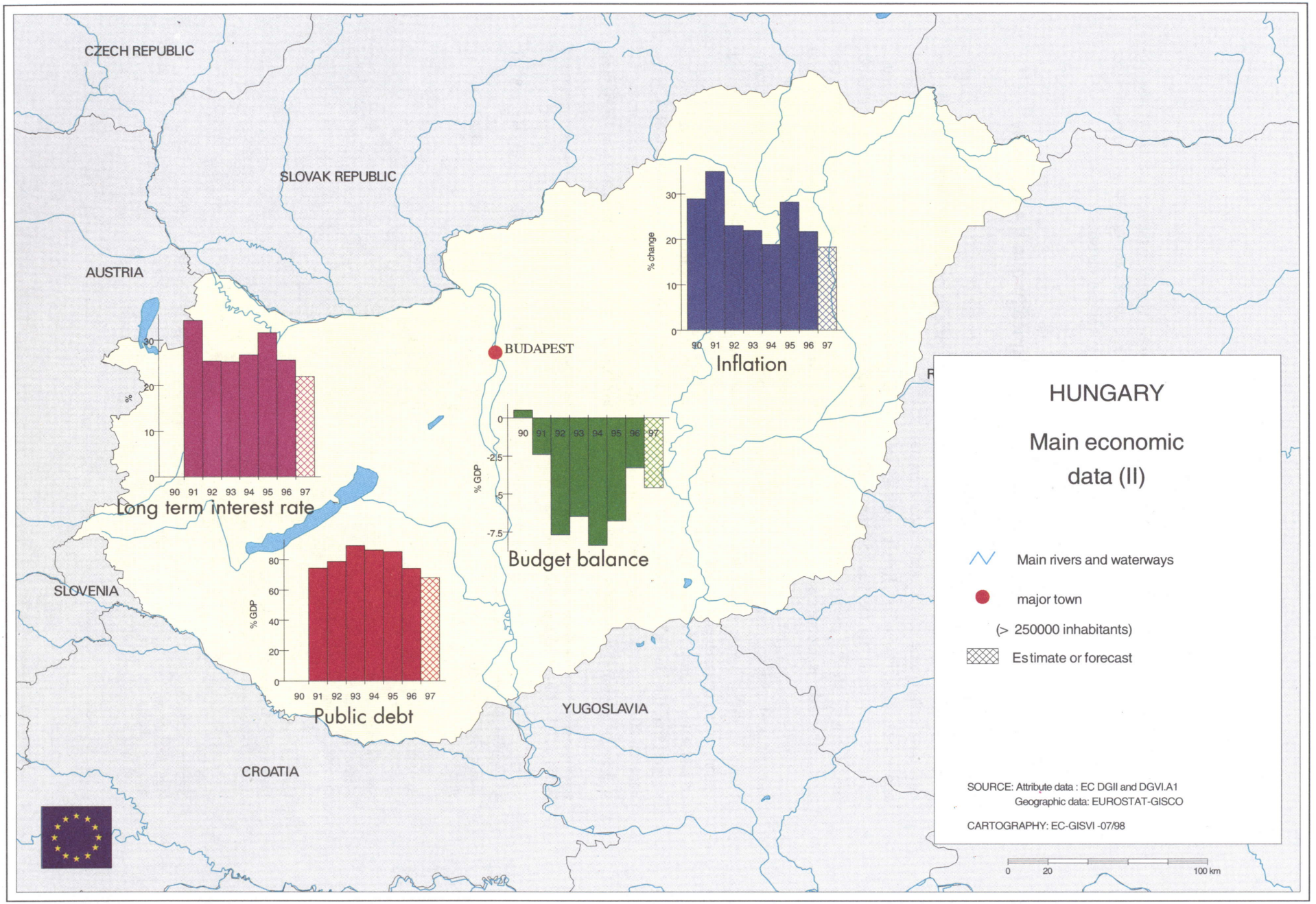
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HUNGARY
Main economic data (II)
Main rivers and waterways
major town
(> 250000 inhabitants)
Estimate or forecast
SOURCE: Attribute data : EC DGII and DGVI.A1
Geographic data: EUROSTAT-GISCO
CARTOGRAPHY: EC-GISVI -07/98
0 20 100 km

1.1.5 Public finance performance is mixed

The general government deficit should reach 4.6% of GDP in 1997. Substantial social security reform is needed to put public finances on a sounder footing. In July 1997, the Parliament approved a policy package establishing a new multi-pillar pension system based upon a basic pay-as-you-go scheme supplemented by obligatory and voluntary funded schemes. This should have positive long term effects on the fiscal accounts and on the local capital market. The retirement age was raised to 62 from 60 (for men) and 55 (for women). Social security reform, however, also calls for an overhaul of the health insurance system.

High rates of taxation, coupled with the tax administration's difficulty in keeping track of the rapid expansion in private enterprise, led to the emergence of a sizeable informal sector. Hungarian estimates suggest that the "black" economy could represent between 20-30% of GDP. The growth of the informal sector, however, is believed to have stopped in recent years, thanks to the introduction of new legislation and stricter controls on tax compliance (see map "Agricultural statistics").

1.2 Agriculture in the economy

1.2.1 Share of agriculture in the economy

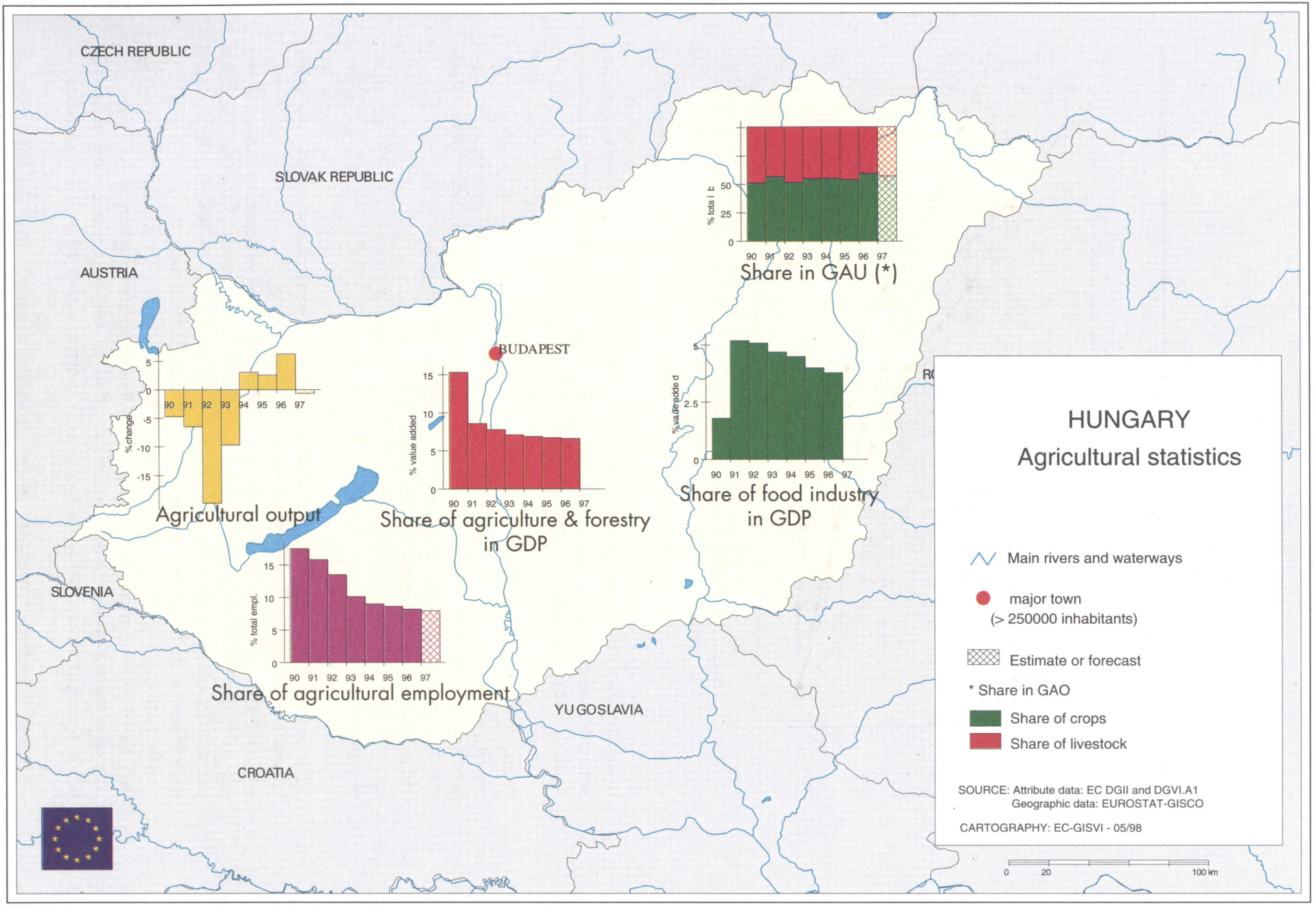
The agricultural sector in all its aspects – agricultural production, forestry, the agri-food industry and related services – has traditionally been of major importance to the Hungarian economy. It ensures the domestic food supply, is an essential provider of employment, an important contributor to Hungary's foreign exchange earnings, and is a dominant factor in rural development.

In 1996, agriculture and forestry accounted for 6.6% of Hungary's GDP [2] and employed 8.2% of the working population. While they are higher than the EU average (1.7% and 5.1% respectively in 1996) these

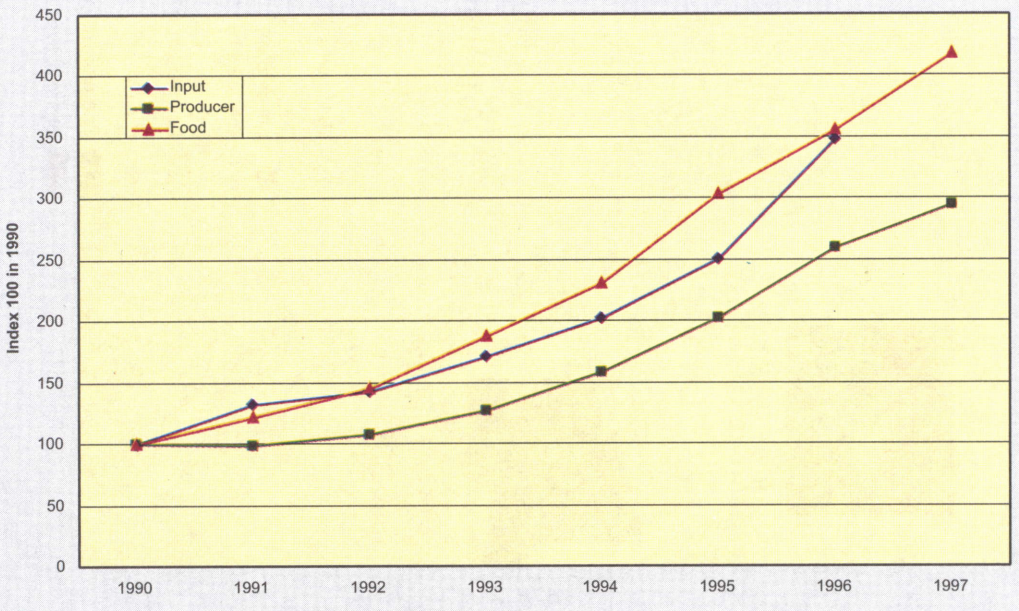
Table 1.2.1 : Share of agriculture in the economy

		1990	1991	1992	1993	1994	1995	1996	1997 (e)
Share in the economy									
share agric., forest., fish	% GVA	15.3	8.5	7.2	6.6	6.7	6.7	6.6	
share of food industry	% GDP	1.8	5.2	5.1	4.7	4.5	4	3.8	
Agricultural GDP	% change	-4.6	-8.1	-11.9	-14.7	3.4	2.7	4.2	-1.9
Share in employment									
share of agriculture	% total empl.	17.5	15.8	13.5	10.1	9	8.6	8.2	7.9
share of food industry	% total empl.	4.2	4.2	4.6	4.4	4	3.8	3.5	
External trade									
share agri-food/exports	%	24	26	25	22	21	22	18	15
share agri-food/imports	%	8	5	6	6	7	6	5	5
Price index	100 in 1990								
Agri. input price		100	132.6	143.2	171.8	202.8	250.9	348.5	
Agri. producer price		100	99.1	107.6	127.5	159.3	202.5	259.9	294.8
Retail food price		100	121.9	145.6	188.1	232.1	304.3	356.9	419.4

[3] Gross Value Added, at market prices


CZECH REPUBLIC
SLOVAK REPUBLIC
AUSTRIA
BUDAPEST
SLOVENIA
YUGOSLAVIA
CROATIA
Agricultural output
Share of agriculture & forestry in GDP
Share of agricultural employment
Share in GAU (*)
Share of food industry in GDP
HUNGARY
Agricultural statistics
Main rivers and waterways
major town
(> 250000 inhabitants)
Estimate or forecast
* Share in GAO
Share of crops
Share of livestock
SOURCE: Attribute data: EC DGII and DGVI.A1
Geographic data: EUROSTAT-GISCO
CARTOGRAPHY: EC-GISVI - 05/98
0 20 100 km

Graph 1.2.1 : Compared evolution of prices



figures are roughly comparable to those of some Member States (Greece for the share of GDP, Spain for the share of employment).

The agri-food sector is the only major sector in which Hungary is a net exporter. Over the period 1990-96, agricultural and food products fell from 25% to less than 20% of total exports but, while their share declined, they still represent an important and fairly stable source of foreign exchange earnings (table 1.2.1 on previous page).

Agriculture and the food industry have been affected by a change of enterprise classification between sectors, which partly explains the abrupt cut in the share of agriculture between 1990 and 1991, together with a steep increase in the food industry's share[4]. Another factor was the splitting-up of the co-operatives and state farms. Non-farm activities, which traditionally represented more than 40% of their activities, have generally been taken out of the reorganised farms and in general no longer count as part of the agricultural economy.

The 1990-1993 recession was worse for agriculture than for Hungary's economy overall: the cumulative fall amounted to – 31% for agriculture against – 18% for the whole economy. Recovery has been visible since 1994, and has been faster for agriculture than for the economy in general. However, in 1997, agriculture recorded a slight fallback, while overall economic growth accelerated.

The agricultural recession of 1990-93 was mainly caused by:

- the collapse of traditional markets in the former Soviet Union;
- an unfavourable development of the terms of trade: as illustrated in graph 1.2.1, the increase in producer prices has been slower than the increase in input and food prices;
- the fundamental restructuring of land ownership;
- the reorganisation of farms;
- the immediate and delayed effects of abnormal droughts in 1992 and 1993: lower production one

[4] A second methodological change in 1995 resulted in a slight downward revision of the shares.

year means less cash for buying inputs the next year and/or pressure for decapitalisation.

The contraction of agricultural activity obviously resulted in a reduction of employment in the sector, in absolute and relative terms. Again this was particularly strong from 1990-93, when agriculture's share in employment fell from 18% to 10%. However, the exact correlation is hard to assess. Around a third of those registered as agricultural employees (in state and collective farms) were in fact employed in non-farm activities and are now normally registered in the industrial sector or in services (if their activity still exists).

The number of people registered in agriculture fell from 345 000 in 1994 to 298 000 in 1996, but their share within the working population declined less rapidly, from 9% to 8.2% of active earners (cf. the general decline of total employment).

1.2.2 Structure of agricultural output

The evolution of the crop sector between 1990 and 1993 was negative (except in 1991) and was visibly affected by the droughts of 1992 and 1993. A clear recovery has been seen since 1994. Over the same period, a real collapse of the livestock sector occurred as a consequence of structural reorganisation, decapitalisation, quality problems and the droughts. At the end of 1997, animal numbers were still lower than in 1996 (with the exception of poultry). The livestock sector's output has not yet stabilised. It continued to fall in 1994 and, after two years of modest recovery, declined again in 1997. Combined with a modest growth in crop output, the result was a slight fallback of overall agricultural output. However, in 1998 agriculture is expected to resume its growth (table 1.2.2).

As a result of this divergent evolution, crops are progressively dominating the livestock sector: starting from around 50/50 in 1990, the breakdown seems to be evolving towards 60/40 (it is 48/52 in the EU). Several factors could explain this trend towards crops:

- livestock rearing requires more investment;
- natural conditions in Hungary are largely favourable to crops;
- livestock production and consumption were artificially supported under the former political regime.

Table 1.2.2 : Structure of agricultural Output

		1990	1991	1992	1993	1994	1995	1996	1997
GAO	100 in 1989	95.3	89.1	71.4	64.5	66.4	68.2	72.5	72.0
o.w. crops	100 in 1989	90.7	94.3	69.7	63.3	69.4	70.8	77.7	79.7
o.w. livestock	100 in 1989	99.8	84.2	74.4	66.6	63.8	66	67.1	64.2
GAO	% change	-4.7	-6.5	-19.9	-9.7	3.1	2.6	6.3	-0.6
o.w. crops	% change	-9.3	4	-26.1	-9.2	9.7	1.9	9.8	2.5
o.w. livestock	% change	-0.2	-15.6	-11.7	-10.4	-4.2	3.4	1.7	-4.4
share of									
crops	% total	51.1	56.8	51.5	54.7	55.4	54.3	59.6	57.2
livestock	% total	48.9	43.2	48.5	45.3	44.6	45.7	40.4	42.8

2. Agriculture and rural society

2.1 Agricultural production and consumption

2.1.1 Land use

The breakdown of land use has not changed significantly since 1989. The most noticeable change is the increasing share of wooded areas at the expense of permanent grassland. Arable land use showed more year to year changes than any clear indication of trends in the 1989-96 period. Permanent grassland represents only 19% of Hungary's agricultural area, is generally of poor quality and is hardly used by the large-scale farms (table 2.1.1).

Table 2.1.1 : Land use

(000 ha)	1989	1994	1995	1996	1996 %(sub)total	
Arable land						
of which	4713	4714	4716	4713	76.2	
Cereals (grain)	2805	2938	2735	2772		
Cereals (silage)	268	213	196	162		
Oilseeds	465	454	547	577		
peas and beans	163	58	61	57		
Sugarbeet	120	105	124	118		
Vegetables	105	98	119	95		
Fallow	-	236	191	215		
Permanent crops						
of which	269	260	315	323	5.2	
Orchards	94	93	94	94		
Vineyards	140	132	131	131		
Permanent grassland	**1197**	**1148**	**1148**	**1148**	**18.6**	
Subtotal: agricultural area	**6179**	**6122**	**6179**	**6184**	**100**	**66.5**
Forests	**1688**	**1766**	**1763**	**1764**		**19.0**
Swamps and ponds	**68**	**68**	**68**	**68**		**0.7**
Subtotal: product. area	**7935**	**7956**	**8010**	**8017**		**-**
Uncultivated area	**1368**	**1346**	**1292**	**1286**		**13.8**
Land area. total	**9303**	**9303**	**9303**	**9303**		**100**

2.1.2 Crops

2.1.2.1 Cereals

The main cereals grown in Hungary are wheat, maize and, to a lesser extent, barley (cf. annex 1.1 for more details on individual cereals) (table 2.1.2).

The cereals area varies between 2.7 and 2.9 mio ha, with no clear trend up or down. Wheat and maize

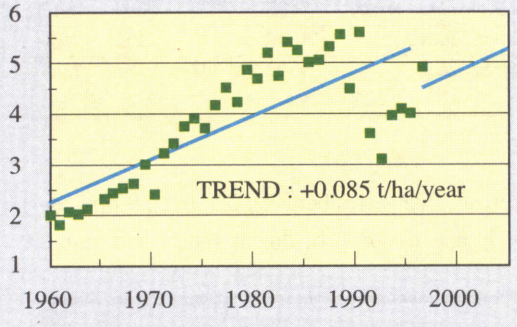
Table 2.1.2 : Cereals supply balance

		1989	1990	1991	1992	1993	1994	1995	1996	1997
area	000 ha	2805	2767	2850	2709	2737	2927	2752	2810	2935
yield	t/ha	5.5	4.54	5.54	3.68	3.11	4	4.09	4.03	4.81
production	000 t	15417	12561	15797	9981	8520	11715	11266	11310	14114
stock change	000 t	-560	1408	-2233	4884	144	-803	2825	-1425	
imports	000 t	315	579	494	131	196	353	31	92	41
exports	000 t	1967	1419	1735	4264	364	1122	4208	721	2318
available for util.	000 t	13205	13129	12323	10732	8497	10143	9913	9256	
utilization										
feed	000 t	9561	8978	8046	7071	5145	7003	6759	6194	
seed	000 t	535	508	498	511	466	445	453	470	
food	000 t	1539	1527	1406	1428	1310	1229	1188	1193	
other	000 t	1570	2116	2373	1722	1577	1467	1513	1400	
food in kg/capita	kg	1	1	1	1	1	1	1	1	
self sufficiency	%	117	96	128	93	100	115	114	122	

areas are roughly the same, although in recent years (1995 to 1997)wheat has tended to predominate, probably following the succession of dry years in 1992, 1993 and even 1994 for maize. In 1997, wheat area was 1.25 mio ha and maize 1.06 mio ha; the barley area was only 0.37 mio ha.

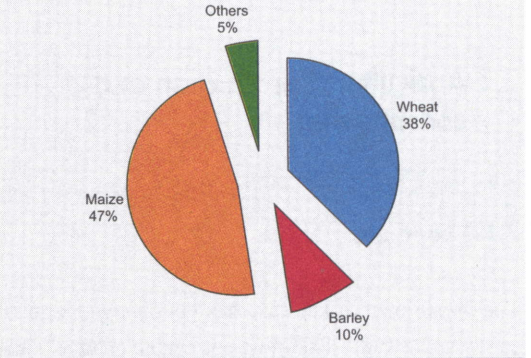
An analysis of cereals yields shows a long term increase (since 1960) at a rhythm of 0.085 t/ha annually. The present level of the trend should be slightly more than 5 t/ha for cereals as a whole, which is close to yields in many EU regions. But the succession of dry years and the drastic reduction of inputs has led to it being only around 4 t/ha. However, yields in 1997 were up significantly to 4.8 t/ha, showing that a return to a level close to 5t/ha is possible. An upward trend could be resuming, starting from an intermediate level of 4.5 t/ha (graph 2.1.1).

Graph 2.1.1 : Total cereals : yield evolution (1960-1997)



From 1992 to 1996, cereals production was notably lower than in the '80s. Some recovery has been visible since 1994. In 1997 the cereals harvest was back to roughly the same level as in the first years of transition: slightly over 14 mio t, with 5.2 mio t of wheat and 6.8 mio t of maize. Although its area has declined, production of maize has tended to predominate over wheat, except in the very dry summer of 1994. This is the effect of the higher average yield of maize, which has steadily risen in recent years (graph 2.1.2).

Graph 2.1.2 : Breakdown of cereal production (average 1995-97)



For the regional distribution of cereals, see map in annex 1.2.

Domestic consumption of cereals has also contracted in the recent past. Comparing the average for 1994-96 with figures for the pre-transition years[5], total utilisation as well as food consumption are down by 25%. The latter fell from 149 to 117 kg/capita. Animal consumption declined by 30%, or relatively less than the drop in animal numbers (on average, -45% for pigs and poultry). This could indicate a deterioration of feed conversion ratios.

On the external side, net exports appear as the result of the usual excess of production over domestic consumption. They fluctuate very much from one year to another (e.g. from 0.4 mio t in 1993 to 4.2 mio t in 1995).

2.1.2.2 Oilseeds (sunflower, rapeseed, soya)

(table 2.1.3)

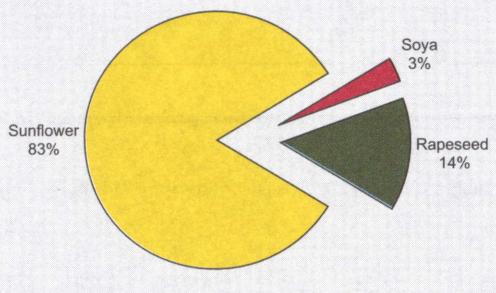
Sunflower is well adapted to the agri-climatic features of Hungary and is widely grown. Until 1996, the sunflower area showed an upwards trend, reaching 475 000 ha in 1996 (82% of the oilseeds area). However, in 1997, it fell back to 440 000 ha. In the past, sunflower yields were close to yields in comparable western producing regions (1.95 t/ha in 1989). Like cereals, they

[5] This refers to an average for the years 1987-89.

Table 2.1.3 : Oilseed supply balance

		1989	1990	1991	1992	1993	1994	1995	1996	1997
area	000 ha	465	449	484	492	427	454	547	581	573
yield	t/ha	1.97	1.88	2.03	1.72	1.71	1.63	1.64	1.78	1.29
production	000 t	915	844	982	849	730	737	897	1034	737
stock change	000 t	-53	-32	-118	200	214	25	-49	-58	
imports	000 t	46	110	8	11	19	88	61	39	
exports	000 t	111	88	189	171	341	313	321	347	
available for util.	000 t	797	834	682	890	622	538	588	666	
utilization										
seed	000 t	9	9	23	36	27	14	17	15	
processed	000 t	710	798	632	794	554	499	543	600	
other	000 t	77	26	28	60	41	25	28	51	
selfsufficiency	%	115	101	144	95	117	137	153	155	

Graph 2.1.3 : Breakdown of oilseed production (average 1995-97)



have been affected by successive droughts and the recession in agriculture, albeit to a lesser extent (-18% over the period 1989-94, against -27% for cereals). 1996 sunflower production reached 866 000 t (84% of oilseeds production), which was a record level. In 1997, it fell back to 540 000 t as a result of a reduction in areas and in yields. Exports, as both seed and oil, are increasing.

Rapeseed has a more limited area (89 000 ha in 1997 - 15% of the oilseeds area), although its profitability has improved in the '90s, with the widespread use of "00" seeds (adapted to the production of oil for human consumption and meal for animal consumption). Only a quarter of the rapeseed produced is processed in Hungary; the rest is exported. Average yield is around 1.5 t/ha, which is only half of the EU figure (graph 2.1.3).

Soya is very limited: 14 000 ha in 1997.

The oilmeal market is characterised by a large deficit, despite the collapse of the livestock sector. Imports were 576 000 t in 1996. Soyameal is the main imported oilmeal.

See annex 1.3 for more details on individual oilseeds.

Table 2.1.4 : Peas and beans production

		1989	1990	1991	1992	1993	1994	1995	1996
area	000 ha	163	139	121	116	92	58	61	57
yield	t/ha	2.52	2.22	2.28	2.13	1.56	2.38	2.41	1.85
production	000 t	412	309	276	246	144	139	147	105

Table 2.1.5 : Sugarbeet and sugar supply balance

Sugar beet		1989	1990	1991	1992	1993	1994	1995	1996	1997
area	000 ha	120	131	158	108	95	105	124	118	98
yield	t/ha	44	36.1	37.2	27.2	23	32	34	39.7	37.7
production	000 t	5301	4743	5867	2928	2182	3370	4199	4687	3691
imports	000 t	0	0	0	0	54	0	0	0	
exports	000 t	245	168	763	133	63	65	437	151	
available	000 t	5056	4575	5104	2795	2173	3305	3761	4536	3691
Sugar (ref. eq)										
production	000 t	497	513	628	363	259	425	480	564	480
yield	t/ha	4.1	3.9	4	3.4	2.7	4	3.9	4.8	4.9
yield	% sugar	9.8	11.2	12.3	13	11.9	12.9	12.8	12.4	13
stock change	000 t	37	-106	-188	193	-3	-53	-45	-149	
imports	000 t	13	35	50	10	17	15	6	1	
exports	000 t	101	13	105	137	4	3	37	8	
utilization	000 t	445	429	385	430	270	383	404	408	435
feed	000 t	9	9	9	9	9	9	9	9	
food	000 t	405	395	362	409	246	351	381	380	
others	000 t	31	24	14	11	15	23	14	19	
food kg/capita	kg	0	0	0	0	0	0	0	0	
self sufficiency	%	112	120	163	85	96	111	119	138	110

Table 2.1.6 : Potatoes supply balance

		1989	1990	1991	1992	1993	1994	1995	1996	1997
area	000 ha	72	72	78	72	79	74	70	62	69
yield	t/ha	18,6	17,08	14,47	16,85	13,31	12,77	15,77	17,79	16,1
production	000 t	1332	1226	1126	1212	1057	946	1099	1103	1111
stock change	000 t	48	-71	-55	-172	-67	-112	-233	-132	
imports	000 t	8	10	40	13	11	48	46	12	
exports	000 t	88	18	26	30	2	1	1	33	
available for util.	000 t	1301	1147	1084	1022	999	881	911	949	
utilization										
feed	000 t	257	202	210	221	184	119	123	150	
seed	000 t	217	223	195	133	123	85	93	94	
food	000 t	577	596	577	594	622	610	621	633	
other	000 t	250	126	102	74	70	67	74	72	
food in kg/capita	kg	0	0	0	0	0	0	0	0	
self sufficiency	%	102	107	104	119	106	107	121	116	

Table 2.1.7 : Tobacco supply balance

		1989	1990	1991	1992	1993	1994	1995	1996	1997 (e)
area	000 ha	12	9	12	13	9	8	7	8	7
yield	t/ha	1,21	1,57	1,44	1,02	1,25	1,51	1,6	1,58	1,76
production	000 t	15	14	18	13	11	12	11	13	12

2.1.2.3 Protein crops

Dry pulses (peas and beans) have a modest and decreasing cultivated area: only 57 000 ha in 1996 (table 2.1.4 on page 27).

Lucerne is the main protein-rich fodder crop. At around 250 000 ha, its area is 10% less than in pre-transition years.

2.1.2.4 Sugarbeet and sugar

In the early '90s the area under sugarbeet contracted, from 131 000 ha in 1990 to 95 000 ha in 1993. This was due to dry conditions, the dispersal of cultivation over the whole country, often far away from processing plants, and the restructuring of the sugar industry. Between 1994 and 1996, contrary to our expectations, the area recovered, reaching 118 000 ha in 1996, and stocks increased. This could be interpreted as an anticipation of a quota regime, as sugarbeet producers and also some processors have been lobbying since 1995 for the introduction of a sugar quota regime similar to the EU's. Nevertheless, in 1997 the area fell back to under 100.000 ha, which could mean that anticipation reached its economic limits (see also § 3.1) (table 2.1.5).

Two further points are worth mentioning:

- some sugarbeet is exported every year, in particular to Croatia and Slovenia;
- one operator produces a significant quantity of isoglucose from maize.

2.1.2.5 Potatoes

With 69 000 ha in 1997, potatoes are not the backbone of Hungary's crops. Grown in lowland areas, they represent roughly 1% of the agricultural area, a percentage comparable to the EU's (table 2.1.6).

2.1.2.6 Tobacco

Tobacco production is concentrated in two counties, Szabolcs-Szatmár-Bereg (north-east) and Bács-Kiskun (centre-south). Yields are rather poor. The area devoted to tobacco is declining and was down to 7 000 ha in 1997. The average production of leaves for the last 6 years is 12 000 t. (table 2.1.7)

2.1.2.7 Fruit and vegetables

Orchard areas are stable at 94 000 ha. Production is variable, according to weather conditions, but is tending to decline. It was 890 000 t in 1997 (table 2.1.8).

Apples (cf annex 1.4) represent around 55% of the total fruit production, and around half are exported. Apples are mainly produced in one county, Szabolcs-Szatmár-Bereg (north-east, with old varieties). New plantations of commercial varieties are appearing in Zala (south-west).

The main other fruits are plums, sour cherries and pears. Production of soft fruit (strawberries, raspberries, gooseberries, currants) is significant, at around 50 000 t (table 2.1.9 on next page).

Table 2.1.8 : Fruit production

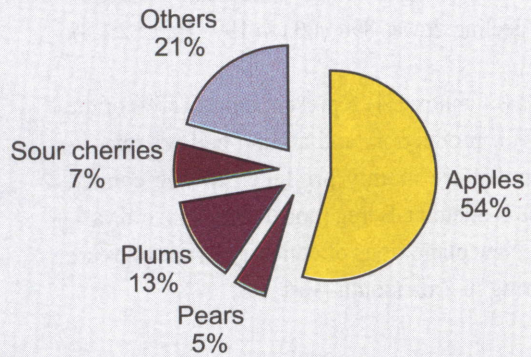
		1989	1990	1991	1992	1993	1994	1995	1996	1997 (e)
orchard	000 ha	94	95	94	95	93	93	94	94	94
production	000 t	1574	1444	1331	1251	1271	1049	684	980	889
o.w. apples		959	945	859	666	819	657	353	552	500
o.w. pears		90	64	70	65	64	43	41	41	38
o.w. plums		179	152	140	142	123	116	105	114	100
o.w. sour cherries		91	61	63	77	76	73	48	66	60

Table 2.1.9 : Vegetable production

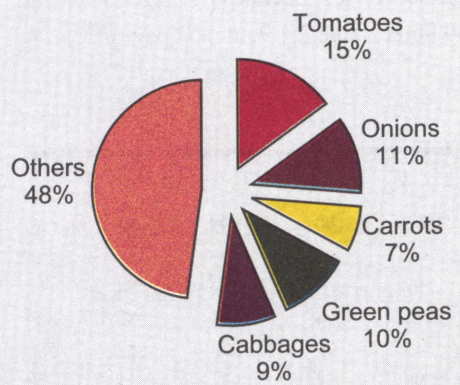
		1989	1990	1991	1992	1993	1994	1995	1996
area	000 ha	105	116	112	82	83	98	119	95
production	000 t	1993	2036	1993	1401	1336	1385	1611	1696
o.w. tomatoes		418	418	527	468	251	202	224	231
o.w. onions		232	160	185	168	138	134	195	180
o.w. carrots		120	119	119	91	94	98	106	121
o.w. green peas		367	314	218	118	108	162	179	165
o.w. cabbages		153	139	135	106	124	117	131	153

All sorts of vegetables are produced in Hungary, especially tomatoes, onions, carrots, green peas, cabbages and the well known paprika (52 000 t in 1996) (graph 2.1.4).

Graph 2.1.4:
Breakdown of fruit production



Breakdown of vegetable production



2.1.2.8 Wine production

Wine grapes are grown in several regions of Hungary. Vineyards covered 131 000 ha in 1996 (a slight decline), but of these only 100 000 ha are considered to be productive. Wine production was 4.5 mio hl in 1997 (table 2.1.10).

Hungary produces ordinary wines (e.g. in Bács-Kiskun) as well as high quality wines, such as the well known "Tokaj". The criteria for quality wine are set in the Wine Law adopted in 1997 and mainly regard the natural sugar content and the region of origin. Quality wine can only be produced in one of the 20 registered wine growing regions in Hungary. The origin has to be traceable and certified along the producing and marketing chain.

Per capita consumption was 27 litres in 1995-96, which is 25% higher than in 1987-89. (Conversely, beer consumption, which is much higher than wine consumption, has declined sharply, from 105 l/capita in 1990 to 75 l/capita in 1995).

Hungary is traditionally a net exporter of wine. Its main markets are the NIS (mainly Russia and Ukraine) for ordinary wines and the EU (mainly the United Kingdom and Germany) for quality wines.

See annex 1.5 for regional share of sugarbeet, fruit and wine in total agricultural production.

Table 2.1.10 : Wine supply balance

		1989	1990	1991	1992	1993	1994	1995	1996	1997
Vineyards										
area (productive)	000 ha	110	111	110	112	107	101	100	100	99
yield (prod. area)	t/ha					5,7	6,1	5,4	6,7	7,2
production	000 t					607	614	544	665	717
grapes for wine	000 t					528	536	482	608	674
wine										
production	000 hl	3711	5472	4607	3878	3644	3694	3289	4188	4472
yield	hl/ha	33,7	49,3	41,9	34,6	34,2	36,5	32,9	42	45,2
stock change	000 hl	798	-1226	-919	208	615	255	705	-419	
imports	000 hl	132	222	79	88	99	77	34	52	
exports	000 hl	2273	1598	777	797	1116	1029	1277	1062	
utilization	000 hl	2368	2871	2991	3377	3242	2997	2750	2759	
l/capita	1	0	0	0	0	0	0	0	0	
self sufficiency	%	157	191	154	115	112	123	120	152	

Table 2.1.11 : Evolution of livestock numbers

1st January	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998(e)
cattle	1690	1598	1571	1420	1159	999	910	928	909	871
o.w. dairy cows	568	560	518	487	438	403	392	396	390	403
pigs	8327	7660	8000	5993	5364	5002	4356	5032	5289	4931
o.w. sows	746	701	624	482	467	401	335	436	379	345
poultry	61604	58564	48036	39330	39719	33729	38382	35659	32300	35665
o.w. lay. hens	26950	25992	25171	23011	21566	21597	17650	17132	15810	
sheep & goats	2231	2085	1889	1832	1781	1288	999	1029	924	910
o.w. ewes	1442	1396	1313	1335	1340	896	734	741	672	
horses	76	75	76	75	73	72	78	71	70	

2.1.3 Livestock

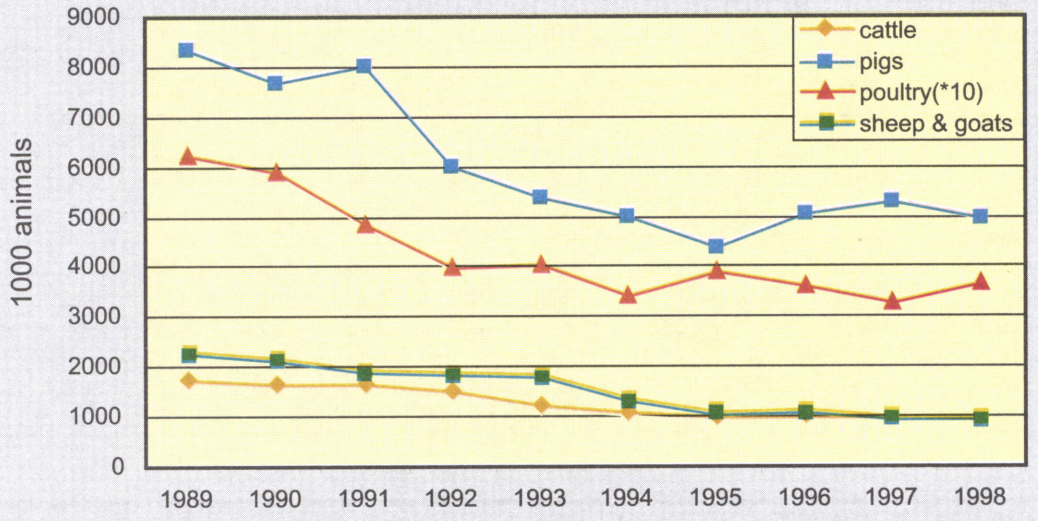
The livestock sector has been marked by a dramatic fall in animal numbers and production, brought about by:

- the abolition of (meat) consumption subsidies in 1988;
- the drop in living standards, provoking a decline in meat consumption;
- the collapse of traditional export markets (former Soviet Union);
- successive droughts in 1992 and 1993;
- a lack of capital to reconstitute livestock numbers;
- disappearance of the symbiotic system between large-scale farms and household plots (cf. § 2.3 on farm structures) (table 2.1.11).

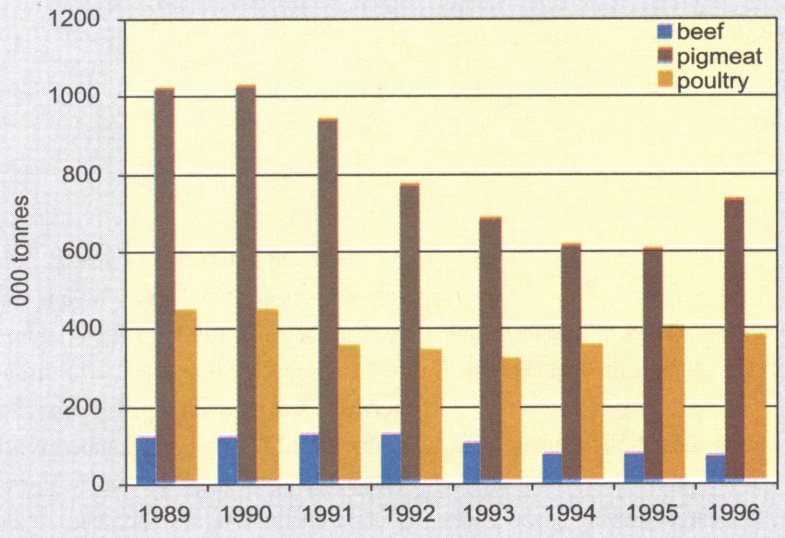
As illustrated in Graphs 2.1.5 and 2.1.6, the decline in both livestock numbers and output was particularly sharp between 1990 and 1994 (with the exception of beef meat). Since then, evolution has varied between sectors, with sizeable annual fluctuations. At the end of 1997, animal numbers were again lower than a year ago, except for poultry. However, it seems that the decline has now bottomed out and that a very slow recovery is taking place.

For the regional distribution of livestock, see map in annexes 1.6 to 1.8 (graph 2.1.5 and 2.1.6).

Graph 2.1.5 : Evolution of livestock numbers



Graph 2.1.6 : Production of meat



2.1.3.1 Milk and milk products

Milk is traditionally produced on large-scale farms (75% by corporate farms and co-operatives in 1996). Due to the lack of good quality pasture, cattle stocking relies on intensive methods: large stables and concentrated feed-stuffs. There is a ban on the use of hormones which, according to official sources, is well respected (table 2.1.12).

Comparing recent years (1994-96) with pre-transition levels gives an indication of the scale of the contraction undergone by this sector: the number of dairy cows fell by 31%, from 572 000 to 400 000, and milk production dropped by 30% too, from 2.85 mio t to 1.99 miot (see graph 2.1.3 on page 27).

The average yield of dairy cows fluctuates around an average of 5t/cow, close to the EU level. It decreased in the first years of transition, but increased again in 1994 and 1995.

It is not clear whether the milk sector has now stabilised. In 1997, the number of cows, the yield, and consequently production decreased, compared with 1995 and 1996.

Table 2.1.12 : Milk supply balance

	1989	1990	1991	1992	1993	1994	1995	1996	
fluid milk									
dairy cows	0	1690	1598	1571	1420	1159	999	910	928
yield	kg/cow	1693	1781	1585	1620	1795	1972	2216	2165
fluid milk prod.	000 t	2862	2846	2490	2301	2080	1970	2016	2009
stock change	000 t	0	0	100	0	0	0	0	-24
imports	000 t	3	1	3	14	24	24	21	16
exports	000 t	113	99	170	99	45	18	51	19
available	000 t	2752	2748	2423	2216	2059	1977	1986	1982
utilization									
feed	000 t	398	379	287	296	238	139	209	187
processing	000 t	1249	1519	1214	934	997	1010	874	1031
food (liquid milk)	000 t	1078	822	901	948	812	766	819	716
others	000 t	28	28	21	38	11	62	85	48
kg/capita	kg	103	79	87	92	79	75	80	70
selfsufficiency	%	104	104	103	104	101	100	102	101
cheese									
production	000 t	91	93	86	79	84	83	83	88,2
stock change	000 t	0	0	0	0	-3	-2	2	-3
imports	000 t	1	1	3	6	9	6	2	1,7
exports	000 t	15	23	18	12	12	10	12	12,6
available	000 t	77	71	70	73	79	77	75	74
kg/capita	kg	0	0	0	0	0	0	0	0
selfsufficiency	%	118	131	122	108	107	108	111	119
butter									
production	000 t	38	39	29	23,3	18,5	15,3	15,2	13,5
stock change	000 t	0	-7	3	-1,9	1,3	0	4,7	1,4
imports	000 t	0	0	0	0	0	0,4	0,2	0,3
exports	000 t	6	12	12	3,8	4,4	1,2	2,8	1
food	000 t	25	18	19	17,6	15,4	14,4	15,4	14
others	000 t	7,2	2,1	1,5	0	0,1	0,1	1,9	0,1
kg/capita	kg	0	0	0	0	0	0	0	0
selfsufficiency	%	118	197	144	132	120	105	88	96

Until the beginning of the nineties, Hungary was traditionally a net exporter of milk products: for example, cheese exports reached 23 000 t in 1990, i.e. one quarter of production. Since then, the trade situation has deteriorated.

The domestic market for dairy produce is changing rapidly, influenced by dynamic foreign investment, strong competition between processing companies (to buy the milk from the farmers and to sell the produce to the retail chains) and increased market differentiation. But overall, consumption of milk and dairy produce has slumped by a quarter over the last seven years (graph 2.1.7).

The figures relating to meat production and utilisation are expressed in carcass weight(c.w.). Figures for trade in meat cover raw and first transformation products, the weight of which is reconverted into c.w. Trade in second transformation products like meat preparations is not taken into account. Therefore, the figure for utilization/capita does not correspond to direct human consumption. It may include meat which is exported after processing -second transformation-, like ham in the pig sector.

2.1.3.2 Beef and sheepmeat

Cattle are traditionally milk oriented in Hungary and beef is a by-product of milk production. With the lack of suitable grassland, cattle are mainly fed with concentrated feed-stuffs (table 2.1.13).

Between 1987-89 and 1994-96 (1 January), cattle numbers fell by 44%, from 1 693 000 to 946 000. Because of the rapid rate of slaughter, output only declined from 1993 onwards: the average level for 1994-96 is 40% lower than in pre-transition years. For 1996 production, expressed in carcass weight, was 63 000 t. Cattle numbers now appear to be stabilising, which could lead to a stabilisation of output.

Until 1993, Hungary was a net exporter of beef meat, but following the massive down-sizing of the herd, Hungary is no longer self-sufficient in beef. However, a significant number of animals are still exported live, in particular to the countries of former Yugoslavia and Italy.

Consumption of beef is traditionally low, at 7 to 8 kg per capita in recent years, i.e. around 10% of all

Graph 2.1.7 : Supply and utilization of fluid milk

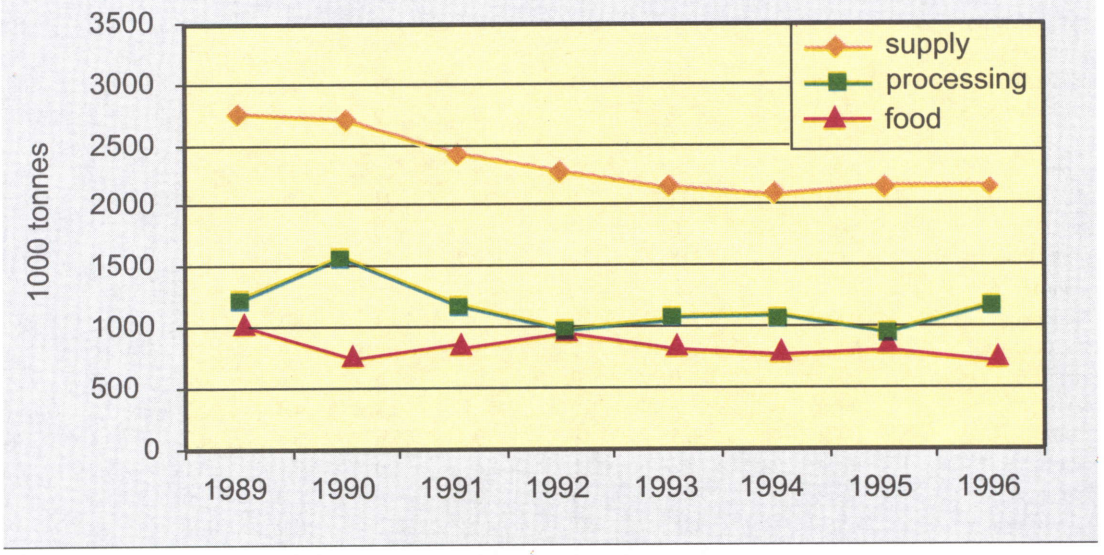


Table 2.1.13 : Beef supply balance

		1989	1990	1991	1992	1993	1994	1995	1996
cattle	0	1690	1598	1571	1420	1159	999	910	928
imports life	0	1	1	9	2	13	3	3	4
exports life	0	212	107	154	181	218	249	256	113
slaughters	0	398	418	473	444	402	318	287	271
average weight	kg	286	273	260	277	241	227	240	232
production	000 t	114	114	123	123	97	72	69	63
stock change	000 t	-1	3	-9	-18	-13	9	14	17
imports	000 t	12	4	1	8	19	31	19	13
exports	000 t	44	51	40	40	22	25	20	21
utilization	000 t	82	70	75	73	81	88	82	72
kg/capita	kg	7.8	6.8	7.2	7.1	7.9	8.5	8	7.1
selfsufficiency (1)	%	214	203	215	237	180	146	159	122

(1) based on "indigenous" production taking into account trade of life animals transformed in carcass

ATTENTION FIRST TRANSFORMATION INCLUDED

Table 2.1.14 : Sheepmeat supply balance

		1989	1990	1991	1992	1993	1994	1995	1996
animal number	0	2231	2085	1889	1832	1781	1288	999	1029
imports life	0	23	42	32	20	2	9	38	55
exports life	0	1253	1076	1373	1185	931	1066	1018	936
total slaughters	0	324	367	383	375	135	100	82	82
average weight	kg	22	14	16	16	15	11	11	11
production	000 t	7	5	6	6	2	1	1	1
o.w. indigenous	000 t	34	19	27	25	16	13	12	11
balance	000 t	27	14	21	19	14	12	11	10
stock change	000 t	0	0	0	-1	1	0	0	0
imports	000 t	0	0	0	0	0	0	0	0
exports	000 t	2	2	1	2	2	1	0	0
utilization	000 t	5	3	5	3	1	1	1	1
kg/capita	kg	0.5	0.3	0.4	0.3	0.1	0.1	0.1	0.1
selfsufficiency (1)	%	138	154	132	184	186	186	131	174

(1) based on production without taking into account trade of life animals

ATTENTION FIRST TRANSFORMATION INCLUDED

meat consumption. This proportion is now slightly increasing (table 2.1.14).

Sheep rearing is very limited and based on extensive grassland systems. Between 1989 and 1996 (1 January), the number of animals dropped from 2.2 mio to around 1 mio (- 60%). At around 1 000 t, sheepmeat production in Hungary is very low, but there is a sizeable trade in live animals, mainly to Italy, corresponding to around 10 000 t of meat. It is planned that animals will be increasingly slaughtered in Hungary, with the meat going to the same destination.

2.1.3.3 Pigmeat and poultrymeat

Pigmeat is Hungary's principle meat. Average pig numbers for 1994-96 were 43% down compared with pre-transition levels, falling from 8.4 mio to 4.8 mio. Production dropped by 37%, from 1.02 mio t to 0.74 mio t over the same period. Since 1995, pig numbers have appeared to be recovering, with 5.3 mio at the beginning of 1997. However, by the end of 1997, they had again fallen slightly. It is not clear whether the situation has now stabilised. 60% of the pigs are produced on small private farms, which have problems with quality (too much fat) (table 2.1.15 and table 2.1.16).

Poultry numbers fell by 44%, from 64.3 mio in pre-transition years to 35.9 mio in 1994-96 and production fell by 20% over the same period, from 0.46 mio t to 0.37 mio t. This discrepancy between poultry numbers and production can be explained by the increasing proportion of turkeys vs. chicken. Production is now slightly recovering.

Table 2.1.15 : Pigmeat supply balance

		1989	1990	1991	1992	1993	1994	1995	1996
pig number	0	8327	7660	8000	5993	5364	5002	4356	5032
imports life	0	0	5	36	22	2	2	1	0.5
exports life	0	632	255	437	2	15	35	3	79
total slaughters	0	10905	10797	9473	7791	7187	6475	6113	7408
average weight	kg	93	94	98	98	94	94	97	97
production	000 t	1014	1018	931	766	674	608	594	721
stock change	000 t	1	-27	11	5	15	-8	0	5
imports	000 t	2	3	1	7	18	63	51	19
exports	000 t	189	246	232	88	92	85	113	175
utilization	000 t	828	749	711	691	615	578	532	570
kg/capita	kg	79.5	72.2	68.6	66.8	59.6	56.3	51.9	55.8
selfsufficiency (1)	%	130	139	137	111	110	106	112	128
selfsufficiency (2)	%	122	136	131	111	110	105	112	126

(1)based on "indigenous" production taking into account trade of life animals transformed in carcass

(2) based on production without taking into account trade of life animals

ATTENTION FIRST TRANSFORMATION INCLUDED

Table 2.1.16 : Poultrymeat supply balance

		1989	1990	1991	1992	1993	1994	1995	1996
poultry number	0	61604	58564	48036	39330	39719	33729	38382	35659
total slaughters	0	305000	273800	210014	203984	190194	198592	222300	199500
average weight	kg	1.43	1.6	1.64	1.63	1.64	1.72	1.75	1.85
production	000 t	436	438	345	332	311	341	390	369
stock change	000 t	-3	3	0	0	0	0	-12	5
imports	000 t	1	3	2	1	2	1	1	1
exports	000 t	190	197	134	84	83	87	109	122
utilization	000 t	244	247	213	249	230	256	270	252
food	000 t	230	232	203	238	218	235	248	234
processing+others	000 t	15	14	10	11	12	21	22	18
kg/capita	kg	22	22.4	19.6	23	21.1	22.9	24.2	23
selfsufficiency	%	178	178	162	133	136	134	144	146

ATTENTION FIRST TRANSFORMATION INCLUDED

Consumption of pigmeat declined substantially from 79 kg per capita in pre-transition years to an average of 55 kg in 1994-96. Conversely, consumption of poultrymeat did not fall significantly in the early '90s and has increased slightly to an average of 23 kg per capita in recent years.

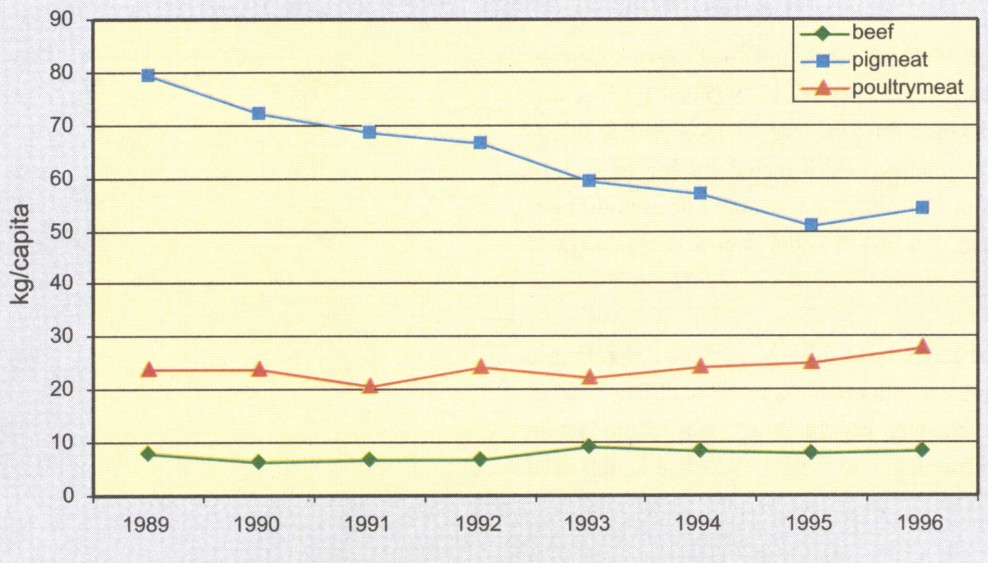
Overall meat consumption fell at the beginning of the '90s, as a consequence of declining living standards, but there is now some indication of a recovery (graph 2.1.8 and annex 1.9).

2.1.4 Forestry

Forests covered 12% of Hungary's territory in 1945. Increased afforestation by the State, on land unsuitable for crops, pushed this figure up to 19% in 1996 (1 764 000 ha). 80% of the forests serve for timber, the remainder for recreation, environmental protection, natural parks, game husbandry and experimental purposes. The government is likely to encourage further afforestation.

85% of the forests are deciduous: oak, beech, hornbeam, poplar. The remaining 15% are coniferous. Wood felling in all its different categories amounted to the gross volume of 6.6 Mio m^3 in 1996. 14 000 people were employed in forestry in 1996.

Graph 2.1.8 : Consumption of different types of meat



2.2 Agricultural trade

2.2.1 Agricultural trade within global trade

Already before the transition, the Hungarian economy was highly involved in external trade, with around one third of GDP being exported. This is even more the case post-transition. In the early '90s the trade balance deteriorated sharply, with a record deficit of -3.2 bio ECU in 1993 and 1994. In 1995 there was an improvement, and in the last three years the deficit has been kept down to -1.9 bio ECU.

exports. As the contraction of domestic food consumption has been sharper than the drop in production, surplus quantities have been available for export. This also reflects the political priority given by the government to maintaining or increasing agri-food exports (cf § 3.2 on trade policy).

Although agri-food exports have remained high, their share in total exports has steadily declined: in 1996, the share fell under 20%, while it was around 25% in the initial years of transition. This is the result of the sharp increase in total exports, and of their diversification.

Table 2.2.1 : Agricultural trade within external trade (Mio ECU)

	1990	1991	1992	1993	1994	1995	1996	1997
IMPORTS								
all	6812	9270	8579	10804	12291	11768	14266	18715
agriculture	546	506	508	682	891	748	740	959
% agriculture	8%	5%	6%	6%	7%	6%	5%	5%
EXPORTS								
all	7570	8280	8238	7620	9026	9857	12348	16852
agriculture	1831	2127	2044	1686	1939	2218	2163	2512
% agriculture	24%	26%	25%	22%	21%	22%	18%	15%
BALANCE								
all	759	-990	-341	-3184	-3265	-1911	-1918	-1863
agriculture	1285	1621	1535	1003	1048	1470	1422	1554

NB Agri-food products comprise the first 24 chapters of the HS codes. Fish and fish products are included (with the exception of 1990).
For 1996 and 1995, trade with free zones is included.

Agri-food exports are crucial to the trade balance

Between 1990 and 1994, agri-food imports were on an upward trend. They fell in 1995 and 1996, probably under the influence of the macro-economic adjustment programme, which included a higher level of border protection and restrained household consumption, but in 1997 they increased again (table 2.2.1)..

With the exception of 1993-94, agri-food exports have maintained a high level of 2 to 2.2 bio ECU. In other words, the steep decline in agricultural production did not translate into a parallel decline in agri-food

2.2.2 Analysis by category of product

On the export side, nine of the twenty-four chapters represent nearly 80% of agri-food exports: meat, preparations of fruit and vegetables, cereals, beverages, fresh fruit and vegetables (two chapters), preparations of meat, oilseeds and live animals (table 2.2.2).

Imports are more dispersed: the main chapter is animal feed, for which the total deficit reaches 115 mio ECU, followed by coffee and tea.

2.2.3 Analysis by partner

Hungary's main trading partner by far is the EU, with 48% of agri-food exports and 43% of imports (1996). Among the Member States, Germany is the principle trading partner, followed by Italy (for exports) and Austria (for imports) (table 2.2.3).

Then come the Newly Independent States, mainly Russia, on the export side only, with 20% in 1996.

In 1996, the other CECs accounted for 16% of exports but for only 5% of imports. The share of these coun-

Table 2.2.2 : Agricultural trade

EXPORTS	Mio ECU	% of TOTAL
Meat	453.2	21.4
Preparations of Vegs & Fruit	254.7	12
Cereals	229.5	10.8
Beverage	194.1	9.2
Vegs & Fruit unprocessed	183.3	8.7
Preparation of Meat	117.4	5.5
Oilseeds	108.6	5.1
Live animals	105.2	5
Others	459.9	22.2
TOTAL	2106	100
IMPORTS	**Mio ECU**	**% of TOTAL**
Prepared animal fodder	157	21.8
Coffee, Tea, Mate & Spice	69.9	9.7
Fruit & Veg unprocessed	63.4	8.9
Tobacco	46.8	6.5
Meat	40.9	5.7
Miscellanous edible preparations	39	5.4
Cocoa & cocoa preparations	39	5.4
Preparations of Vegs & Fruit	37	5.1
Others	220	31.5
TOTAL	713.1	100

Table 2.2.3 : Direction of agricultural Hungarian trade (% of Total)

	EXPORTS							IMPORTS						
	1991	1992	1993	1994	1995	1996	1996-91	1991	1992	1993	1994	1995	1996	1996-91
TOTAL	100	100	100	100	100	100	0	100	100	100	100	100	100	0
EU-15	52.6	49.6	53.1	51.1	44.5	47.4	-5.3	36.6	43	53.8	52.9	46.8	43.1	6.4
o.w. DEU	21.1	20.1	22.4	22.5	18.8	19.4	-1.7	8.8	12.9	15.1	14.6	10.2	10.1	1.2
ITA	10.6	9.6	8.8	8.3	7.2	7.2	-3.4	0.2	1.9	2.4	3	3.4	4.8	4.6
FRA	3.2	3.4	4.4	4.2	3.2	3.2	-0.1	2.2	2.6	5.8	5.4	3.3	3.6	1.3
AUS	6.1	5.9	6.9	6.3	4.9	6.1	0	9.9	9.4	9.6	7.8	8	6.1	-3.8
CEEC	6.9	11	12.5	12.1	15.2	15.7	8.8	5.8	5.2	5.2	5.7	5.3	4.8	-1
o.w. CEFTA	4.9	7.2	8.4	9.3	10.6	12.9	8	4.7	4	4.7	4.1	3.7	3.4	-1.3
NIS	13.1	24.1	19.8	21.7	23.5	20	6.9	1.8	3	1.7	3.3	1.2	1.6	-0.3
o.w. Russia	NA	8.2	14	14.4	13.9	11.9	NR	NA	0.4	0.2	0.3	0.3	0.3	NR
LATIN AMER.	1.1	0.4	0.3	0.2	0.2	0.2	-0.9	26.1	22.5	18.8	16.4	19.4	21.4	-4.7
Others	26.3	14.9	14.3	14.9	16.6	16.7	-9.6	29.6	26.2	20.4	21.8	27.4	29.2	-0.4

tries is increasing, while the EU's share is declining. In particular, exports towards CEFTA partners are rising steadily, and more rapidly than imports.

Among Hungary's other trading partners, it is worth mentioning that Latin America accounts for 21% of all agri-food imports, mainly in the form of animal feed (e.g. soyameal).

2.2.4 Agricultural trade with the EU

Hungarian imports from the EU-15 increased very rapidly during the first years of transition, following the breakdown of the COMECON. However, they decreased slightly in 1995 and 1996, despite the development of the Association Agreement. The explanation lies with the austerity package of 1995:

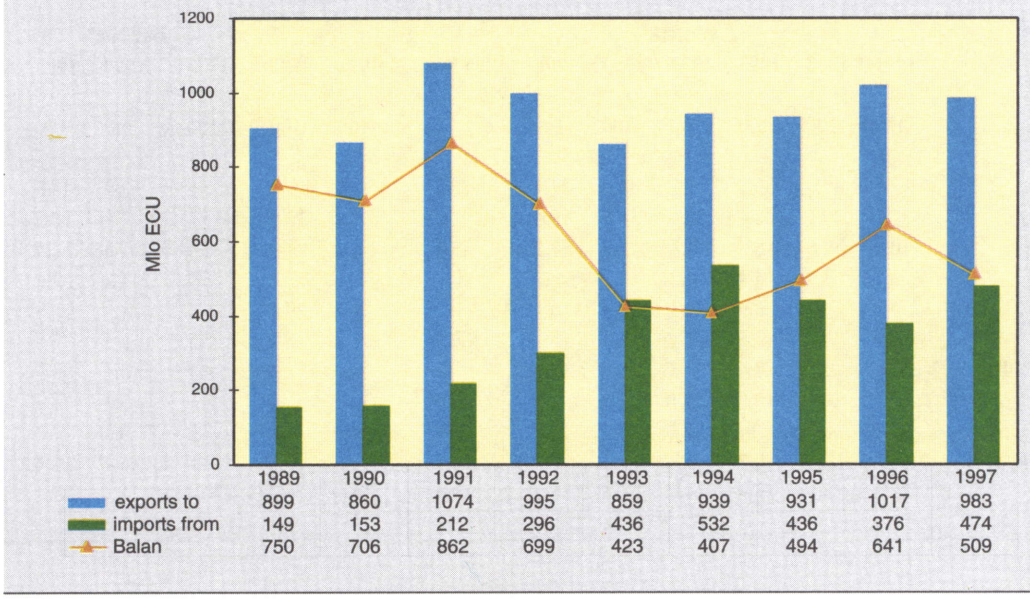
- the import surcharge which was implemented between March 1995 and July 1997;
- the decline in household consumption (graph 2.2.1).

Hungarian exports to the EU-15 fluctuate from year to year, but are generally oriented upwards. This could be linked with the improved functioning of the Association Agreement (cf. § 3.2). From 1995 to 1997 their value ranged between 0.9 and 1 bio ECU.

Between 1989 and 1997, the share of agri-food products in total exports to the EU fell significantly, from a high 27% down to 9%. This again illustrates the shift in the composition of trade with the EU.

Hungary, together with Bulgaria, is the only CEC to have a positive trade balance with the EU in agri-food products, although it varies greatly from year to year. It reached a plateau in 1993 and 1994 then, as imports tended to be stable and exports were on an upward trend, in 1996 the balance increased to 0.6 Mio ECU.

Graph 2.2.1 : Hungarian agricultural trade with the EU-15, Mio ECU



	1989	1990	1991	1992	1993	1994	1995	1996	1997
exports to	899	860	1074	995	859	939	931	1017	983
imports from	149	153	212	296	436	532	436	376	474
Balan	750	706	862	699	423	407	494	641	509

2.3 Farm structures

2.3.1 Transition to private ownership

2.3.1.1 Land privatisation

Hungary's land privatisation programme was based on the need to restructure the ownership of collective farms and compensate expropriated owners.

Of the 5.6 mio ha occupied by the collective farms in the early 1990s, 2 mio ha were formally owned privately by the farms' members, but there were restrictions on the land's use. By the end of 1992 this land had become fully-fledged private property.

In the context of compensation, about 2.5 mio ha of collective land and 0.2 mio ha of state owned land were privatised through auctions. About 1.5 mio people received, on average, less than 2 hectares each.

The remaining land from the collective farms was allocated to their members, but registration of these parcels is proceeding slowly.

2.3.1.2 Transformation of collective farms

The transformation of collective farms into co-operatives was based on 1992 legislation that provided a framework for the distribution of assets and the privatisation of land. Of the initial assets, 41.5% were given to active members, pensioners received 38.7%, and those who had left the farm earlier received 19.9%. In the first phase of reorganisation, up to 1995, most of the active members opted to remain under the umbrella of the new co-operatives. Only about 15% left, and about one third of these created smaller co-operatives or partnerships. The restructuring of the new co-operatives is still underway. Many are evolving away from agricultural production towards service and marketing businesses of various kinds.

2.3.1.3 Privatisation of state farms

The privatisation of the state farms was almost fully complete by mid-1996. Of the initial state farmland (411 000 ha) 47% was used to compensate previous owners. The rest remained state property, at least for a period of ten years. Regarding non-land assets, out of 121 state farms 86 have so far been fully privatised:

- 44 were purchased by Hungarian nationals (mainly managers and former workers);
- 3 were sold to foreign investors;
- 39 were liquidated and their assets sold through auctions.

The privatisation of 7 additional state farms was to be completed in 1997.

The remaining 28 former state farms were turned into joint-stock companies and remain in majority state ownership. A quarter of the shares of these farms are intended to be sold to private owners in the near future.

2.3.1.4 Structure of land ownership

Table 2.3.1 summarises the changes in the ownership of productive land (agricultural land + forests) between 1990 and 1995. Due to the delay in registration, the data are not fully reliable (table 2.3.1).

Table 2.3.1 : Ownership of productive land (%)

Year	State	Collective farms / co-operatives	Co-operative members	Other private owners
1990	27	42	24	7
1991	27	39	23	11
1992	24	31	26	19
1993	23	19	23	35
1994	21	-	40	41
1995	20	-	33	48

Source: Ministry of Agriculture, quoted by World Bank

The share of land owned by co-operatives and co-operative members fell from two-thirds to one third. The share of state owned land also decreased (although not as rapidly as the other assets owned by the state). This was to the benefit of private owners outside the co-operatives, who already in 1995 owned nearly half the productive land.

2.3.1.5 Land market

Hungary's land market is embryonic. Land that was privately owned before 1990 can be bought and sold, while land received through compensation or as a share from the collective farms cannot be sold for three years after receipt. Land ownership, and thus land transactions, are further constrained by existing legislation, which sets an upper limit of 300 hectares for individual ownership and prohibits legal persons (co-operatives, private companies with legal entity) and non-resident foreign citizens from owing agricultural land. A further problem is the delay in land entitlement, in particular for co-operative shares.

While the land market does not really function, there is an active rental market. A large proportion of the land received through compensation is leased to individuals and co-operatives, as well as to private companies. Although there are over two million landowners in Hungary, about 50% of the land is used by about 4 000 farming organisations (co-operatives and other businesses).

Table 2.3.2 : Use of productive land in 1996

	Corporations	Co-operatives	Private (individual) farms
Number	4 300	2 100	1 200 000
% of agricultural area	18	28	54
% of forest	66	8	26
% of total productive land	28	24	48

Source: World Bank for numbers and Central Statistical Office for land use

2.3.2 Evolution of farm structures

2.3.2.1 The diversity of farm types

Before the reform, there were basically two types of farm: large-scale farms (121 state farms and some 1 200 co-operatives) and around 1.4 million individual small plots (mostly part-time). Their share in land use was estimated at 14%, 80% and 6% respectively, and their share in output at 15%, 50% and 35%. The structure of the farm sector was characterised by the symbiotic coexistence of large units and small individual plots. This typically encouraged deeply integrated production relations between household farms and state farms/co-operatives, which sometimes verged practically on "contract" farming, and a high degree of autonomy from the central authorities.

Restructuring has generated a greater diversity in the legal status, size and ownership of agricultural holdings. Some individuals have left the co-operative or the state farm with their personal allotment of assets and initiated different types of farming (individual or corporate, part or full time, subsistence or market oriented). Existing co-operatives have often split into several smaller, village-based or functional units, which have registered either as co-operatives or as other types of businesses (mainly limited liability companies and, to a lesser extent, joint stock companies). State farms have been divided into smaller but still viable units, which were then reorganised, also as limited liability or joint stock companies.

Table 2.3.2 describes the present land use distribution among the main types of farm: corporations, co-operatives and private (individual) farms. Forest areas are mentioned, in order to be consistent with available ownership data (cf table 2.3.1).

Output is estimated at 43% for corporations and co-operatives together and 57% for private farms.

The advance made by private (individual) farms since the reform is notable, in terms of area as well

as production. Among these 1.2 mio farms, a new category of full-time commercial private farms is progressively emerging. Now estimated at 50 000 to 60 000 (of which 30 000 are officially registered) they stem from:

- the household plots of former co-operative members and state-farm employees;
- creation by compensation beneficiaries;
- creation by members seceding from co-operatives with their land;
- a combination of the above, as well as the buying and leasing of land.

Only a few have 10 hectares or more, but their role in generating competition in both output and input markets is already important. Most are likely to face a difficult time in the coming years, however, due to their limited investment capacity and the shortcomings of the rural infrastructure.

2.3.2.2 Farmers' organisations

Agricultural producers have established a wide range of associations to represent their interests. The co-operative farms are represented by the National Association of Agricultural Producers (MOSZ). Several organisations have been established by private farmers – among them the National Association of Farmers Circles – but none can be considered their sole representative.

The 1993 law on the Agricultural Market Regime set up the Product Councils, which are vertical organisations for the different commodities.

In 1994, a Chamber of Agriculture was set up, with a regional network, to provide support for all types of farming organisations, to collect information, and to support the implementation of agricultural policies. It seems that this is not yet operational.

2.3.2.3 Medium- and long-term evolution of farm structures

The privatisation and restructuring process has not led to a break-up of farm structures in Hungary. Large-scale farms remain important while, besides traditional very small-scale production, a new individual, independent, middle-scale, commercial agriculture is appearing, as described above.

Officially, government policy up to May 1998 expressed no particular preference towards one or other type of farming.

As far as economic viability is concerned, arguments are contrasted. For example, economies of scale could favour larger farms, whereas worker motivation is probably higher in smaller units. The predominance of family farms in Western Europe is the result of a historical and economic evolution, while in the recent past corporate farming has also actively developed.

Corporate and co-operative farms will probably evolve towards an increased reliance on internal contracting agreements for most production activities, which will be the responsibility of private individuals or small groups that own land and assets. The core farm's activities will focus on service functions.

At the other end of the spectrum, a certain percentage of the small household farms will remain as part-time "farms"; others will be consolidated through purchase and leasing by individual entrepreneurs and companies, into larger or more land-intensive farm units. These farms will essentially be based on family labour, although to some extent they will also use hired labour. They may gradually be associated through "western-style" service co-operatives, jointly owned by the member farmers, providing services that entail economies of scale, such as input supply, marketing and even processing.

In the very long term, the present dual scale of farm structures in Hungary could well evolve towards a

continuous spectrum of farms. Decentralised units of production would operate with more or less reliance on service companies or co-operatives.

2.4 Rural development

2.4.1 Regional economy

In 1996, Hungary's GDP per capita was some 37% of the EU average. However, regional data on GDP per capita show considerable disparities (cf. map in annex 1.10). GDP ranges from 206% of the national average in Budapest down to 67% in the north-central county of Nógrád. Most of the counties with above average per capita GDP are located in the western and central parts of the country.

Average unemployment for 1994 to 1996 was around 10%, falling below 9% in 1997, but here too substantial regional disparities exist (cf. map in annex 1.11). Lowest in the western counties close to the Austrian border and in Budapest (5.5% - Oct 96) unemployment is highest in the northern and eastern parts of Hungary (up to 19% in the county of Szabolcs-Szatmár-Bereg).

The service sector accounts for 77% of GDP in Budapest; industry's share peaks at 40% in the central parts of the country, while agriculture's contribution is highest, at 16%, in the county of Békés (south-east) and in general in the south of the country. The role of agriculture in employment is particularly important in the East and in the South of the country (cf. maps in annexes 1.12 to 1.14).

2.4.2 Rural and urban population

Hungary's total population is 10.1 million (on 1.1.98). It has been falling since 1980, when it peaked at 10.7 million. Nearly one fifth (1.9 million) live in Budapest, the capital. The other main cities are much smaller: Debrecen (210 000), Miskolc (180 000), Szeged (167 000), Pecs (162 000), Györ (127 000). The 200 local communities established as towns represent 62.9% of the total population, while the 2 926 local communities established as villages represent 37.1% (in the following we call the latter the rural population).

The rural population reached a low point of 35.9% in 1994, before increasing to its 1996 level of 37.1%. Conversely, the urban population is now falling. Statistics show that the bigger the town, the sharper the rate of decline. This is particularly true for Budapest, which lost 110 000 inhabitants between 1990 and 1996, and for the other top five cities.

This situation might appear paradoxical. Budapest and the other main cities are generally better-off in terms of GDP and employment, while agriculture, which was the main activity in the villages, has experienced a deeper recession than the rest of the economy and has lost an appreciable amount of its workforce. This evolution could be explained by:

- city dwellers, especially older people, leaving the towns after receiving back a small plot of land;
- the emergence of poverty attracting people away from the towns to villages, where subsistence can be easier;

Within the rural population, it seems that inhabitants of small villages moved to bigger villages, where activities other than agriculture may have better resisted the recession.

2.4.3 Rural handicaps

The relative dynamism of the rural population does not translate into an economic dynamism. Few opportunities for economic activity exist in rural areas.

One important problem is linked to the restructuring of the collective farms. Under the socialist regime, members of collective farms could have "household plots". The system was mutually advantageous, as it created additional income for the members, facilitated the marketing of household production, and supported the rural population. Moreover, the co-operatives gave direct financial assistance to their members, after retirement or in the event of illness. The co-operatives which could afford it performed the functions normally carried out by local authorities at village level. Their industrial or service capacity provided an infrastructure for the whole community, and they also ran or supported social and cultural institutions. This "symbiotic" system has largely disappeared following the transformation process. Local authorities should have taken over these various services but generally they lack the financial resources, the infrastructure and the knowledge to do so effectively.

Another handicap for rural areas is the pattern of settlement, inherited from the socialist period. Under the concept of "rural centres", all social services (schools, health services etc) were concentrated in one village for every 3 to 5 small villages. Owners of isolated houses were forced (no access to infrastructure and basic services) to leave their farms and move into the villages. There are therefore nearly no farms (nor any buildings or infrastructure) outside the villages. This poses a problem to the expansion of individual farms and to the development of other activities. Moreover, villages have traditionally been prone to ribbon development which, in addition to being visually unattractive, is space consuming and impractical.

2.5 Agriculture and the environment

In Hungary as elsewhere, agriculture has an impact on the state of the natural environment. While agriculture has been responsible for creating landscapes and diversified ecosystems which are perceived as desirable and beneficial to society, it has also negatively affected soil quality, surface- and ground waters and biodiversity and created visually unattractive landscapes. As a general observation, the deep recession experienced by Hungarian agriculture since 1990 has relaxed pressures on the environment. It remains to be seen how the expected (and desirable) economic recovery can maintain this improvement in the situation and build on the potential benefits to the environment of sound agricultural practices.

2.5.1 Landscapes and biodiversity

Hungary benefits from a wide diversity of agricultural landscapes: lowlands, wetlands, semi-natural cultivated landscapes, grass steppes, hilly and mountainous agricultural areas, etc. Together with forests and other features (lakes, ponds, thermal springs), this contributes to a rich natural patrimony.

Often linked with rich landscapes, High Nature Value farming systems (cf. map in annex 1.15) also maintain important habitats for flora and fauna. In Hungary, these low-input systems are often fragmented and are found chiefly on marginal agricultural land. In total, they cover around 15 to 20% (ca 1.5 million ha) of the country's area.

There are more than 500 000 ha of traditionally managed grasslands, mainly unimproved grass or puszta, grazed by sheep and cattle, and by draught horses. Usually pusztas are alkaline, salt-rich habitats, containing a wide range of perennial herbs and grasses. Their evolution and conservation is crucially dependent on pastoral farming. Livestock raising of this sort still survives on areas of steppe on the Great Plain.

Low intensity arable farming systems are highly fragmented and smaller in scale. On these farms, the use of chemical fertilisers seldom exceeds 50 kg/ha per annum. Weed control is usually done by shallow soil cultivation using draught horses or small tractors. A number of protected bird species frequent low-input arable land.

There are small pockets of other traditional arable land uses, including reed banks, orchards and vineyards. One of the most typical forms of low intensity agriculture in the country is the tanya, or small mixed farm, characterised by its great variety of land use and practices such as inter-cropping (e.g. county of Bacs-Kiskun, south of the Great Plain).

The process of land privatisation and farm restructuring, which is still going on, is having a marked effect on agricultural landscapes and the distribution of plant and animal species. While the fragmentation of land use has been less important than the fragmentation of land ownership, it has the potential to create or restore natural habitats and increase biodiversity. 'Strip' farming is the most typical example. On the other hand, there is a risk that privatisation, enhanced commercial opportunities or the prospect of future CAP implementation could endanger environmentally friendly farming practices. Some cases of High Nature Value land being ploughed up and cultivated with maize or sunflower have been reported in this context.

2.5.2 Soils

Although Hungary – relative to the rest of Europe – is well endowed with fertile flat land, about 44% of its soil has unfavourable hydro-physical properties. Approximately 2.3 mio ha are affected by water erosion and 1.3 mio ha by wind erosion. There are about 2.3 mio ha of acidic soil, and around 10% of Hungary is affected by salinisation. The poorest quality soil is found in the sandy areas, the main depressions of the Great Plain and hilly areas. The best soil conditions are found in the loess plateaux of Transdanubia.

This situation has resulted partly from human activity, such as river regulation, drainage and irrigation, overuse of fertilisers, the creation of very large plots, the orientation towards crops rather than grassland and intensive livestock rearing. The economic recession in agriculture has so far reduced this kind of pressure on the soil, but here too recovery and accession prospects may endanger the environment if adequate measures are not taken.

2.5.3 Water resources

Over-intensive agriculture during the Communist period led to the pollution of groundwater and surface water in some regions, through the overuse of chemical inputs and the improper disposal of animal manure from intensive livestock rearing. Water resources have also been over-exploited, mainly by industry but sometimes also by agriculture (irrigation). The economic recession in agriculture has so far reduced water pollution and water consumption but, again, pressures could be reinforced with economic recovery. In particular, the reconstitution of animal herds of a smaller size has to be accompanied by efforts on manure disposal: building storage tanks and adjusting spreading to the soil's absorption capacity.

Another issue linked with water is the possibility that the Carpathian Basin could be one of the regions of the world most affected by global warming. The climate may become drier, with higher temperatures and evaporation rates and declining rainfall.

2.6 Up- and downstream activities

2.6.1 Up- and downstream services

A newly established private sector is emerging in Hungary, which is in many ways close to the western system. A full range of modern equipment and agricultural inputs (seeds, fertilisers, pesticides) is available throughout the country from a number of suppliers.

Hungarian "production systems", which developed under the former regime as regional organisations dedicated to introducing new technologies and inputs, are now organised as joint ventures, partly owned by the users of their services (production co-operatives, private farms, etc.) and partly by suppliers (manufacturers of machinery, seeds, pesticides, fertilisers, etc.). There are about 20 of these, specialising in crop or livestock supplies, throughout Hungary (table 2.6.1).

The decline in fertiliser use was very severe at the beginning of the transition period and larger than the fall in agricultural production. The previous overuse of fertilisers and a lack of cash explained this sharp reduction. Within the different types of fertilisers, there has been a preference for nitrogen (short-term effect) at the expense of P and K fertilisers (long-term effect). A recovery in fertiliser use has been apparent since 1994, but Hungarian levels are still well below the EU average (around 170 kg/ha in total), in particular for P and K. This can result in yields being affected, as well as sensitivity to climatic hazards.

2.6.2 Food industry

The output of the food industry declined by 14% over the period 1990 to 1993, albeit at a slower pace than agricultural production. A recovery then took place: + 7.3% from 1993 to 1996. Accounting for 3.8% of GDP in 1996, the food industry represents a fairly stable share of the national economy. At 15–16%, its share in exports is much higher.

Prior to transition, state owned food-processing enterprises accounted for about 75% of all food industry output. The remainder was carried out in plants owned by collective and state farms, agricultural and consumer co-operatives and, to a lesser extent, by private companies and individuals. The sector has undergone a radical structural change through a rapid privatisation process (faster than for any other Hungarian industry) and the creation of new private companies.

Foreign investment has played a major role in privatisation. By the end of 1996, foreign investors owned, in terms of equity, 53% of the food industry, while the state had a share of 6% and other domestic investors 41%. Foreign ownership is dominant in vegetable oil processing, confectionery, sugar, tobacco, brewing and distilling.

The competitiveness and financial performance of the privatised companies in these sectors have improved, thanks to considerable resources being invested in upgrading their technical management

Table 2.6.1 : Use of fertilisers

Active ingredients		1990	1991	1992	1993	1994	1995	1996
Total use of fertilisers	000 t	671	196	189	207	280	247	270
Use per ha of arable land and permanent crops	kg/ha	127	37	38	41	56	49	54
Of which:								
N	kg/ha	67	26	30	32	45	38	40
P	kg/ha	24	5	4	5	5	6	7
K	kg/ha	36	6	4	4	6	5	7

Source: Central Statistical Office

and organisational efficiency. However, some sectors, particularly the marketing of farm produce and first processing of animal products, are lagging behind. This could hamper an improvement in producer prices. Margins in these sectors are poor and do not generate the capital necessary for investment. Agricultural producers generally have little involvement with ownership of the food industry.

One risk stemming from the restructuring of the food industry is too high a concentration of capital, leading to dominant positions in some sub-sectors. This is already noticeable in the vegetable oil sector (foreign capital) and maybe in the poultry sector (Hungarian capital). However, it should be remembered that the former state-owned system was monopolistic in essence.

In the retail sales sector rapid transformations are occurring, with important foreign investments, mainly in supermarkets (Spar, Metro, Tesco, Tangelmann, Plus, Kaisers, Louis Delhaize, Cora...). Competition is becoming stronger in this sector. At the same time, the market power of the retail sales sector has grown vis-à-vis the food industry.

2.6.3 Banking system

Agricultural credit is provided predominantly by five major banks [6] and 257 rural savings co-operatives. The banks also supply credit and financial services to other sectors, agriculture representing only a small part of their overall loan portfolios. Historically, the banking system has been oriented towards large-scale production co-operatives; the emergence of small-scale private farms and their need for specific financial services represents a serious challenge for them. Large banks are handicapped by their centralised structures. Savings co-operatives are well established throughout the country, but are financially weak and do not lend much to agriculture because of its low profitability.

Short term credit (e.g. for financing the purchase of inputs) has developed more rapidly than investment credit, mainly due to the weak financial situation of farms and to the lack of reliable guarantees. The overall land tenure situation of many farms and the absence of a land and fixed assets mortgage system make it difficult to find sufficient collateral.

Faced with this situation, the government has developed instruments to support investment (Agricultural Development Fund) and to guarantee credit (Rural Credit Guarantee Foundation, Land Mortgage Institute). This is developed in § 3.3.

[6] Kereskedelmi Bank, ABN-AMRO Bank, Budapest Bank, National Savings Bank and Mezobank (after merging with Agrobank). All have been privatised.

3. Agricultural and rural policies

Hungary's agricultural policy has traditionally been export-oriented. From 1989-92 a rather liberal approach was adopted to international trade relations and agricultural policy, reflecting Hungary's long-standing membership of the GATT and, in particular, its pragmatic adherence to the Cairns group during the Uruguay Round. In January 1998 Hungary formally withdrew from this group, as its agricultural policy started to be reshaped with a view to EU membership. Since 1993, and more visibly since 1994, Hungary has in fact taken a more interventionist approach, adopting different elements of the EU's Common Agricultural Policy, albeit with much lower support prices, and increasing border protection. Export subsidies continue to play a major role in agricultural support and within the agricultural budget. Various financial instruments are now being developed, however, in support of a structural policy, going beyond the setting of a legal framework.

In March 1997, the Hungarian government launched a national debate on its agricultural and rural policies with the publication of "The basic principles of the national agricultural programme". At least two important issues have so far emerged as controversial. First, encouraging "the creation of farms with land areas capable of efficient market production" and requiring "full registration of all agricultural producers" may favour the large-scale farms (new co-operatives and large corporate farms) and has raised fears among small farmers. Second, the objective of dedicating 2.5% of GDP to agricultural and rural policies is dependent on the budgetary commitments that still have to be made for regional policy, including its rural aspects.

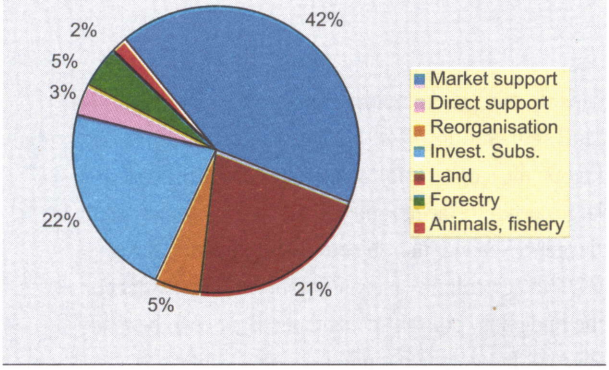
At present the agricultural budget (which does not include rural development) represents around 1.3% of the GDP. The breakdown of expenditure is set out in the table 3.0.1.

The largest part of the agricultural budget goes to the market policy. In 1998 this was cut, however, from 42% to 35%, and direct subsidies increased accordingly (from 21% to 27%). Market support is mainly provided through export refunds and, for a limited number of products, by direct price support. Direct subsidies include credit grants, support for the use of poor land and, since 1998, a subsidy designed to encourage farm employment. Investment subsidies rank third in importance, with a share of 24% in 1998 (graph 3.0.1).

Table 3.0.1 : Agricultural budget for 1997 and 1998

	1997		1998
	mio ECU	mio HUF	mio HUF
Market policy (mainly export subsidies)	200	42300	41000
Subsidy to agricultural production (mainly interest subsidy and use of poor quality land)	99	20900	31480
Reorganisation program	25	5300	3000
Investment subsidies	104	22000	28320
Land improvement, irrigation	9	2000	1900
Afforestation aid	6	1300	1400
Land use and quality protection	6	1320	1400
Animal husbandry and breeding	2	500	550
Wildlife management and fishery	5	1098	850
Others	20	4230	6220
TOTAL	477	100948	116120

Graph 3.0.1 : Allocation of the agricultural budget, 1997



In this chapter on agricultural and rural policies, we have classified Hungarian policy measures by using the same typology as in the EU. With a view to Hungarian accession, this makes comparison with the EU easier. Each category mirrors the description in chapter 2:

- agricultural market policy;
- trade policy;
- agricultural structural policy (cf. Objective 5a in the EU);
- rural development policy (cf. Objectives 1, 6 and 5b in the EU for its regional component);
- agri-environmental policy (cf. accompanying measures of the 1992 CAP reform).

Table 3.1.1 : Summary of prices

% of EU prices	Support price			Producer price				
	1997/98	1996/97	1995/96	1997	1996	1995	1994	1993
Common Wheat	57	40	41	78	91	48	52	55
Barley				95	120	56		
Maize	57	50	45	55	66	50	54	57
Sugar beet				54	47	49	49	44
Sunflower				98	102	88	91	62
Tomatoes				20	17	17	19	21
Apples				22	23	40	23	27
Beef	58	53	49	54	56	57	53	44
Pigmeat				83	72	105	99	88
Poultrymeat				81	82	86	88	79
Milk	73	66	63	72	61	63	68	61
in ECU/t	**Support price**			**Producer price**				
	1997/98	**1996/97**	**1995/96**	**1997**	**1996**	**1995**	**1994**	**1993**
Common Wheat	71	50	52	98	126	67	75	87
Barley				95	120	56		
Maize	71	64	57	73	103	79	80	95
Rye				77	109	50		
Sugar beet				27	23	23	23	21
Sunflower				197	193	191	198	133
Tomatoes				98	73	63	75	75
Apples				89	96	152	86	82
Beef	1630	1495	1391	1427	1469	1675	1641	1387
Pigmeat	1195	1062	887	1383	1161	1417	1262	1108
Poultrymeat				1042	1095	1007	1186	1070
Milk	210	191	182	214	184	186	203	184

3.1 Agricultural market policy

3.1.1 Market regimes

Direct market regulations were introduced in 1994 for wheat, maize, slaughter pigs, slaughter cattle and cow's milk. In addition to external trade measures, they include a system of guaranteed prices within maximum guaranteed quantities. A particular feature of the system is that it directly supports the farm gate price, rather than the wholesale price as in the EU.

Another group of products (sugarbeet, chickens, sunflowers, sugar and isoglucose) is supported by indirect market regulations. External trade measures (import protection, export subsidies) are the main instruments used to stabilise these markets.

The market policy is operated by the Office for Agricultural Market Regimes, which depends on the Ministry of Agriculture, under the supervision of an inter-ministerial committee.

3.1.2 Summary of market regimes

As well as describing the current market policy tools, this analysis focuses on the policy's effect on prices and presents a comparison with the EU situation. A summary is given below.

All prices have been converted into ECU, using an annual exchange rate. During the reference period the Forint appreciated in real terms (inflation rising faster than the exchange rate, by roughly 10% a year). This means that prices expressed in ECU tend to exaggerate the price increases received by Hungarian producers (table 3.1.1).

3.1.2.1 Cereals

Cereal prices have fluctuated greatly in recent years. World prices were exceptionally high during the 1995/96 marketing year, including in Hungary and the EU. This meant that, between 1995 and 1996, producer prices for wheat in Hungary nearly doubled, and for maize increased by 30%. Following the general trend, prices went down in 1997, but remained above pre-1995 levels. As a result, price gaps between Hungary and the EU closed. Maize has to be distinguished from other cereals, however, as producer prices for maize in Hungary remain 35-45% lower than EU prices. They are even significantly lower than the usual world prices. By contrast, the price gap for other cereals has significantly narrowed during the last two years: in 1997, producer prices for Hungarian wheat and barley stood at 80% of EU prices.

Support prices have also converged as a result of increases in Hungary and reductions on the EU side. In Hungary, both wheat and maize prices are supported by intervention at a safety net level that represents about 60 [7] % of the EU level. Access to intervention is limited individually at 2.4 t/ha and 3.2 t/ha for wheat and maize respectively. Until recently, only insignificant quantities were bought at intervention. In October 1997, following an exceptional harvest, a decision was made to purchase 300 000 t of maize into public storage, at the intervention price.

3.1.2.2 Oilseeds

Sunflower is the main oilseed produced in Hungary. Producer prices were at the EU/world level in 1996 and 1997. As for maize, this lower level reflects Hungary's net exporting situation and the inefficiency of the downstream sector. The crushing industry is concentrated into a private monopoly with foreign capital. Apart from border protection

[7] This is a rough estimate of the gap, as support prices are not directly comparable: in Hungary they are defined at farm-gate level, while in the EU they apply at the wholesale stage.

(mainly for vegetable oils) no other market support is given to the sector.

Oilseed prices in the future will continue to follow EU/world fluctuations.

3.1.2.3 Sugar

Sugarbeet prices in Hungary were about 54% of EU levels in 1997. Sugar prices can be roughly estimated at two thirds of the EU level and nearly 50% above the world market level. Apart from border protection there is no support system. Prices in this sector are therefore very sensitive to any production exceeding internal demand, as is the case at present.

Over the coming years, a system close to the EU quota regime could be implemented, under pressure from beet growers and the sugar industry. But GATT commitments will limit the possibilities for increasing sugar prices and exporting and, thus, restrain beet areas. However, prices should improve as a result of the major restructuring of the sugar industry, which has been taking place over the last few years under foreign capital.

3.1.2.4 Fruit and vegetables

A comparison has been made for tomatoes and apples only. Difficulties arise because prices may correspond to different types of product (e.g. tomatoes for the fresh market or for industry). Producer prices in Hungary seem to be much lower than in the EU, e.g. respectively 20% and 22% of EU levels in 1997. Hungary may have a strong competitive advantage at farm level, but several problems persist: inadequate marketing structures; low commercial standards, in particular for domestic production; the lack of producer organisations – although these are gradually being formed. In addition, due to the low level of inputs (fertilisers, pesticides) fruit and vegetable production is very sensitive to weather conditions, and quality problems result. All these factors make prices particularly volatile.

3.1.2.5 Wine

Support is ensured through import tariffs and significant export subsidies.

3.1.2.6 Dairy

Milk prices are supported by an indicative price system, with the possibility of intervention. If dairy companies pay the indicative price to producers, they qualify for a – small – subsidy. If producers do not find a buyer, they may in theory sell their quality milk to the State, at a "guaranteed price" that is lower than the indicative price. In recent years intervention has not been activated, as market prices were higher than the trigger price. Border protection for dairy products is high (66% for milk powder, 130% for butter in 1997).

In 1997 the indicative price, which applies only to extra or first class milk, stood at 73% of the corresponding EU support price. The gap has closed significantly in recent years, and is likely to narrow further, considering the prospects on both sides: an increase in the Hungarian price and a lowering of the EU price, as proposed in Agenda 2000.

Individual dairy quotas were introduced in 1996. Nationally, the quota amounts to 1 900 million litres. This is lower than the production level of the past few years but higher than the marketed production of quality milk, to which the quota applies. At individual level, the minimum price mechanism applies only within the quota.

Milk producer prices were at 72% of the EU level in 1997, the same gap as for support prices. They may rise slowly in the coming years as demand for higher quality products increases.

3.1.2.7 Beef

The beef sector is relatively marginal in Hungary and beef appears as a by-product of milk production. Producer prices in Hungary were only 54% of the EU level in 1997. Internal demand, as well as cattle numbers, has fallen sharply over recent years. It is not yet clear whether the situation has now stabilised. In any case, prices remain very depressed and are unlikely to increase to any significant extent, given the consumer preference for pig-meat and poultry.

Prices are theoretically supported by intervention on slaughter cattle, at a very low level (around 60% of the EU average buying-in price).

3.1.2.8 Pig-meat and poultry

The price differential between Hungary and the EU for both pig- and poultry-meat is roughly the same as for wheat: producer prices in Hungary are 20% lower. This is the result of the increase in cereal prices. Prices for pig- and poultry-meat formerly appeared high, when compared with the low cereal prices. On the supply side, this reflects poor feed conversion ratios and inefficient structures (many very small individual pig and poultry "farms"). On the demand side, it reflects the consumer's preference for pork and, increasingly, for poultry. Intervention theoretically exists for slaughter pigs, at a level very much below market prices.

Given these structural features, prices should remain relatively high in the coming years. But constraints on export subsidies under the GATT commitments and, for pig-meat, quality problems, could even cause prices to fall slightly.

3.1.3 Conclusions on price gaps

Producer prices in Hungary are generally lower than EU prices. This is due on the one hand to Hungary's net exporting situation, to the low level of support and to the inefficiency of the downstream sector. On the other hand, it is of course also due to the relatively high level of EU prices, compared with world prices. However:

- for cereals – except maize -, pig- and poultry-meat, prices are already close to EU levels; for oilseeds, prices are similar;
- if the Agenda 2000 proposals are implemented in the EU, the gap for cereals and dairy products will close further and for beef will close significantly;
- for sugar, the price gap will remain wide, but the introduction of quota regimes could limit market impact at accession time;
- for fruit and vegetables, the apparently competitive position of Hungarian producers masks severe structural problems.

3.1.4 Short-term credit policy

Under the interest subsidy programme for producers, "integrators" (i.e. first buyers) of farm produce qualify for an interest subsidy on loans extended to farmers. The integrators act as intermediaries, as they extend credit to farmers in the form of inputs. The farmer signs a contract with the integrator to deliver his harvest, with the price to be received contingent on market price conditions at harvest-time The farmer presents the contract to the branch of a co-operating bank for approval. The farmer receives the inputs and the integrator receives an advance of funds from the bank for the cost of the inputs. When the production is marketed, the loan is repaid (and interest reimbursed by the programme).

3.2 Trade policy

3.2.1 The Uruguay Round commitments

3.2.1.1 Border protection

Before 1994, import protection was essentially based on quantitative measures. Protection was ensured by import licenses and the so-called global quota of consumption products, of which food products represented about one third. Its efficiency in the new economic context was limited.

Following the Uruguay Round Agreement (URA), non tariff barriers were dismantled through the tariffication process. Hungary was able to bind relatively high tariffs. Under the URA, Hungary committed itself to decreasing the average rate of agricultural tariffs by 36% in 6 years. However, for some sensitive products (sugar, margarine, pork, etc.) the reduction was limited to 15% (as allowed).

The arithmetic average of non-preferential tariffs for agricultural products jumped from 23% in 1993 to 45% in 1995. This increase was intended to curb the growth in imports and to provide additional revenue for the budget.

For many products, tariffs are higher for processed than for staple agricultural products. This tariff escalation, together with the fact that export subsidies are often higher for processed than staple products, leads to a significant protection of the food industry that reflects its shortcomings.

In practise, preferential access is given in a number of cases (cf annex 1.18):

- through the Association Agreement (see point 2 below), the EU enjoys tariff conditions similar to those applied in 1994;
- through the CEFTA Agreement (see point 3 below), other CECs (Poland, Czech and Slovak Republics, Slovenia, Romania) benefit from preferential treatment;
- developing countries exporting tropical commodities also have better tariffs than the bound levels.

3.2.1.2 Export subsidies

Since 1995, the first year of implementation of the Uruguay Round Agreement, Hungary has subsidised its exports above the commitment levels related to budgetary outlays and product coverage indicated in its schedule (cf annex 1.19). For 1995, the commitment level was 21 bio HUF (128 mio ECU, at the 1995 exchange rate), whereas the budget for export subsidies was 44 bio HUF (268 mio ECU). The same happened in 1996, with a budget of 41 bio HUF (212 mio ECU, at the 1996 exchange rate). On average for 1995 and 1996, this represented 11% of the value of agricultural exports.

During these two years, Hungary tried to renegotiate its schedule in Geneva, claiming that there was a serious technical error in the calculation of export subsidies during the base period, i.e. that the data on subsidised exports to former COMECON countries had not been included. The situation was aggravated by the fact that Hungary had expressed its commitments in national currency and that it had a high inflation rate. As no agreement was reached, a WTO panel was established in February 1997 at the request of Argentina, Australia, New Zealand and the United States.

In July 1997, Hungary and the complainants reached an agreement on a waiver which was then approved by the WTO General Council in October 1997. The key elements are the following:

- generally the basis for export commitments is the actual situation of 1995 in terms of product coverage and budgetary outlays;
- for certain products (pigs, poultry, wine and beverages), the quantity limitations indicated in the schedule are retained;
- Hungary commits itself not to use the flexibility granted under the waiver for exports to non-traditional markets (i.e. where subsidised exports did not take place during the period 1994-96): North and South America, the Pacific region, East and South East Asia;
- the waiver ends on 1 January 2002.

Management of export subsidies

In April 1998, fresh legislation on export refunds was adopted. It has features in common with the equivalent EU regulation: a tendering system will be introduced, and the previous system of automatic export subsidies will be limited to a few products only. Export refunds will, furthermore, be differentiated according to destination. For many products, the refund for exports to non-EU countries will be higher than for exports to the EU. In this way, trade towards the former COMECON should further increase, strengthening the underlying trend.

Prior to these changes, export subsidies were set at the beginning of the year as a fixed amount per quantity of product, i.e. in HUF/kg or in HUF/l, which varied little with changes in world prices. In the past, some export subsidies were related to the declared export value, which gave rise to an overvaluation of exports.

The main sectors benefiting from export refunds are preserved fruit and vegetables, meat products and wine. In general, rates of subsidy are higher for processed and value-added products, which provides effective protection to the food industry.

The general opinion of experts is that export subsidies mainly benefit the traditional players of industry and trade, and do not play a very important role in supporting producer prices. No quantitative study exists to demonstrate this, but it is clear that in some sectors, while there are relatively high export refunds for the processed product, the farm gate price for the raw product is low.

3.2.1.3 Domestic support

Under the Uruguay Round Agreement, domestic support must be reduced by 20% over 6 years, with reference to the period 1986-88 (cf annex 1.20). Combined with the application of the clause of excessive inflation, this commitment does not mandate additional reduction of domestic support, but precludes substantial re-subsidisation. Support for agricultural investment is not concerned by the reduction commitment.

The PSE (Producer Subsidy Equivalent) for Hungary, calculated by the OECD, was 16% in 1995, compared with 49% in the EU.

3.2.2 The Association Agreement

3.2.2.1 Main features

In the agricultural sector, the Association Agreement between Hungary and the EU is mainly based on mutual concessions in the form of tariff quotas at preferential rates. These came into force on 1 March 1992. The Agreement has been modified to take into account the Uruguay Round Agreement of 1994 and the EU enlargement of 1995. The related Additional Protocol is still in the process of being formally approved, but its trade related provisions are already applied on the basis of autonomous measures. Regarding the Uruguay Round, preferential tariff rates were fixed at 20% of Most Favoured Nation rates (instead of 40% before). In respect of the EU enlargement to Austria, Finland and Sweden, additional quantities and new quotas were opened, so that the main provisions of the former bilateral agreements between Hungary and the three new Member States and their "traditional trade" were broadly maintained.

In addition, the EU decided in 1995 to increase tariff quotas by 25% over a period of 5 years (for Hungary as well as for the other associated CECs).

Other particular points are:

- the minimum prices for soft fruit, which had an adverse effect on Hungarian exports to the EU, have been cut by 20%, tariffs have been reduced by 50% and an early warning system has been set up;
- discussions are still underway on the new entry prices for fruit and vegetables.

Besides the Association Agreement, two agreements were concluded in 1993 between the EU and Hungary, one on the reciprocal protection and control of wine names, and one on the reciprocal establishment of tariff quotas for certain wines. Such quotas have been fixed for a period of five years ending in December 1998. Discussions on a possible extension of the agreement are on-going.

3.2.2.2 Results

Exports to the EU

Like the other associated CECs, Hungary was not able to fully use most of its preferential quotas in the first years of the Agreement's implementation. Quota utilisation has now improved for beef and pork products and the situation can be judged much more satisfactory for the main agricultural products.

The recovery of production and sanitary improvements, the stabilisation process (organisation of trading companies, information about the Association Agreement, etc.) and increased preference margins have all contributed to the improved take-up.

Despite this, Hungary still has some complaints about the administration of quotas. In particular, they argue that more products should be managed under the "first come first served" approach rather than under the "simultaneous examination" approach. In fact, the former provides more flexibility and probably gives a better share of the quota rent to the exporting country.

Imports from the EU

While imports from the EU have increased substantially (cf. § 2.2), this cannot be attributed solely to the Association Agreement. The Hungarian preference for Western products, considered to be of better quality, and the developing consumption of highly processed products may have played a more important role. The growth in imports has however been curtailed by the increase in tariffs following the Uruguay Round Agreement and the imposition of a temporary import surcharge.

3.2.3 The CEFTA Agreement

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

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

CEFTA encompasses all merchandise trade. For industrial products all barriers will be abolished by the end of 2000. For agricultural and food products the initial agreement introduced a system of preferential quotas. Preferences were given for selected

commodities on a bilateral basis, for which parties had to decrease tariffs by 10% annually, until a 50% preference was reached. It was later decided to introduce the 50% tariff reduction at once and in some cases an even higher reduction (of 70%).

In December 1995 agreement was reached on further gradual liberalisation of agri-food trade until, after further negotiations, full liberalisation would eventually be achieved. However, the original deadline of 1998 was postponed and, finally, at the CEFTA summit meeting in Warsaw in December 1997 changes were agreed to the grouping of products in different categories with different degrees of liberalisation:

- A listing: duty free and quota free commodities as from 1.1.1996 (breeding animals, horses, rabbits, durum wheat and oilseeds);
- B listing: common preferential tariffs (poultry meat 28%, wheat 15%, barley 18%, flour 15%, pastry 20%, some fruit and vegetables 5 to 10%);
- C and D listings with bilateral preferences between CEFTA members; C and D listings embrace main goods, which are not covered under A or B, some limited by quotas;
- A1 and B1 listings were agreed at the Warsaw Meeting as a special arrangement for Slovenia's gradual adjustment to CEFTA rules;
- Sugar and certain dairy products remained outside the listings.

Since 1991, the share of Hungary's agri-food exports going to the CEFTA countries has greatly increased, from 4.9% in 1991 to 12.9% in 1996. Conversely, the CEFTA countries' share in Hungarian agri-food imports fell, from 4.7% in 1991 to 3.4% in 1996. The impact of the CEFTA Agreement should not be overestimated, but it has certainly played a role in this result. Hungary's agri-food sector in any case appears to be quite competitive, compared with the other CEFTA members.

3.3 Structural policy in agriculture

In addition to the legal framework that covers farm structures (land privatisation, state farm privatisation, transformation of collective farms), various structural policy instruments are being developed by the Hungarian government, mainly support for investment and support for the use of poor quality land. The taxation system is described in point 3 below.

3.3.1 Support for investment

Responding to the decline in agricultural investment and the lack of bank lending, the government in 1992 created an Agricultural Development Fund within the budget of the Ministry of Agriculture. Through this instrument, farmers can receive investment grants, as well as loan interest rate subsidies. Investments can be production-related (e.g. plantations, machinery) or for farm infrastructure (e.g. buildings, land improvement).

In 1997, the rate of grant varied between 15 and 45%, according to the type of investment. The interest rate subsidy is 40% of the lending rate (provided that the latter does not exceed the Central Bank refinancing rate by more than 4%). The share of the agricultural budget devoted to investment support has gradually been increasing and reached 22% in 1997, i.e. 22 bio HUF (104 MECU).

Even if participation has developed well, it seems that small to medium size farms are not being properly reached. Individual farmers or even farm organisations often fail to get public support for investment, simply because banks are unable to provide them with a loan in the absence of appropriate security. Banks usually require 150% or higher collateral on agricultural loans, which prevents many holdings from obtaining credit, due to depressed asset values and insufficient equity capital.

In an effort to tackle this problem, the government created the Rural Credit Guarantee Foundation (RCGF) in 1991, with the assistance of PHARE (see annex 3 for PHARE assistance to Hungary). This provides a 50% guarantee on the loan principal and pays the first year's interest charges. It quickly met a pressing need and was very useful, but its means are still too limited to make a sizeable impact. Animal husbandry and food production activities have received most of the loan guarantees.

While the legal framework establishing a Land Mortgage Institute has been decided, its financial framework is still unclear, in particular the extent of state involvement, and the Institute is far from being operational. A key problem is Hungary's lack of a land market, caused by the delays in land entitlement, the ban on foreign, co-operative and corporate ownership of land, and the size limitation on private ownership (300 ha). Moreover, land ownership and land use have been largely separated (it is estimated that only some 20% of all land is farmed by its owners) and renting rights cannot be used as collateral.

On the whole, agricultural investment remains weak. However, loans to agriculture doubled from 1995 to 1996, probably more as the result of bank privatisation and the injection of foreign capital into banks than of public support for agricultural investment. Emerging small private farmers remain handicapped by their limited skills in elaborating business plans and in financial management.

3.3.2 Farming in less favoured areas

The agricultural use of land in regions with less favourable natural conditions is considered to be in the interest of the national economy. In order to encourage this and to supplement their low incomes, farmers can claim a fixed subsidy of around 2 000 HUF/ha. Eligibility of land is based on its value, as established during the restitution/compensation process. According to the information provided by Hungary to the EU, the area eligible was 3.2 mio ha in 1996. In the 1997 agricultural budget, 5.5 bio HUF were allocated for this subsidy. The main counties concerned are Borsod-Abaúj-Zemplén, Szabolcs-Szatmár-Bereg and Hajdú-Bihar (north-east) and Somogy (south-west). The scheme has some similarities with the EU's Less Favoured Areas scheme.

3.3.3 Taxation

Small farmers with a revenue of up to 1 mio HUF are exempt from income declaration and taxes. Farmers with a revenue of between 1 and 2 mio HUF are not obliged to keep accounts and may pay taxes at the personal rate (up to a maximum of 42% in 1997). Farmers with a gross revenue above 2 mio HUF must keep accounts and pay taxes at corporate rates (18% of net income). Co-operatives pay corporate tax, while their members pay income tax on their personal income.

Land tax was eliminated in 1995.

Farmers benefit from a refund of 85% of the fuel excise tax.

In practice, most individual farmers do not pay taxes and do not provide statistical information to the tax authorities, even though this means they forgo their right to receive subsidies. According to some estimates, 10-15% of agricultural production has moved completely into the shadow economy, and is not reflected in national statistics or in the tax base. In an attempt to correct this situation, the government decided that, from 1997 onwards, all producers selling any agricultural products have to be registered with the tax authorities, even if they are exempt from income declaration.

3.4 Rural development policy

3.4.1 Regional policy

The Act on Regional Development and Physical Planning, adopted in 1996, constitutes the legal basis of Hungary's regional development policy. The principles, objectives and institutional structure envisaged in the Act have clear similarities with the EU's regional policy.

The Ministry of Environment and Regional Development is responsible for both regional policy and spatial planning. Inter-Ministerial co-ordination has to be ensured by the National Council for Regional Development. Moreover, a National Development Agency is involved in the implementation of regional policy. A government decree has envisaged the establishment of a regional development fund.

19 counties plus Budapest represent the top level of regional administration, responsible for implementing regional policy. At the same time, the 1996 Law provides for the establishment of larger regional administrative and planning units, with Regional Development Councils being set up. Seven NUTS II regions covering the whole of Hungary are currently under consideration

Local government is responsible for settlement development and planning. The formation of associations of local governments is encouraged.

The Hungarian government is well aware of the need for an active and decentralised regional policy. Hungary is the first of the CECs to have adopted a legal framework closely in line with EU structural policy. Many sections of the new Law were drafted with a view to taking over the acquis.

The financial instruments at the disposal of Hungary's regional policy are clearly limited and the level of public expenditure which would be available for counterpart funds under the EU structural policy cannot yet be determined.

In addition to budgetary funding, other problems exist for the implementation of the regional development policy. Institutions still have to be created and existing ones require support and experience. The need for inter-ministerial co-ordination is very important. Co-ordination between the Ministries that have offices at county level (like the Ministry of Agriculture) and the elected County Development Councils, which are the major actors for regional development, also needs improving. Furthermore, regional co-operation between the counties should be strengthened.

While the regional policy applies in particular to rural areas, there is so far no particular distinction of rural development policy within regional policy, although the former government expressed its intention to implement rural development programmes.

3.4.2 Rural policy as accompanying measures of agricultural policy

Structural policy instruments for agriculture are being developed (cf. § 3.3) and an agri-environmental policy is slowly emerging (cf. § 3.5). However, apart from the general considerations expressed in "The basic principles of the national agricultural programme", there is not yet a fully-fledged concept of a rural policy to accompany the changes in agriculture and agricultural policy. In particular, the Ministry of Agriculture has no budget line to support on- or off-farm economic diversification.

In any case, considering the specific problems of rural areas (cf § 2.4), the need for rural policy instruments is clear.

3.5 Agri-environmental policy

3.5.1 Protection of nature

Nature conservation policies in Hungary date from 1901, when national protection was given to 132 bird species and 32 types of mammal. The number of protected species has since increased continuously.

A legal framework in respect of protected areas (cf. map in annex 1.16) was already developed before World War II. Considerable progress was made in the '70s, when the first Hungarian national parks were established. The legal framework was updated, amended and unified in 1996 (Law 53 of 1996 on the protection of nature).

The network of protected areas includes core areas for bio-diversity. The most important are the pusztas (a complex mosaic of grasslands and extensive arable land, cf § 2.5), floodplains, areas of marshland, natural lakes, systems of fishponds and mountains. Today there is a total of 201 protected areas in Hungary, covering 670 600 ha (i.e. 7.2% of the country's total area).

These protected areas are classified as follow.

Table 3.5.1 : Protected areas (1995)

Category	Number	Area (000 ha)	Strictly protected area (000 ha)
National parks	5	177.7	29.2
Landscape protection areas	51	466.7	55.7
Nature reserves	145	26.2	1.7
Total	**201**	**670.6**	**86.6**

The privatisation of strictly protected areas, national parks and some other specific sites has been prohibited. Moreover, there is a government programme to acquire some 250 000 ha of protected areas which were formerly owned by co-operatives or were illegally privatised.

3.5.2 Agri-environmental measures

The 1995 Act on Environmental Protection and the related programme, which was adopted in 1997, drew up policies for key socio-economic sectors, including agriculture.

Since 1996, funds have been made available under the agricultural budget for environmental measures, such as schemes supporting conversion to organic farming, for keeping endangered and rare breeds, as well as for soil conservation measures. Some share common features with the EU agri-environmental schemes (Regulation 2078/92).

Furthermore, agri-environmental programmes are under preparation, including horizontal and zonal schemes. The horizontal schemes would provide support for the environment and for nature friendly, sustainable agricultural practices.

The zonal programmes would provide support for regions where:

- traditional agricultural practices have preserved significant areas of (semi-)natural habitats;
- the ecosystem is sensitive to changes in land use;
- the survival of rural communities is uncertain due to natural ecological conditions;
- the area has outstanding landscape or recreational value which can only be protected by maintaining low-intensity agricultural systems.

(See annex 1.17 for proposed Environmentally Sensitive Areas)

3.5.3 Protection of soils and waters

The need to reduce the pollution caused by agriculture through fertilizers, manure and pesticides is well recognized by the public authorities. Basic rules covering farming activities that have a direct impact on the environment are laid down by the law on arable land (Law 55 of 1994) and the law on general rules for environmental protection (Law 53 of 1995).

In particular, a license system exists for the storage and spreading of liquid manure, and for the use of pesticides.

Enforcement of the regulations has become more difficult as the number of farms has increased, and due to the low environmental awareness of farm managers. The economic recession in agriculture reduced pressures on the environment, but they risk increasing with the upswing of input use and the reconstitution of animal herds.

3.6 Veterinary and phytosanitary legislation

3.6.1 Veterinary

The approximation of veterinary and phytosanitary legislation has progressed well. Negotiations on a veterinary and phytosanitary equivalency agreement between Hungary and the EU are ongoing. Further adaptation of legislation and/or enforcement systems are however necessary. The development of these aspects is referred to as a short and medium term priority in the National Programme for the Adoption of the Acquis, and in the Partnership Agreement.

The animal health situation appears to be satisfactory. Disease monitoring and surveillance plans, as well as contingency plans, have been elaborated and are being applied. A computerised network exists between central and county levels, including the Border Inspection Posts, but this network needs further development. Important EU principles such as safeguard clauses, additional guarantees and regionalisation still need to be introduced.

The application of EU animal welfare standards is pending ratification by the new Parliament.

A system of animal identification, registration and movement control is being set up.

(for more information on the Veterinary sector, see annex 4)

3.6.2 Phytosanitary

In the phytosanitary field, the Hungarian legislation which is currently applied conforms only partially with EU regulations. Here as well, approximation is progressing. A draft Plant Protection Act should be presented to the Parliament during the second semester of 1998.

Acts and decrees on the production and marketing of seeds and plant propagating material are mainly fully compatible with EU-Regulations.

Regulations relating to the placing of plant protection products on the market and fixing maximum levels for pesticide residues are also in line with the corresponding EU legislation.

Particular efforts are still needed in the following areas:

- Strengthening controls, both internal and at the external borders;
- Upgrading of the existing phytosanitary information system;
- Development of laboratories.

3.6.3 Food processing

Most food processing establishments still need upgrading to comply with the detailed hygiene and technical standards laid down in various EU Directives. The largest food manufacturers are already applying these standards, as well as the Certification and HACCP (Hazard Analysis Critical Control Point) principles.

4. Medium term outlook

4.1 Main hypotheses

This chapter brings together the report's findings in order to construct a possible mid-term scenario for Hungarian agriculture in the run-up to EU accession. Building on a tentative macro-economic scenario, and assuming the continuation of the reform process and preparations for accession, the concrete aim of the exercise is to establish projected supply balances for the main commodities, including production, domestic consumption and trade. The margin for error with such projections is great, but experience with the 1995 exercise has helped in gaining credibility. It remains to be emphasised that the following quantitative estimates, based on qualitative analysis and expert judgement, have to be interpreted carefully.

4.1.1 Overall economy

The growth of the agricultural economy relies heavily on general economic growth, the main reasons being:

- the development of food demand is to some extent dependent on GDP growth and consumer income;
- agriculture depends directly on upstream and downstream sectors;
- credit availability, dependent on interest rates, is a key factor for agriculture;
- the budgetary outlays which can be devoted to agriculture depend on overall growth.

Hungary experienced a severe recession from 1990-93; the decline came to an end in 1994, albeit with persistent imbalances. The abrasive macro-economic adjustment policy initiated in 1995 has enabled a significant improvement in external trade, the current account and public finances and the economy is now back to a sustainable growth. Provisionally put at 4.4% for 1997, this rate of growth in GDP is expected to be maintained, even slightly increased, in 1998 and 1999. However, household consumption is only recovering slowly, and unemployment is still at 8.7%, even after a strong fall in the labour force participation rate. This "reasonably optimistic scenario" was that envisaged in the 1995 projection exercise and it should continue to develop in the mid term.

As a cautious illustration, the growth in GDP up to 2003 could develop as indicated in the table 4.1.1.

4.1.2 Agricultural economy

Within the Hungarian economy, agriculture's share declined over the period 1990-93, but now appears to be stabilising at around 6%. Taking into account the close link between agriculture and the other sectors of the economy, the crucial political importance of agriculture for the trade balance, and a relatively favourable outlook for world market prices, it is not unreasonable to think that this share could be maintained or only slightly decrease. Agri-food exports, however, still depend significantly on export subsidies. In this context, Hungary has to comply with its

Table 4.1.1 : Illustrative assumptions of GDP growth

	1997	1998	1999	2000	2001	2002	2003
1995 exercise	+3	+4	+5	+5			
present exercise	+4,4	+4.5	+4.6	+4	+4	+4	+4

Source: authors' assumptions

commitments, as agreed by the 1997 waiver. Thus, the share of agri-food products in total exports is projected to go on falling.

After the slight setback in 1997, agriculture is resuming its growth, but at a slower pace than the overall economy.

4.1.3 Farm structures and the food industry

The privatisation and restructuring process has not led to farm structures in Hungary breaking up. Large-scale farms remain important while, besides traditional very small-scale production, a new individual, independent, middle-scale, commercial agriculture is appearing. This rather smooth evolution and the diversity of emerging structures can be considered as a positive factor.

However, there are still structural problems:

- the investment capacity of the different farm types is rather low: low self-financing capacity, lack of efficient long-term credit system;
- the control of land use is not always well established: corporate ownership is not allowed, private ownership is limited, the land market is not operational.

The rapid restructuring and modernisation of the food industry, largely under the influence of foreign capital, represents a favourable factor for Hungarian agriculture. In medium-term, this could also reduce the need for export subsidies, in line with the GATT commitments.

The share of household income spent on food is still high and food expenditure is therefore sensitive to income levels. Thanks to increasing incomes, the domestic demand for food is gradually recovering, and its structure is also changing.

4.1.4 Market policy

It is assumed that recent policy orientations will continue to develop: nominally high border protection with a number of preferences (e.g. Association Agreement, CEFTA Agreement), use of export subsidies, price support at a "low" level. This assumption is justified by different factors:

- despite the change of government, agricultural policy is expected to follow the basic principles of the National Agricultural Programme, paving the way for EU membership;
- in particular, given the crucial importance of agricultural exports, which count among the main objectives of the Programme, it is assumed that export refunds will still be used, within GATT limits – as laid down in the waiver.

4.2 Commodity projections

4.2.1 Land use

Consistent with the general trend in Europe, Hungary's total agricultural area is projected to decrease, but only by – 0.3%.

Arable land has proven to be fairly stable during the years of transition, and is therefore expected to remain close to its present level. Amongst arable crops, increasing specialisation should lead to a reduction in some marginal types of production, in favour of cereals and oilseeds.

Amongst permanent crops, vines will decline slightly, while orchards are likely to remain quite stable, as they currently benefit from replanting programmes. Permanent pastures could decrease marginally.

Land taken out of production could be planted with trees, as the government is likely to encourage further afforestation (table 4.2.0).

4.2.2 Cereals

Main assumptions

- no major change in the distribution of cereals;
- the area devoted to cereals in 1997 was unusually large (2.9 Mio ha) and not really in line with the previous years. For this reason, the projected area for 2003 is lower than in 1997, but slightly higher than the 1994-96 average;
- yields: taking the 1996-97 average level as the starting point, then paralleling the historical long-term trend (+ 0.085 t/ha/year) will lead in 2003/04 to a yield close to 5 t/ha; (the average yield for EU-15 in 1997/98 is 5.4 t/ha)
- development in feed use is linked to the number of animals;
- other uses: human utilisation will recover and by 2003 should have returned to the level of the early '90s, close to 140 kg per capita; seeds are linked to the area of the following year; other uses for 2003 are set at a level corresponding to the average for the '90s;
- imports are set at the GATT minimum access level (0.396 Mio t);
- exports are the result of the calculation (table 4.2.1).

Main results by 2003/04

Production will grow by 25% against 1996; in fact, by 2003, harvests should reach the good level achieved in 1997 again, as the result of improved yields. Production and yields will recover their pre-transition [8] levels.

Related to livestock numbers, feed use will be lower than in 1996 at the beginning of the period, but is expected to have recovered by 2000 and to increase further, up to 6.7 Mio t in 2003.

Exports of more than 4 Mio t will be necessary by 2000-2003. These volumes were already achieved in 1992 and in 1995. The GATT constraint for 2001 is 1.141 Mio t for wheat and 0.164 Mio t for maize. Non-subsidised exports of these crops, which have always constituted the bulk of cereals exports (80%), seem realistic.

These developments would lead to an increase in the self-sufficiency rate, up to 136%.

In the '95 report, as the starting point for yields was lower and domestic utilisation higher, the exportable surplus forecast for 2000 was only 2.4 Mio t.

Table 4.2.0 : Land use projections (000 ha)

	1996	2000	2003
Arable land	4713	4710	4710
of which			
cereals 2772	2820	2850	
oilseeds	577	590	601
sugarbeet	99	104	96
others	1265	1196	1163
Permanent crops	323	319	316
Permanent pastures	1148	1145	1140
TOTAL	**6184**	**6174**	**6166**

Table 4.2.1 : Cereals total

		1996	1997	2000	2003/04
area	000 ha	2810	2935	2820	2850
yield	t/ha	4,03	4,81	4,71	4,97
production	000 t	11310	14114	13296	14164
imports	000 t	92	41	396	396
exports	000 t	721	2318	4028	4175
available	000 t	10681		9664	10385
utilization					
o.w. feed	000 t	6194		6186	6727
o.w. seed	000 t	470		453	458
o.w. other uses	000 t	1400		1675	1750
o.w. human	000 t	1193		1350	1450
kg/capita	kg	117		133	137
selfsufficiency	%	122		138	136

[8] Pre-transition refers to an average figure for the years 1987 to 1989.

4.2.3 Oilseeds

Main assumptions

- area: slight increase (+20 000 ha) over the period 1996-2003, mainly devoted to sunflower;
- yields: taking 1996 as the starting point, then paralleling the historical long-term trend (+ 0.045 t/ha/year) will lead in 2003/04 to a yield of 2.1 t/ha;
- development of crushing capacity up to nearly 1 Mio t;
- slight increase in imports due to the absence of duty on imported oilseeds;
- exports are the result of the calculation (table 4.2.2).

Table 4.2.2 : Oilseeds

		1996	1997	2000	2003/04
area	000 ha	581	573	590	601
yield	t/ha	1,78	1,29	1,96	2,09
production	000 t	1034	737	1156	1259
imports	000 t	39		63	63
exports	000 t	347		202	283
available	000 t	725		1017	1039
utilization					
o.w. seed	000 t	15		17	19
o.w. processing	000 t	600		965	985
o.w. other uses	000 t	51		35	35
selfsufficiency	%	155		114	121

Main results by 2003

Production of oilseeds will grow to 1.25 Mio t (+20% against 1996, and +35% compared to pre-transition years). As a result of increased production and crushing capacity, exports of oilseed products – in particular sunflower oil – are likely to develop, while exports of oilseeds will be lower than in recent years. Exports of sunflower-seed and -oil will be over the GATT ceilings (respectively 71 000 and 146 000 t by 2001). Nevertheless, as domestic market prices for oilseeds and oils are at world market levels, Hungary will be able to export without subsidies.

At first glance, self-sufficiency in oilseeds will be lower than in the past, but this is linked to the increased crushing capacity.

The present results for 2000 are in the same order of magnitude as the '95 forecasts.

4.2.4 Sugar

Main assumptions

4.2.4.1 Sugarbeet

- area: slight decrease to 92 000 ha in 2003/04, as a result of the restructuring of the sector and of external constraints;
- yields: starting from the 1995-97 average, then an increment of 0.5 t/ha/year, leading in 2003/04 to a yield of 42.6 t/ha;
- exports: Hungary will still export sugarbeet to factories close to the border (table 4.2.3).

4.2.4.2 Sugar

- sugar content: taking 1997 as the starting point, then an increase of 0.1% per year, leading in 2003/04 to a sugar content of 13.5%;

Table 4.2.3 : Sugar beet and sugar

		1996	1997	2000	2003/04
area	000 ha	118	98	102	92
yield	t/ha	40	38	39	43
production	000 t	4687	3691	3947	3921
net trade	000 t	-151		-350	-350
sugar					
production	000 t	564	480	475	482
yield	t/ha	5	5	5	5
yield	% sugar	12	13	13	14
imports	000 t	1		5	5
exports	000 t	8		56	37
utilization	000 t	408		424	450
utilization/capita	kg	40		42	44
selfsufficiency	%	138		112	107

- sugar yield will reach 5.2 t/ha in 2003/04, compared with 7.8 t/ha today in the EU-15;
- imports are set at 5 000 t, above the minimum access quota (1000 t.);
- utilisation will recover to its end of '80s level of 450 000 t;
- exports are limited by the GATT constraint.

Main results by 2003/04

The production of sugar will be more or less the same as in 1997, around 480 000 t, slightly above domestic utilisation. Exports will start from a higher level than now, then gradually decrease because of the GATT constraint (32 000 t in 2000 and 2001).

In the '95 scenario, the restructuring of the sugar sector was expected to be faster and deeper and the reduction in areas by 2000 more extensive However, thanks to rationalisation, the improvement in yields would have led to higher production. Utilisation was also expected to recover faster.

4.2.5 Wine

Main assumptions

- area: continuation of the slight decrease in vineyards;
- grape yields: given the great variability in recent years, the starting point is the average for 1995-97; increments are applied on this basis to reach again the record level of 1996-97 by 2003/04;
- wine yields: average 1995-97 levels as the starting point, then an increment of 1.9 hl/ha/year leading in 2003/04 to 49.5 hl/ha, which corresponds to the 1990 record yield and is slightly above the present average for the EU-15 (49 hl/ha in 1996/97);
- imports: slight increase to 150 000 hl;
- consumption will recover its early '90s average level, i.e. 30 l/capita (to be compared with the current EU-15 average of 34 l/capita) (table 4.2.4).

Table 4.2.4 : Wine

Vineyards		1996	1997	2000	2003/04
prod. area	000 ha	100	99	96	93
yield	t/ha	6,7	7,2	6,7	6,9
production	000 t	665	717	638	642
grapes for wine	000 t	608	674	568	590
wine					
production	000 hl	4188	4472	4206	4605
yield	hl/ha	42	45,2	43,8	49,5
imports	000 hl	52		108	150
exports	000 hl	1062		1375	1695
utilization	000 hl	2759		2939	3060
l/capita	l	27		29	30
selfsufficiency	%	152		143	150

Main results by 2003/04

Wine production will rise to 4.6 Mio hl, to be compared with the pre-transition level of 4 Mio hl.

Wine exports will increase accordingly, up to 1.7 Mio hl, which is above the GATT ceiling (0.4 Mio hl in 2000 and 2001). However, some wine can be exported without refunds. Furthermore, the predicted volume of 1.7 Mio hl is still lower than exports during the pre-transition years (2.1 Mio hl), and exports of wine to former COMECON partners are expected to recover.

4.2.6 Livestock

Main assumptions

- Cattle: the starting point is the 1998 figure, on the basis of which a progressive increase is applied, ranging from 1% to 3% a year; the rhythm of recovery is limited, due to low investment capacity.
- Number of cows: same assumption as for cattle.
- Pigs and poultry: sizeable annual fluctuations make it difficult to pinpoint a trend in animal numbers since 1994; the starting point is the 1998 figure, which also corresponds to the average for 1995-98. Then, for pigs, there is a yearly increase ranging

from 2% to 3%. For poultry, a regular increment of 1% a year is applied.

- Sheep & goats: a slight increase on recent years, to reach a level of meat production fitting with domestic consumption of 1000 t (table 4.2.5).

Main results by 2003

The new forecasts are much lower than those made in 1995 because we then thought that the bottom had been reached and that recovery would start in 1996. This has not been the case, as animal numbers were still declining at the end of 1997. In the present forecasts the yearly increments have also been revised downwards, in comparison with 1995.

Table 4.2.5 : Livestock

		1997	1998	2000	2003
cattle	000	909	871	893	962
o.w. cows	000	390	403	413	445
pigs	000	5289	4931	5155	5606
poultry	0	32300	35665	36382	37484
sheep & goats	000	924	910	919	975

Table 4.2.6 : Fluid Milk

		1997	1998	2000	2003
cows	0	392	396	413	445
yield	kg/cow	5144	5073	5208	5358
fluid milk prod.	000 t	2016	2009	2152	2384
imports	000 t	21	16	20	20
exports	000 t	51	19	12	22
available	000 t	1986	2006	2159	2382
utilization					
feed	000 t	209	187	203	218
processing	000 t	874	1031	1040	1150
other	000 t	85	48	65	65
human	000 t	819	716	851	949
kg/capita	kg	80	70	84	93
selfsufficiency	%	102	101	100	100

4.2.7 Milk

Main assumptions

- milk yields will rise by 50 kg a year, reaching 5.36 t/cow in 2003;
- feed use: the starting point is the 1995-96 average, then it increases at the same rate as the number of cows;
- human consumption will recover and reach 93 kg/capita in 2003;
- processing: recovery up to 1.15 Mio t which is still below the pre-transition level of 1.3 Mio t;
- imports are kept constant at a low level;
- exports are the result of the balance sheet (table 4.2.6).

Main results by 2003

Milk production will increase to 2.4 Mio t, which is still below the pre-transition level of 2,8 Mio t.

External trade in fluid milk will remain relatively limited. Exports will level off at around 22 000 t. Selfsufficiency will be around 100%.

The 1995 projections did not detail milk utilisation. In the new forecasts, the number of cows increases at a slower pace but milk yields improve more rapidly. However, production by 2000 will be lower than predicted in 1995.

4.2.8 Beef/veal

Main assumptions

- total slaughters are based on a historical ratio between cattle and the number of slaughters; this ratio (32%) is rather low compared with other CEC's, because a significant number of live animals are exported. The historical ratio is progressively increased to 35%, the underlying assumption being a decline in exports of live animals;

- average weight is kept stable over time at 250 kg carcass weight;
- human consumption per capita is very low at present and will only increase marginally from 7.1 kg in 1996 to 8.7 kg in 2000. In a second stage, beef consumption could develop as incomes improve, and with a possible shift in consumer preferences. Beef consumption in 2003 is estimated at 9.1 kg/capita;
- exports are kept constant at 5 000 t (the GATT constraint applying in 2001 for subsidised exports of beef and cattle is 83 000 t);
- imports are the result of the balance sheet and by 2003 would be more or less in line with the GATT minimum access (14 000 t) (table 4.2.7).

Table 4.2.7 : Beef/Veal

		1997	1998	2000	2003
cattle	0	910	928	893	962
total slaughters	0	287	271	295	337
average weight	kg	240	232	250	250
production	000 t	69	63	74	84
imports	000 t	19	13	20	15
exports	000 t	20	21	5	5
utilization	000 t	82	72	88	94
kg/capita	kg	8	7,1	8,7	9,2
selfsufficiency	%	84	87	84	90

Main results by 2003

Between 1996 and 2003 beef production will increase substantially (by 34%). However, the 2003 level is still well below the pre-transition average production of 120 000 t.

While self-sufficiency was over 160% in the early'90s, Hungary will not be self-sufficient in beef meat. Nevertheless, the situation will slightly improve, with a rate of 90% by 2003.

These results depend on the trade in live animals, which is assumed to decrease.

In the '95 projections, imports were predicted to be higher, in line with a stronger growth in beef consumption.

4.2.9 Pigmeat

Main assumptions

- the slaughter number is determined by recent developments in production cycle, (around 9 months) taking into account total pig numbers (breeders/fatteners);
- average carcass weight will decrease slightly from 97 kg to 95 kg, still above the present EU average (90 kg);

Table 4.2.8 : Pigmeat

		1997	1998	2000	2003
pig numbers	0	4356	5032	5155	5606
total slaughters	0	6113	7408	7160	7786
average weight	kg	97	97	96	95
production	000 t	594	721	687	740
imports	000 t	51	19	20	20
exports	000 t	113	175	101	129
utilization	000 t	532	570	606	630
kg/capita	kg	51,9	55,8	59,8	61,8
selfsufficiency	%	112	126	113	117

- after reaching a trough, human consumption will increase annually by 1 kg/capita up to 2000, and then at a lower pace, as a consequence of the possible shift towards beef consumption;
- trade in live animals is not taken into account, as this has been very limited since 1992;
- imports of meat are kept constant at the level of GATT minimum access (20 000 t);
- exports of meat are the result of the balance sheet (table 4.2.8).

Main results by 2003

Pig production is not expected to increase faster than demand and could reach 0.74 Mio t in 2003, well below the pre-transition level of 1 Mio t. This rather modest rhythm of recovery is justified by the poor

efficiency of pig production: concentration in small farms, inefficient animal feeding, quality problems.

Exports will be equivalent to the average for the period 1994-96, being slightly above the GATT limit for the pig sector (live animals + meat = 126 000 t) which applies from 2000 to 2001. The net exporting position of Hungary would worsen, self-sufficiency falling to 117% by 2003.

The '95 scenario was more optimistic, both for supply and for domestic demand. Under the present scenario, trade with other CEC's is more important.

Table 4.2.9 : Poultrymeat

		1997	1998	2000	2003
poultry numbers	Mio	38,4	35,7	36,4	37,5
total slaughters	Mio	222	200	209	205
average weight	kg	1,75	1,85	1,75	1,85
production	000 t	390	369	365	380
imports	000 t	1	1	11	11
exports	000 t	109	122	96	94
utilization	000 t	281	247	280	297
kg/capita	kg	27,5	24,2	27,6	29,1
selfsufficiency	%	138	149	131	128

Table 4.2.10 : Total meat

		1997	1998	2000	2003
production (*)	000 t	1053	1153	1127	1205
imports	000 t	71	33	51	46
exports	000 t	243	318	203	229
utilization	000 t	884	895	975	1022
kg/capita	kg	86	88	99	103
o.w. beef	kg	8	7,1	8,7	9,2
o.w. pigmeat	kg	51,9	55,8	59,8	61,8
o.w. poultrymeat	kg	27,5	24,2	27,6	29,1
selfsufficiency	%	119	129	116	118

(*) sheep and goatmeat production and utilization estimated at 1000 t in 2000 and 2003

4.2.10 Poultrymeat

Main assumptions

- the slaughter number is determined by the historical production cycle, between 50 and 60 days, taking into account a further shift towards turkey;
- starting from the 1994-95 level, average weight will increase slightly to 1.85 kg (a level already obtained in 1996); this is also a result of the shift towards turkey;
- starting from the 1995-96 average, human utilisation per capita will increase by 0.5 kg a year to reach 30 kg in 2003;
- imports are put at the GATT minimum access level of 11 000 t. This means that imports are increasing, as a result of a greater opening of the domestic market due to the CEFTA agreement;
- exports are the result of the balance sheet (table 4.2.9).

Main results by 2003

Poultrymeat production could reach 380 000 t, which is equivalent to the 1995-96 average. Exports will be below the GATT limit of 111 000 t and well below the 1995-96 average.

The '95 projections were more optimistic on the production side, resulting in a higher trade surplus.

4.2.11 Total meat

As a result of the beef, pig and poultrymeat projections and also taking sheep and goatmeat into account, total meat production and utilisation would increase by the same rate between 1995 and 2003 (14%). Production would only represent 75% of the pre-transition level, while utilisation would nearly have recovered (90%) (table 4.2.10).

Total meat utilisation per capita would be more than 100 kg, of which over 60% would be pigmeat, which remains by far Hungary's preferred meat. This total is higher than today's EU-15 average (90 kg/head) but in the same range as the EU's biggest meat consumer, Spain (104 kg).

4.2.12 Summary of expected developments

Table 4.2.11 offers a summary of the tentative outlook, in terms of percentage change over the period "1994-96"/2003. The results obtained for 2003 are compared with the average level for 1994-96. The rates applied to inputs (areas or livestock units) reflect the assumptions, while output growth rates are the result of calculations.

There will be an overall increase in output, with one exception: the reduction in areas planted with sugarbeet should result in a slight fall of sugar production. However, this effect is nearly offset by the improvement in yields, both for sugarbeet and for sugar itself.

Taking the rate of growth over the period 1996-2003 and dividing it by the number of years gives an estimation of the annual rate of growth. However, for pigmeat and beef, production in 1996 is not an appropriate reference:

- The production of pigmeat in 1996 was significantly higher than in previous years (+20% against 1995). Compared with this level, there is only a modest annual growth.
- Conversely, beef production reached a trough in 1996, the lowest point of the decade, from which it is assumed it will recover. The annual growth rate for beef (5%) is higher than for any other commodity. Nevertheless, this growth is still modest, as the forecast beef production for 2003 is only equivalent to 70% of pre-transition levels.

The comparison between the pre-transition levels of output and the results obtained for 2003 highlights a divergent evolution between crops and livestock: by 2003, crop production should have recovered and – except for cereals – be even higher than in pre-transition years. In contrast, the production of meat and milk would still be lower than pre-transition.

Table 4.2.11 : Outlook for the main commodities

	expected growth over "1994-96"/2003			av. yearly growth of output 96/2003	2003 as % of "1987-89" output
Commodity	**area**	**yields**	**output**		
Cereals	1%	24%	24%	4%	97%
Oilseeds	14%	24%	42%	3%	135%
Sugar	-21%	31%	-2%	-2%	104%
Wine	-7%	34%	24%	1%	118%
	livestock				
Milk		12%	19%	3%	84%
Beef/Veal		2%	24%	5%	71%
Pigmeat		17%	15%	0,40%	72%
Poultry		4%	4%	0,40%	83%
Total meat			12%	0,60%	75%

Annex 1: Tables and regional maps

1.1 AGRICULTURAL PRODUCTION AND CONSUMPTION

(tables and regional maps)

1.1 Tables: Supply balances for individual cereals

1.2 Map: Regional share of cereal production

1.3 Tables: Supply balances for individual oilseeds

1.4 Table: Supply balance for apples

1.5 Map: Regional share of sugarbeet, fruit and wine

1.6 Map: Regional share of livestock

1.7 Map: Number of cattle per 100 ha of agricultural area

1.8 Map: Number of pigs per 100 ha of agricultural area

1.9 Table: Total meat supply balance

1.2 REGIONAL ECONOMY (maps)

1.10: Regional GDP per capita

1.11: Regional unemployment rate

1.12: Share of agriculture in regional GDP

1.13: Regional GAO/inhabitant

1.14: Regional share of agriculture in employment

1.3 AGRICULTURE AND ENVIRONMENT (maps)

Source for these maps:

BirdLife International (August 1997): Proposals for pre-accession agri-environment schemes in Hungary

1.15: High Value Natural Areas in Hungary

1.16: Designated sites in Hungary

1.17: Proposed Environmentally Sensitive Areas in Hungary

1.4 TRADE POLICY

1.18: 1997 tariffs

1.19: Export subsidies: reduction commitments

1.20: Domestic support: reduction commitments

Annex 1.1 : Wheat supply balance

		1989	1990	1991	1992	1993	1994	1995	1996	1997
area	000 ha	1242	1221	1158	848	986	1059	1110	1193	1247
yield	t/ha	5,26	5,08	5,19	4,07	3,06	4,6	4,16	3,28	4,22
production	000 t	6540	6198	6008	3453	3021	4874	4614	3910	5258
stock change	000 t	-28	-75	-501	916	-369	-925	1609	-1023	
imports	000 t	2	21	72	1	57	64	12	21	
exports	000 t	1526	1223	1123	990	117	862	3315	405	
available for util.	000 t	4988	4921	4457	3380	2592	3150	2920	2503	
utilization										
feed	000 t	2782	2593	2269	1171	866	1454	1289	898	
seed	000 t	390	361	306	289	273	266	276	243	250
food	000 t	1432	1442	1308	1327	1232	1154	1113	1120	
other	000 t	384	525	574	593	222	276	242	242	
food in kg/capita	kg	137	139	126	128	119	112	109	110	
self sufficiency	%	131	126	135	102	117	155	158	156	

Annex 1.1 : Barley supply balance

		1989	1990	1991	1992	1993	1994	1995	1996	1997
area	000 ha	283	297	357	480	429	423	393	326	370
yield	t/ha	4,74	4,61	4,36	3,59	2,65	3,69	3,58	2,83	3,59
production	000 t	1340	1369	1555	1723	1138	1558	1408	921	1330
stock change	000 t	7	-150	-18	43	175	-279	302	237	
imports	000 t	133	371	208	13	78	263	31	56	
exports	000 t	185	16	78	383	30	38	184	76	
available for util.	000 t	1295	1574	1668	1396	1362	1504	1557	1137	
utilization										
feed	000 t	993	947	1013	962	938	1154	1284	900	
seed	000 t	70	76	78	94	92	83	1284	53	53
food	000 t	4	0	0	1	0	0	0	0	
other	000 t	228	551	577	339	332	268	-1011	184	
food in kg/capita	kg	0	0	0	0	0	0	0	0	
self sufficiency	%	103	87	93	123	84	104	90	81	

Annex 1.1 : Maize supply balance

		1989	1990	1991	1992	1993	1994	1995	1996	1997
area	000 ha	1105	1082	1154	1207	1156	1237	1033	1053	1059
yield	t/ha	6,33	4,16	6,71	3,65	3,5	3,85	4,53	5,69	6,45
production	000 t	6996	4500	7745	4405	4044	4761	4680	5989	6828
stock change	000 t	-543	1617	-1611	3855	240	508	860	-701	
imports	000 t	143	145	178	3	8	9	4	26	
exports	000 t	219	156	498	2525	172	188	644	169	
available for util.	000 t	6376	6106	5814	5738	4120	5090	4900	5146	
utilization										
feed	000 t	5447	5097	4532	4607	3105	4067	3698	3962	
seed	000 t	37	38	85	100	75	60	63	46	46
food	000 t	15	6	7	11	6	9	7	6	
other	000 t	877	965	1189	1020	934	954	1132	1131	
food in kg/capita	kg	0	0	0	0	0	0	0	0	
self sufficiency	%	110	74	133	77	98	94	96	116	

Annex 1.1 : Rye supply balance

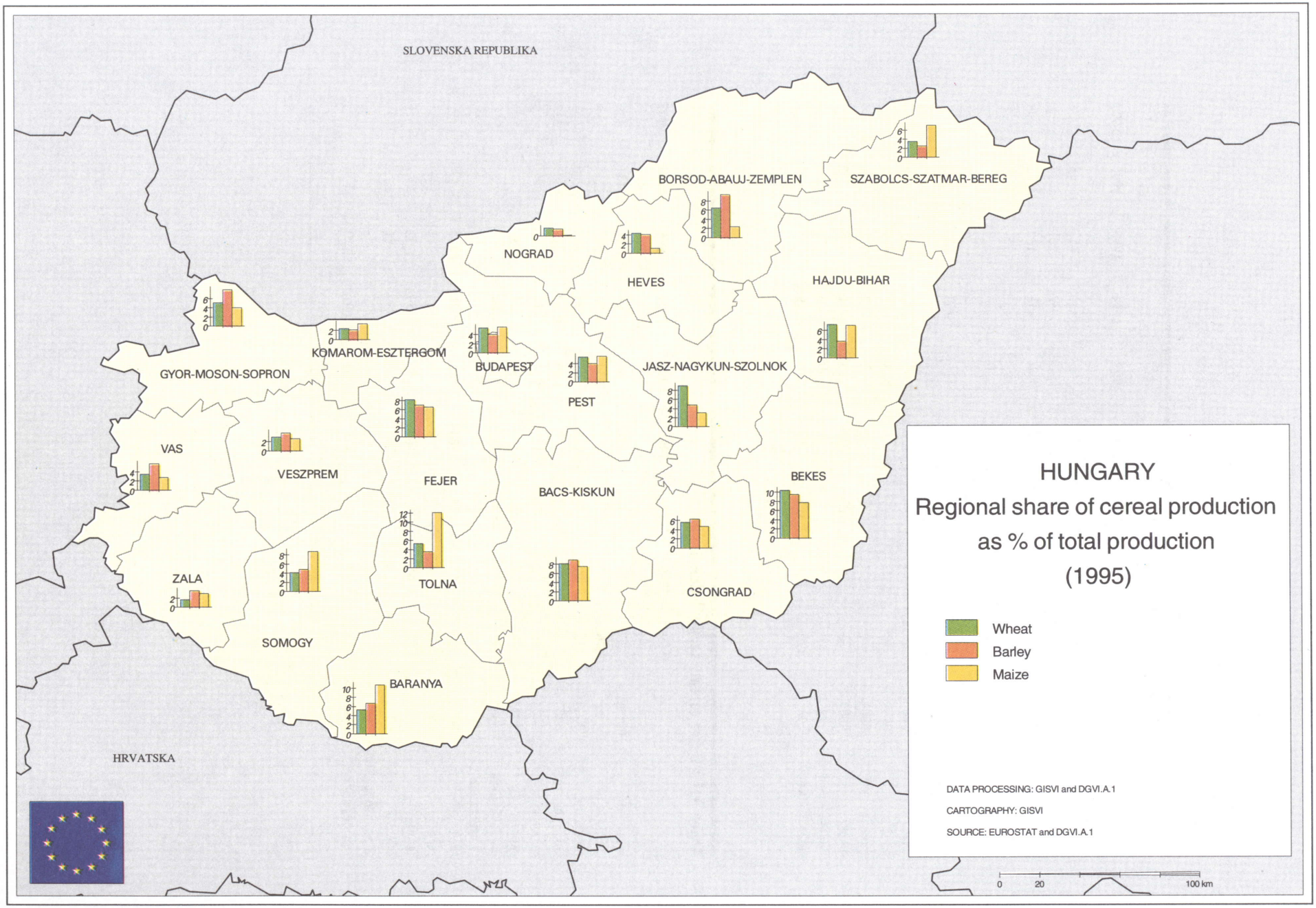
		1989	1990	1991	1992	1993	1994	1995	1996	1997
area	000 ha	97	92	94	71	68	88	77	59	67
yield	t/ha	2,76	2,53	2,37	1,92	1,67	2,18	2,23	1,66	2,27
production	000 t	267	232	223	136	113	193	171	98	153
stock change	000 t	-9	11	-23	77	21	-52	39	28	
imports	000 t	15	20	10	0	3	28	0	4	
exports	000 t	1	2	0	5	4	6	20	5	
available for util.	000 t	271	261	210	208	133	162	191	125	
utilization										
feed	000 t	167	178	131	143	77	115	147	91	
seed	000 t	20	20	15	12	10	17	16	11	11
food	000 t	37	34	34	28	14	14	14	13	
other	000 t	47	29	30	25	32	16	15	10	
food in kg/capita	kg	0	0	0	0	0	0	0	0	
self sufficiency	%	98	89	106	65	85	119	89	78	

Annex 1.1 : Oats supply balance

		1989	1990	1991	1992	1993	1994	1995	1996	1997
area	000 ha	45	48	51	52	53	56	53	48	53
yield	t/ha	3,34	3,41	2,65	2,81	1,82	2,32	2,61	2,33	2,6
production	000 t	149	163	135	147	96	131	139	112	138
stock change	000 t	2	-12	-28	13	27	5	-1	21	
imports	000 t	0	0	0	0	0	0	0	5	
exports	000 t	11	4	1	8	7	3	6	5	
available for util.	000 t	141	147	106	152	116	133	132	133	
utilization										
feed	000 t	105	110	76	114	93	111	115	120	
seed	000 t	13	9	7	8	8	8	8	7	7
food	000 t	0	0	2	1	2	2	1	1	
other	000 t	23	28	21	29	13	11	8	5	
food in kg/capita	kg	0	0	0	0	0	0	0	0	
self sufficiency	%	106	111	128	97	83	99	105	84	

Annex 1.1 : Other cereals supply balance

		1989	1990	1991	1992	1993	1994	1995	1996	1997
area	000 ha	33	27	37	51	46	65	85	131	139
yield	t/ha	3,76	3,66	3,56	2,3	2,34	3,06	2,97	2,15	2,94
production	000 t	125	99	132	117	107	198	253	280	407
stock change	000 t	11	17	-53	-20	49	-59	15		
imports	000 t	23	22	26	113	50	-11	-17		
exports	000 t	24	18	35	352	33	24	39		
available for util.	000 t	135	120	70	-142	174	104	213		
utilization										
feed	000 t	67	53	25	74	66	101	227		
seed	000 t	5	4	7	8	8	11	15		
food	000 t	51	45	55	60	55	50	52		
other	000 t	12	18	-18	-284	45	-59	-81		
food in kg/capita	kg	5	4	5	6	5	5	5		
self sufficiency	%	93	83	189	-82	62	191	119		


SLOVENSKA REPUBLIKA
BORSOD-ABAUJ-ZEMPLEN
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BUDAPEST
JASZ-NAGYKUN-SZOLNOK
GYOR-MOSON-SOPRON
PEST
VAS
VESZPREM
FEJER
BACS-KISKUN
BEKES
ZALA
TOLNA
CSONGRAD
SOMOGY
BARANYA
HRVATSKA
HUNGARY
Regional share of cereal production
as % of total production
(1995)
Wheat
Barley
Maize
DATA PROCESSING: GISVI and DGVI.A.1
CARTOGRAPHY: GISVI
SOURCE: EUROSTAT and DGVI.A.1
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Annex 1.3 : Rapeseed supply balance

		1989	1990	1991	1992	1993	1994	1995	1996	1997
area	000 ha	52	60	66	35	22	28	45	94	89
yield	t/ha	1,89	1,76	1,68	1,28	1	1,87	1,96	1,47	1,63
production	000 t	98	106	112	44	22	53	89	138	145
stock change	000 t	-1	-14	-15	19	22	-2	-4	18	
imports	000 t	0	1	0	0	1	8	18	3	
exports	000 t	38	30	46	40	25	36	71	121	
available for util.	000 t	59	63	51	24	20	24	32	38	
utilization										
seed	000 t	1	1	2	3	1	0	1	3	
processed	000 t	59	62	49	21	19	23	31	35	
other	000 t	0	0	0	0	0	0	0	0	
self sufficiency	%	167	167	220	188	110	226	277	364	

Source CSO

Annex 1.3 : Sunflower supply balance

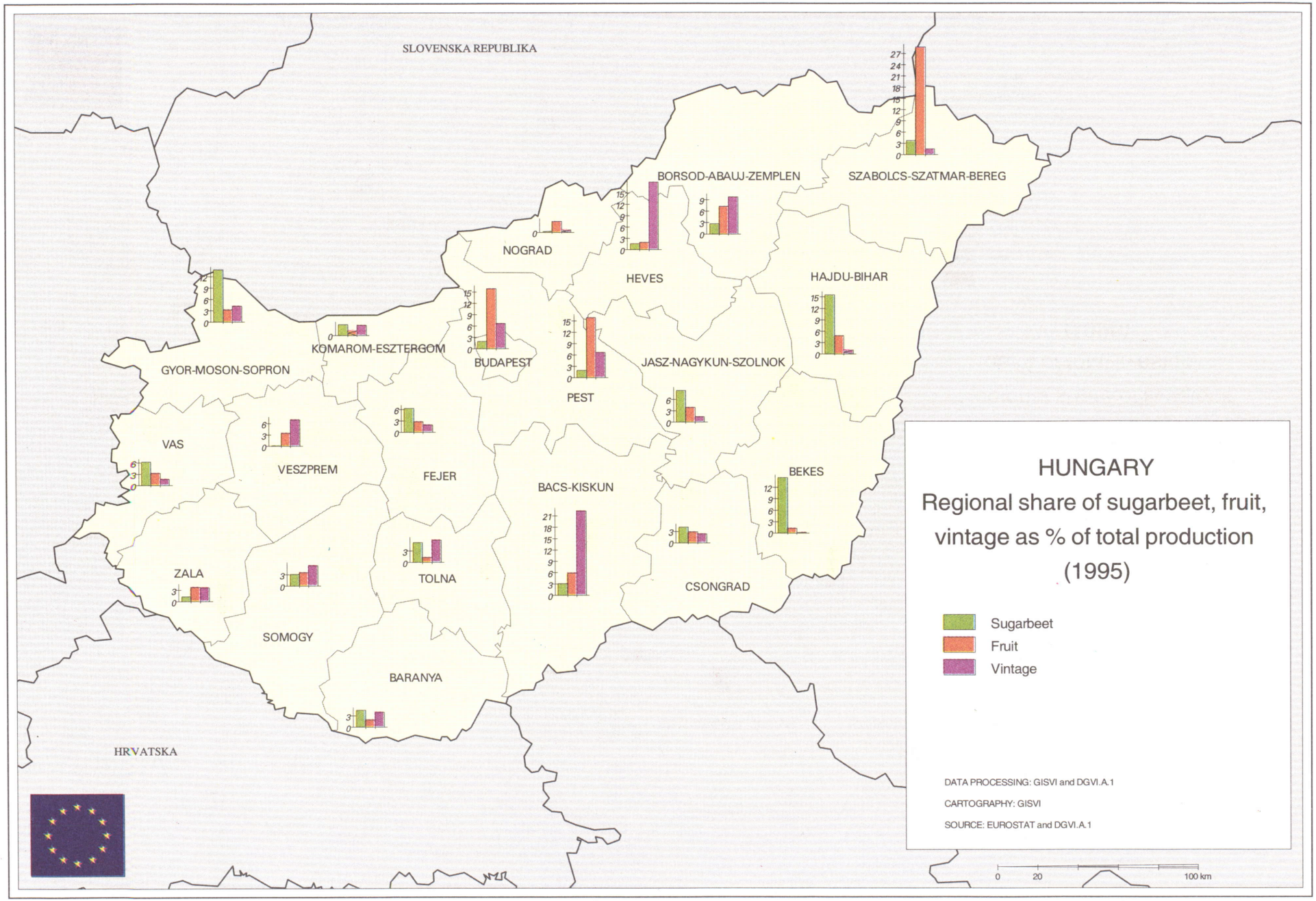
		1989	1990	1991	1992	1993	1994	1995	1996	1997
area	000 ha	359	347	393	430	389	416	491	474	440
yield	t/ha	1,95	1,97	2,07	1,78	1,75	1,6	1,61	1,83	1,23
production	000 t	699	684	813	765	682	667	789	868	540
stock change	000 t	-33	-24	-107	180	186	25	-42	-76	
imports	000 t	44	108	7	9	13	72	34	30	
exports	000 t	66	37	115	109	297	271	249	220	
available for util.	000 t	644	731	598	844	584	493	531	602	
utilization										
feed	000 t	4	6	5	52	37	14	18	35	
seed	000 t	3	4	7	21	15	8	7	9	
processed	000 t	635	719	579	768	530	466	500	550	
other	000 t	2	2	7	3	2	5	7	8	
self sufficiency	%	109	94	137	97	125	139	154	153	

Annex 1.3 : Soyabeans supply balance

		1989	1990	1991	1992	1993	1994	1995	1996	1997
area	000 ha	54	42	25	28	15	9	10	13	14
yield	t/ha	2,2	1,29	2,3	1,43	1,72	1,84	1,85	2,11	2,21
production	000 t	118	54	58	40	26	17	19	27	31
stock change	000 t	-19	6	4	1	7	2	-3	0	
imports	000 t	2	1	0	2	5	8	8	5	
exports	000 t	7	22	28	21	20	6	1	6	
available for util.	000 t	94	40	33	22	18	22	24	26	
utilization										
feed	000 t	31	18	15	5	2	6	3	8	
seed	000 t	5	4	14	12	11	6	9	4	
processed	000 t	17	17	4	5	5	10	12	15	
other	000 t	41	0	0	0	0	0	0	0	
self sufficiency	%	188	250	324	236	158	104	90	148	

Annex 1.4 : Apples supply balance

		1989	1990	1991	1992	1993	1994	1995	1996	1997
production	000 t	959	945	859	666	819	657	353	552	500
stock change	000 t	70	50	-55	53	-67	80	63	-117	
imports	000 t	10	12	8	1	1	3	45	31	
exports	000 t	653	730	416	200	232	97	34	54	
available	000 t	386	278	395	520	521	643	427	412	
utilization										
feed	000 t	1	1	1	1	2	1	1	1	
processing	000 t	104	13	218	301	250	340	225	200	
food		257	258	173	217	267	301	200	210	
other	000 t	24	5	3	1	2	1	1	1	
food in kg/capita	kg	0	0	0	0	0	0	0	0	
selfsufficiency	%	248	341	217	128	157	102	83	134	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BEKES
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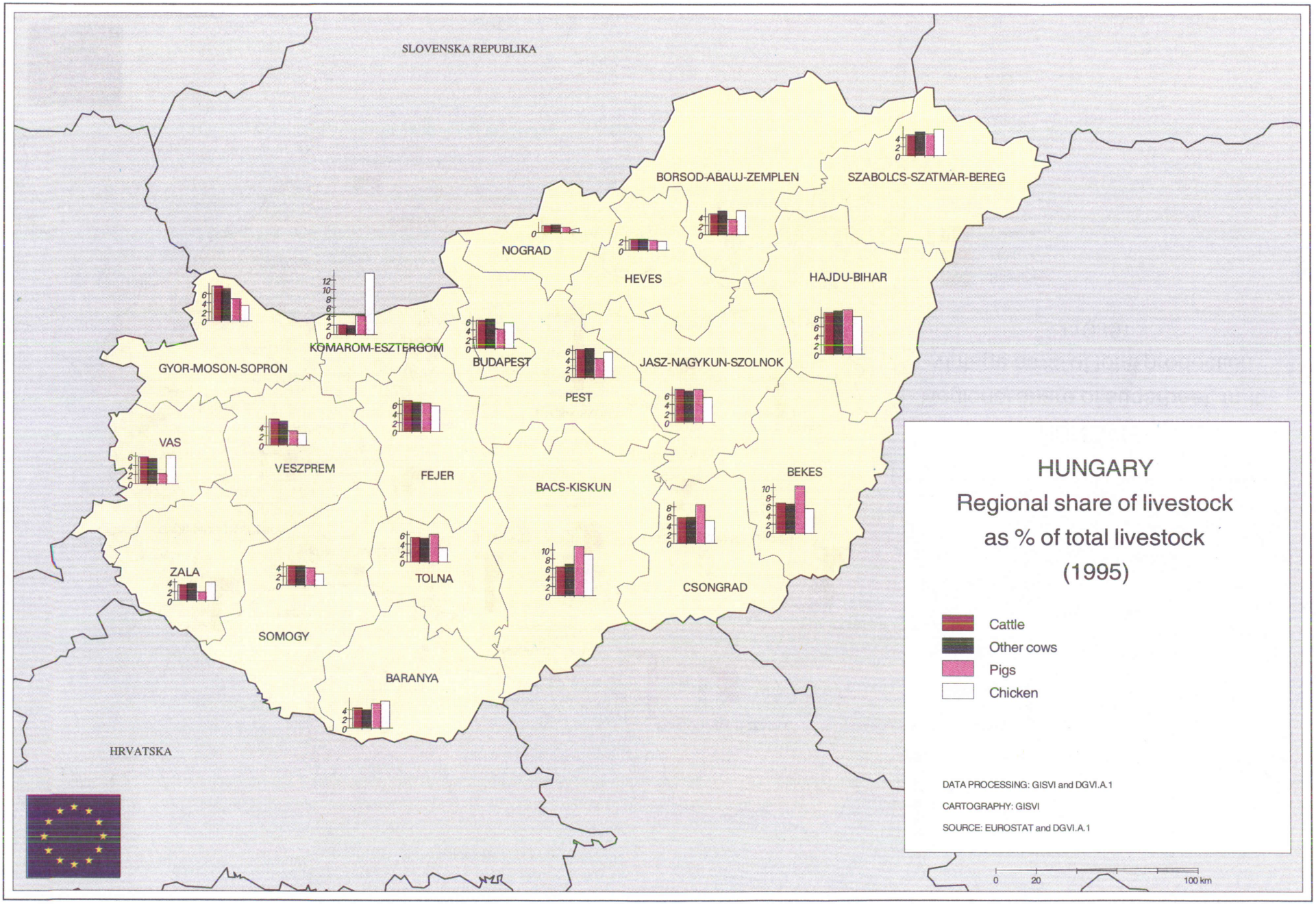
TOLNA
CSONGRAD
SOMOGY
BARANYA
HRVATSKA
HUNGARY
Regional share of sugarbeet, fruit, vintage as % of total production (1995)
Sugarbeet
Fruit
Vintage
DATA PROCESSING: GISVI and DGVI.A.1
CARTOGRAPHY: GISVI
SOURCE: EUROSTAT and DGVI.A.1
0
20
100 km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CSONGRAD
SOMOGY
BARANYA
HRVATSKA
HUNGARY
Regional share of livestock
as % of total livestock
(1995)
Cattle
Other cows
Pigs
Chicken
DATA PROCESSING: GISVI and DGVI.A.1
CARTOGRAPHY: GISVI
SOURCE: EUROSTAT and DGVI.A.1
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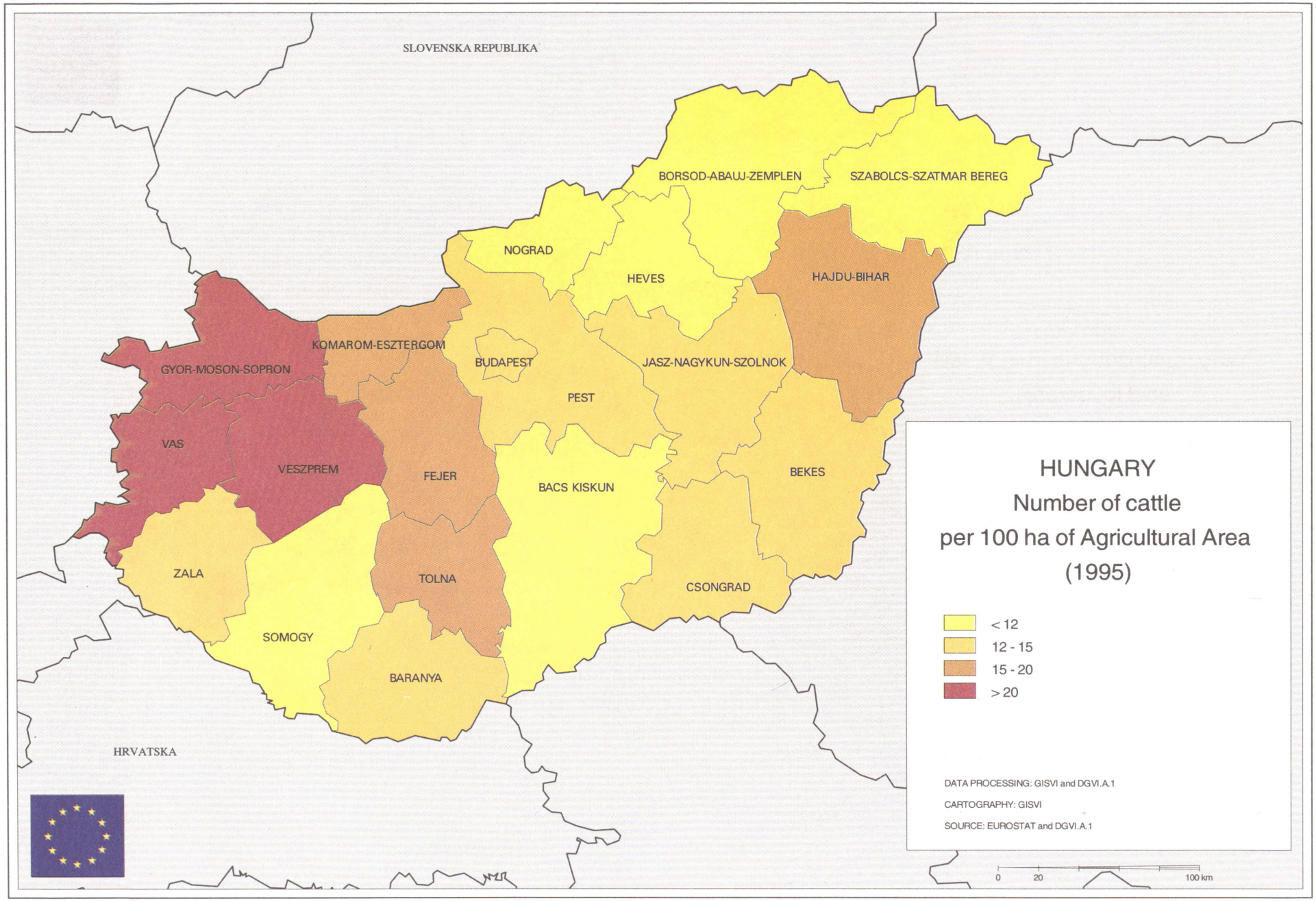
100 km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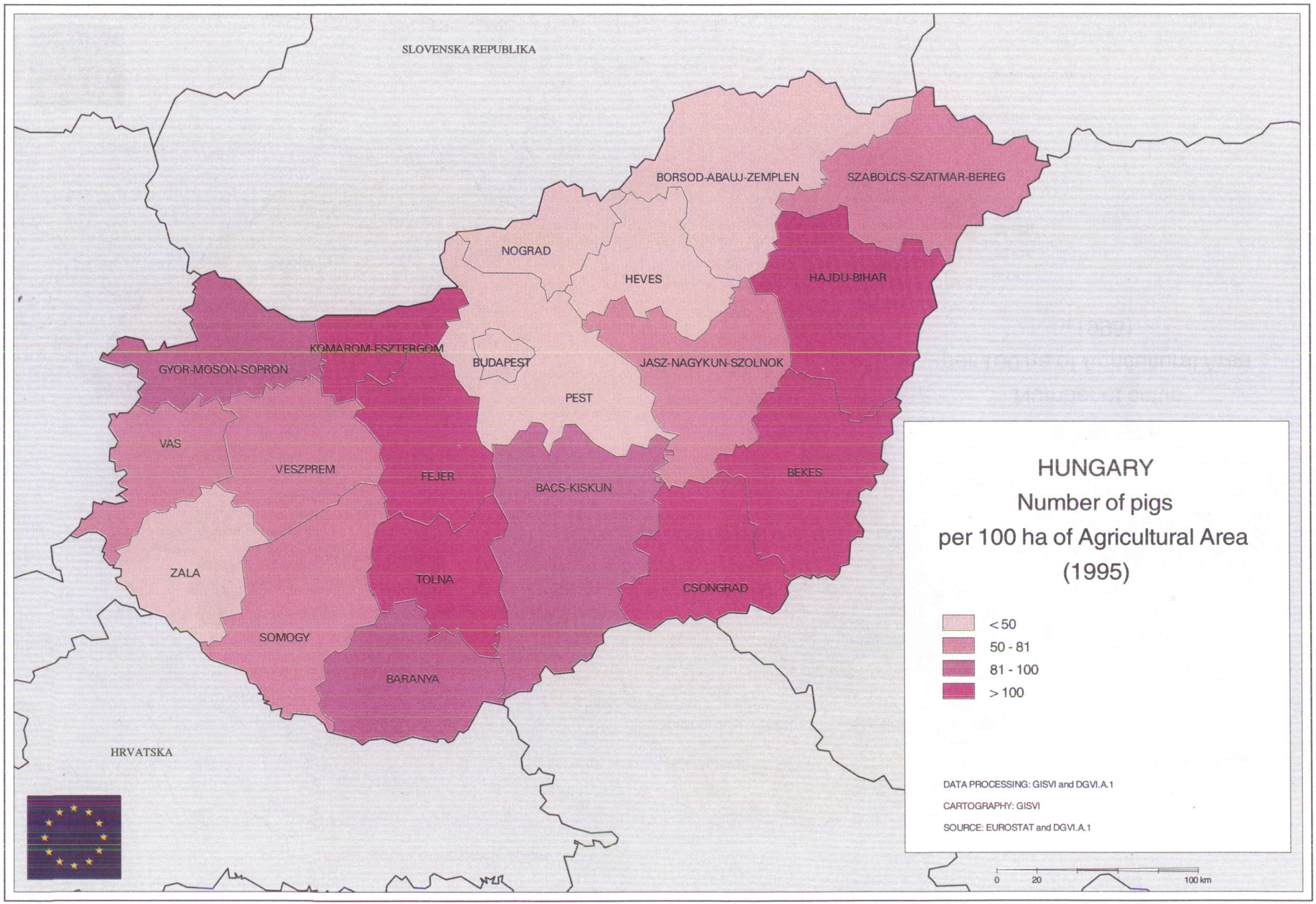
BACS KISKUN
BEKES
ZALA
TOLNA
CSONGRAD
SOMOGY
BARANYA
HRVATSKA
HUNGARY
Number of cattle
per 100 ha of Agricultural Area
(1995)
< 12
12 - 15
15 - 20
> 20
DATA PROCESSING: GISVI and DGVI.A.1
CARTOGRAPHY: GISVI
SOURCE: EUROSTAT and DGVI.A.1
0
20
100 km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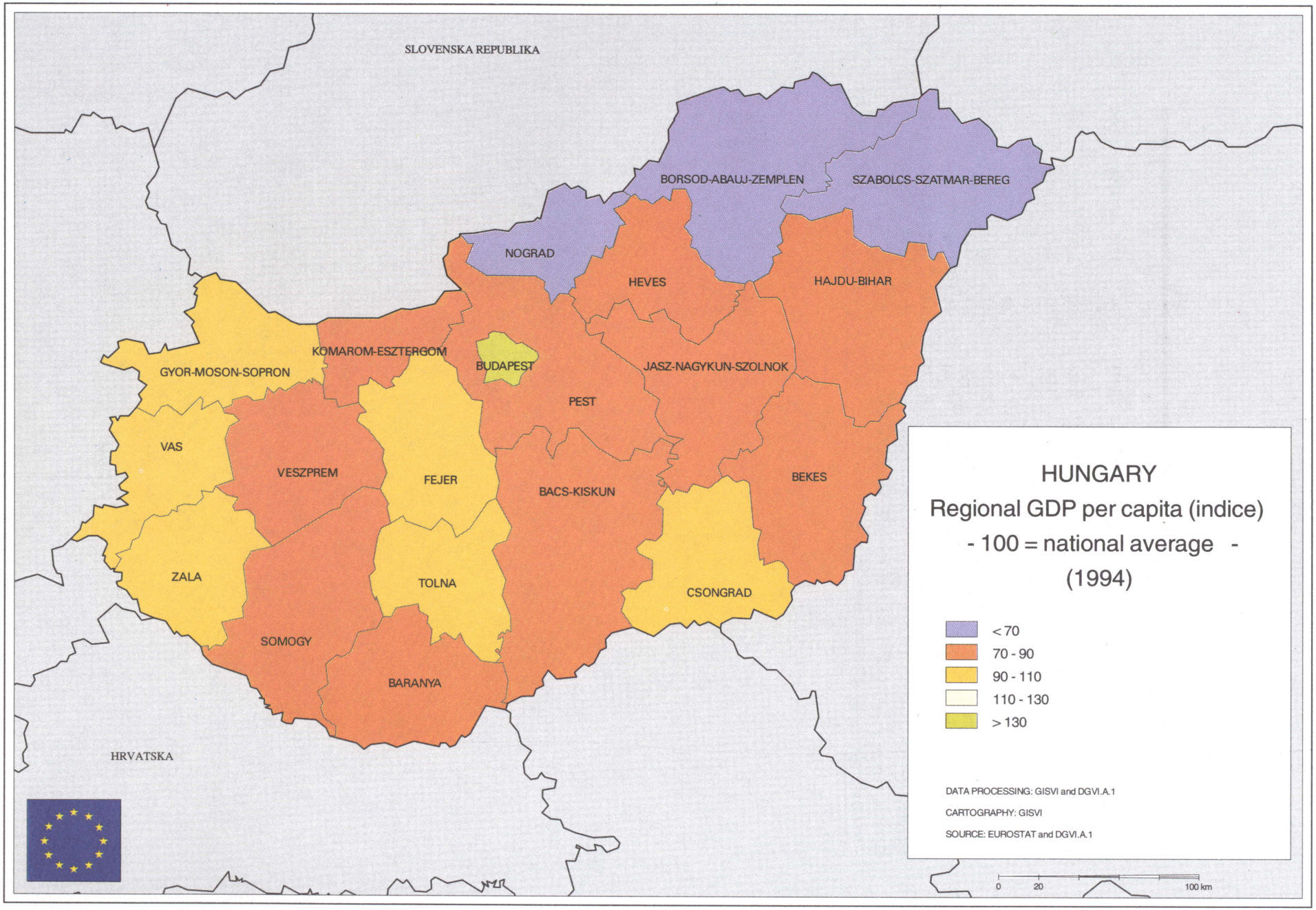
FEJER
BACS-KISKUN
BEKES
ZALA
TOLNA
CSONGRAD
SOMOGY
BARANYA
HRVATSKA
HUNGARY
Number of pigs
per 100 ha of Agricultural Area
(1995)
< 50
50 - 81
81 - 100
> 100
DATA PROCESSING: GISVI and DGVI.A.1
CARTOGRAPHY: GISVI
SOURCE: EUROSTAT and DGVI.A.1
0
20
100 km

Annex 1.9 : Total meat supply balance

		1989	1990	1991	1992	1993	1994	1995	1996	1997
production	000 t	1571	1575	1405	1227	1084	1022	1053	1153	
o.w. indigenous	000 t	1717	1642	1503	1293	1149	1093	1125	1196	
stock change	000 t	-2	-21	3	-14	3	1	2	27	
imports	000 t	14	10	3	16	38	96	71	33	
exports	000 t	424	495	408	213	199	197	243	318	
utilization	000 t	1159	1069	1003	1016	927	922	884	895	
kg/capita	kg	111	103	97	98	90	90	86	88	
selfsufficiency (1)	%	148	154	150	127	124	119	127	134	
selfsufficiency (2)	%	136	147	140	121	117	111	119	129	

(1) based on "indigenous" production taking into account trade of life animals transformed in carcass.

(2) based on production without taking into account trade of life animals.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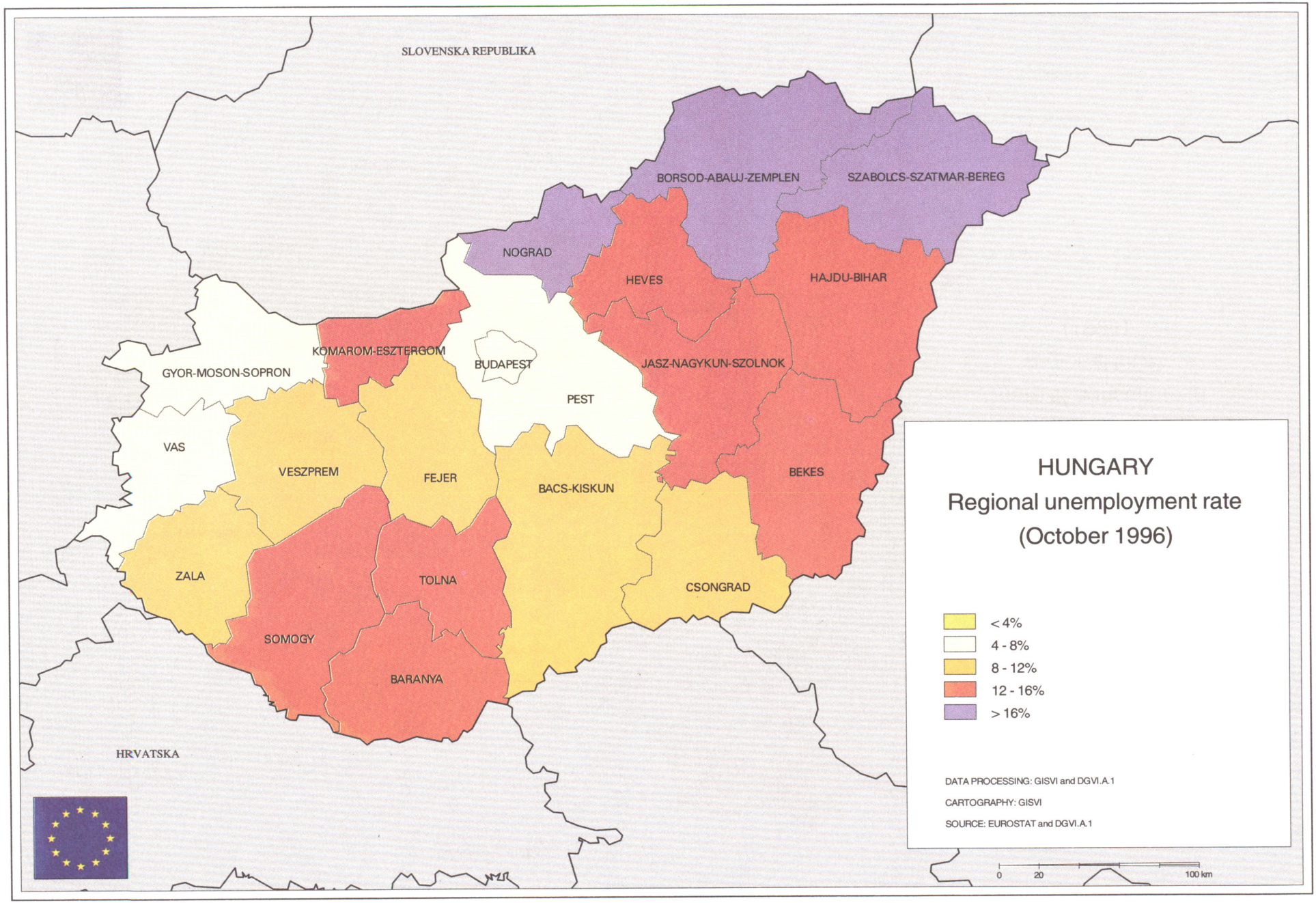
FEJER
BACS-KISKUN
BEKES
ZALA
TOLNA
CSONGRAD
SOMOGY
BARANYA
HRVATSKA
HUNGARY
Regional GDP per capita (indice)
- 100 = national average -
(1994)
< 70
70 - 90
90 - 110
110 - 130
> 130
DATA PROCESSING: GISVI and DGVI.A.1
CARTOGRAPHY: GISVI
SOURCE: EUROSTAT and DGVI.A.1
0
20
100 km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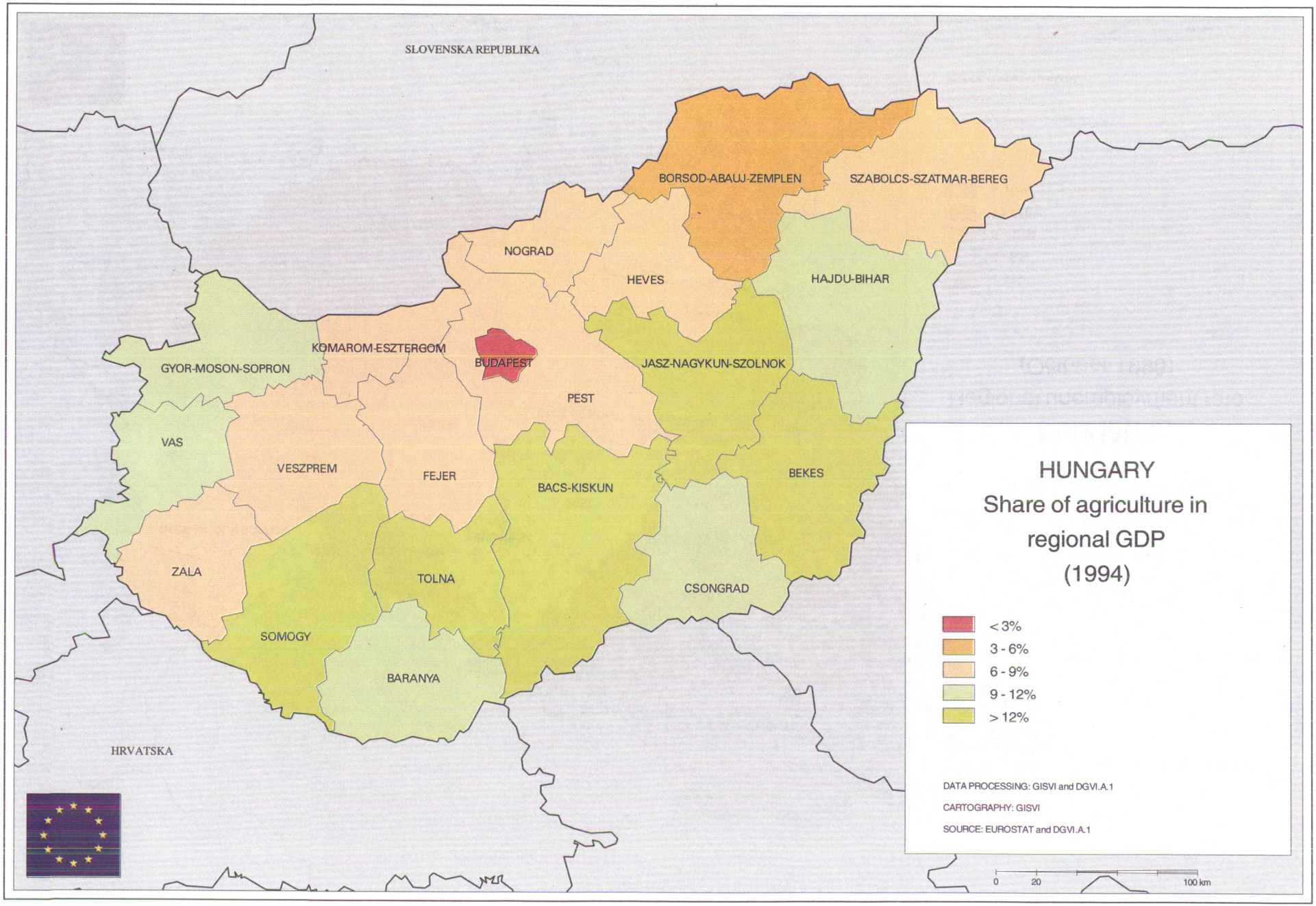
FEJER
BACS-KISKUN
BEKES
ZALA
TOLNA
CSONGRAD
SOMOGY
BARANYA
HRVATSKA
HUNGARY
Regional unemployment rate
(October 1996)
< 4%
4 - 8%
8 - 12%
12 - 16%
> 16%
DATA PROCESSING: GISVI and DGVI.A.1
CARTOGRAPHY: GISVI
SOURCE: EUROSTAT and DGVI.A.1
0
20
100 km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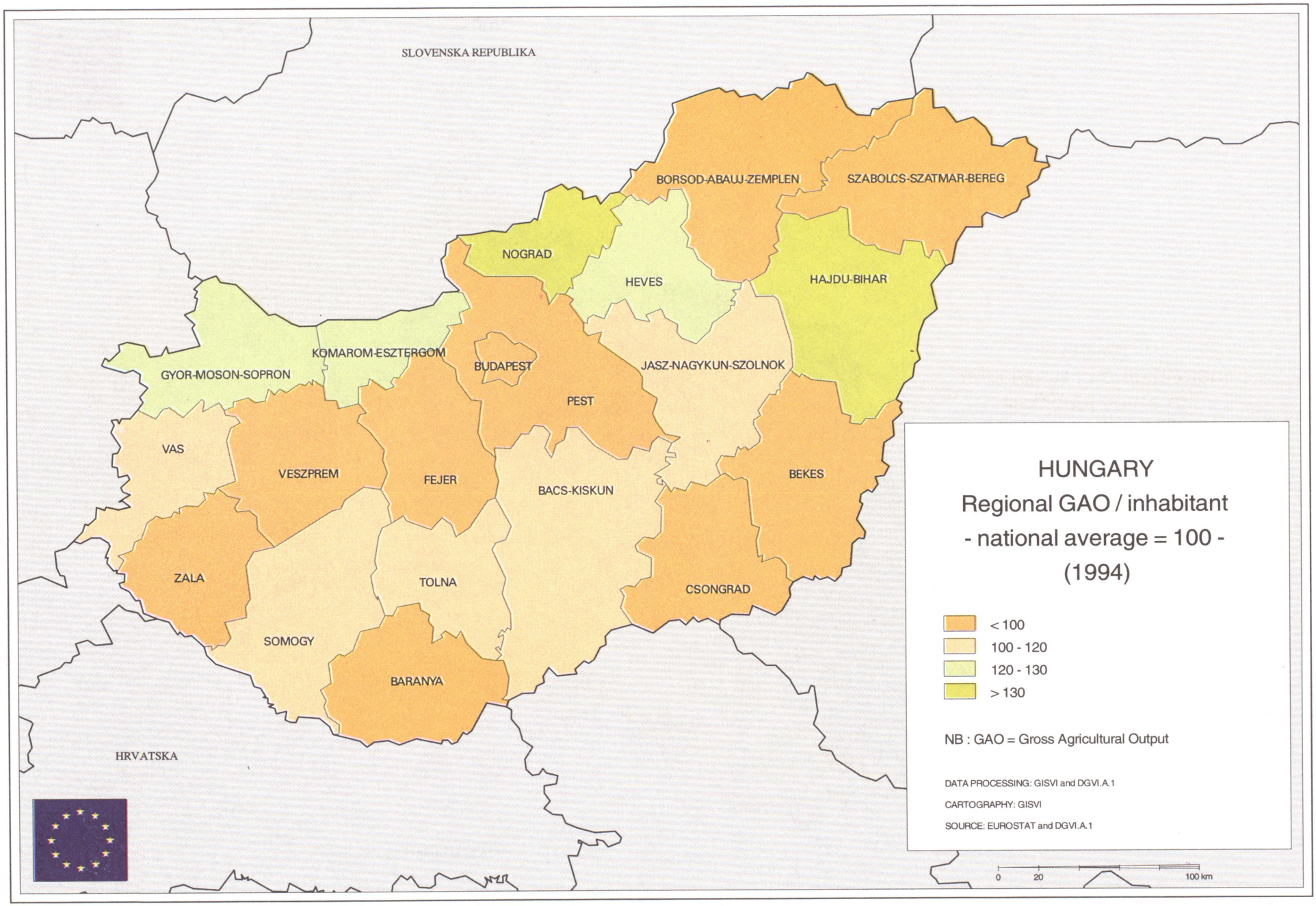
VESZPREM
FEJER
BACS-KISKUN
BEKES
ZALA
TOLNA
CSONGRAD
SOMOGY
BARANYA
HRVATSKA
HUNGARY
Share of agriculture in regional GDP (1994)
< 3%
3 - 6%
6 - 9%
9 - 12%
> 12%
DATA PROCESSING: GISVI and DGVI.A.1
CARTOGRAPHY: GISVI
SOURCE: EUROSTAT and DGVI.A.1
0
20
100 km


SLOVENSKA REPUBLIKA
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SZABOLCS-SZATMAR-BEREG
NOGRAD
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BUDAPEST
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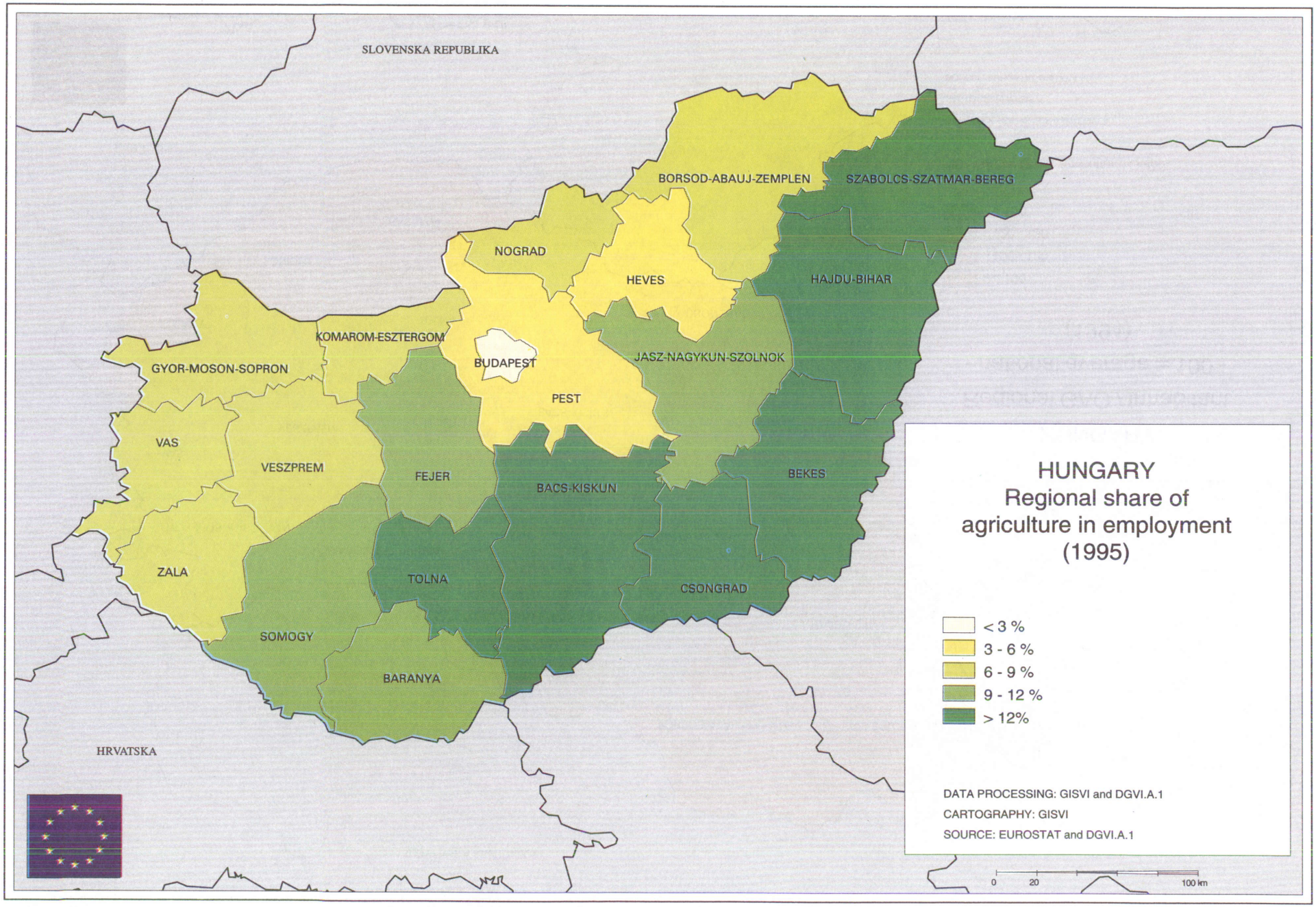
VESZPREM
FEJER
BACS-KISKUN
BEKES
ZALA
TOLNA
CSONGRAD
SOMOGY
BARANYA
HRVATSKA
HUNGARY
Regional GAO / inhabitant
- national average = 100 -
(1994)
< 100
100 - 120
120 - 130
> 130
NB : GAO = Gross Agricultural Output
DATA PROCESSING: GISVI and DGVI.A.1
CARTOGRAPHY: GISVI
SOURCE: EUROSTAT and DGVI.A.1
0
20
100 km


SLOVENSKA REPUBLIKA
BORSOD-ABAUJ-ZEMPLEN
SZABOLCS-SZATMAR-BEREG
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GYOR-MOSON-SOPRON
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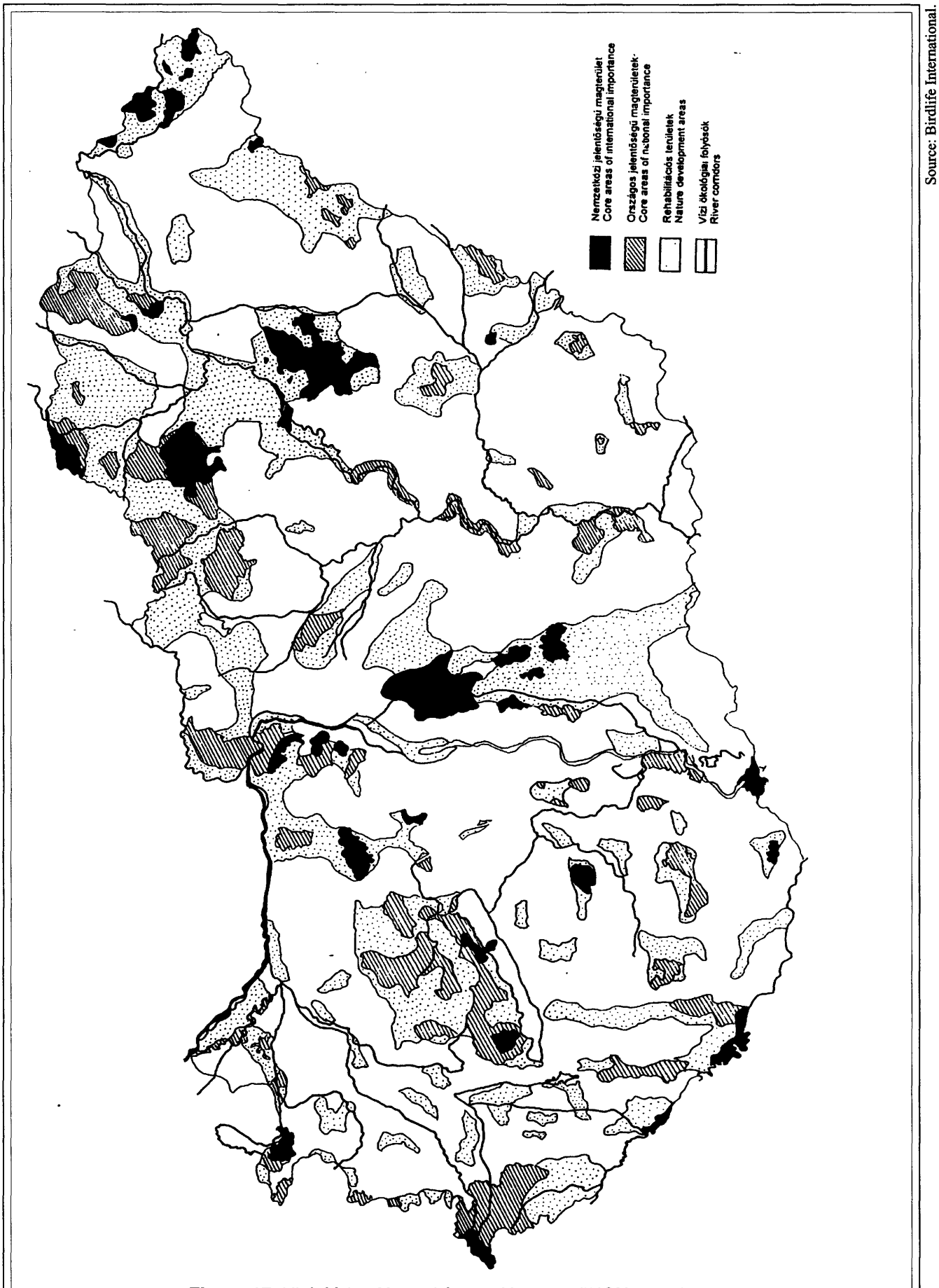
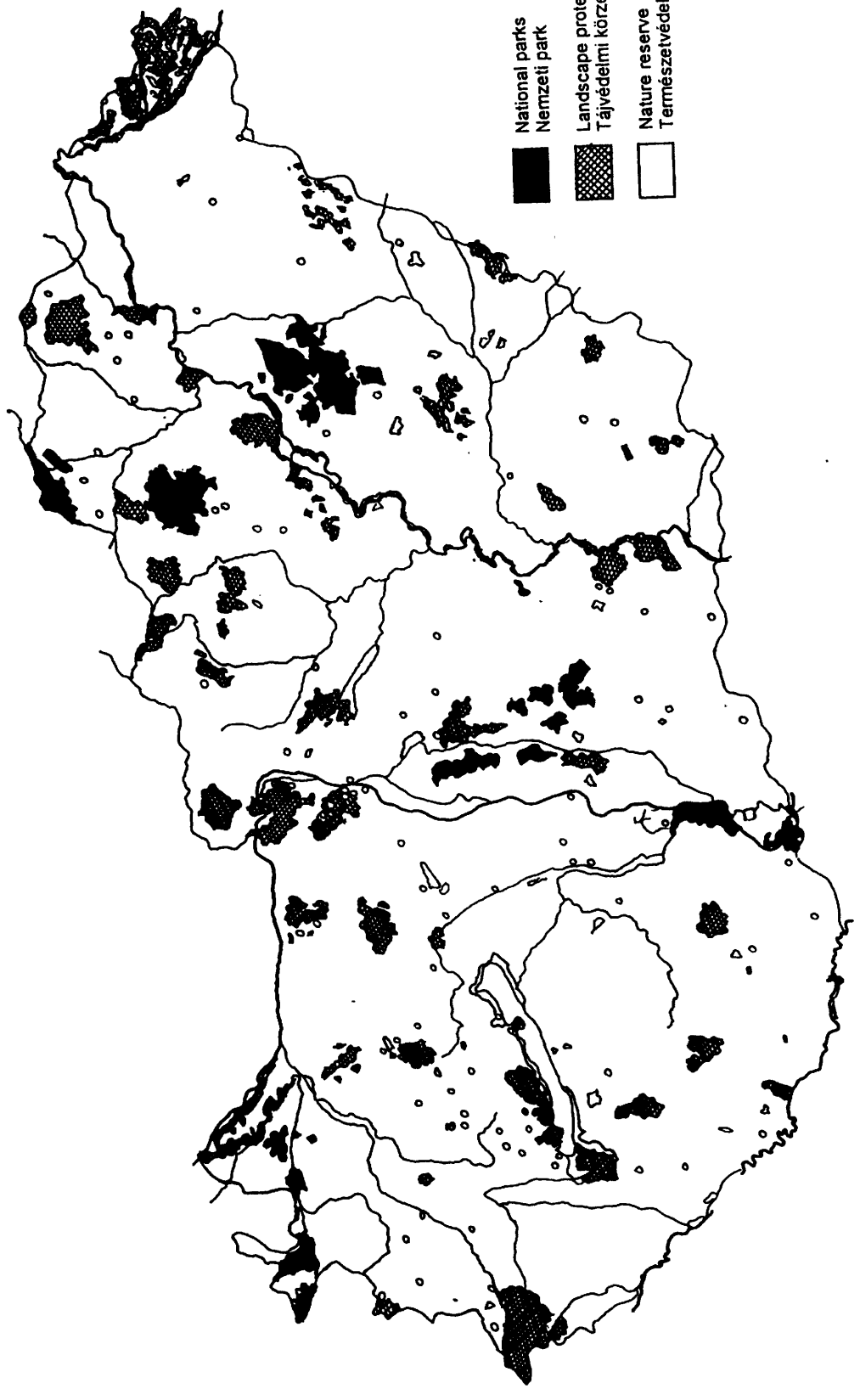
VESZPREM
FEJER
BACS-KISKUN
BEKES
ZALA
TOLNA
CSONGRAD
SOMOGY
BARANYA
HRVATSKA
HUNGARY
Regional share of agriculture in employment (1995)
< 3 %
3 - 6 %
6 - 9 %
9 - 12 %
> 12%
DATA PROCESSING: GISVI and DGVI.A.1
CARTOGRAPHY: GISVI
SOURCE: EUROSTAT and DGVI.A.1
0
20
100 km



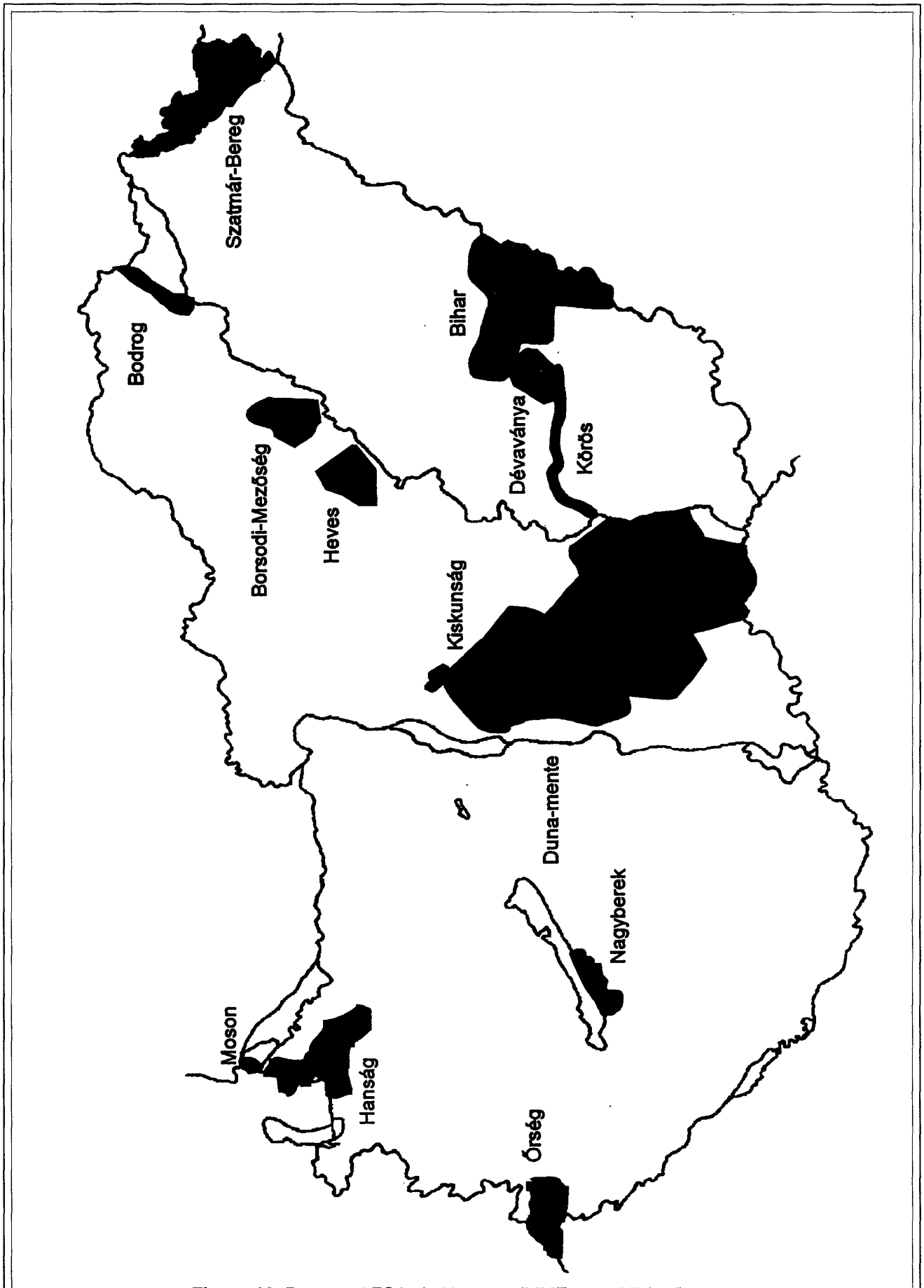
Source: Birdlife International.

Figure 17. High Value Natural Areas, Hungary (IUCN, 1995)



Source: Birdlife International.

Figure 18. Designated sites in Hungary (IUCN, 1995)



Source: Birdlife International.

Figure 18. Proposed ESAs in Hungary (MME, unpublished)

ANNEX 1.18 : 1997 tariffs

Commodity	Normal tariff	CEFTA	3rd countries	EU
Live cattle	43.4/54.4	10/15	15	10.5/15
Bovine meats	91.9	25	15	15
Pigmeat	56.5	25	15	10.5/15
Poultrymeat	49.9	20/28	35	20
Milk	65.6	37	30	20/30
Yogurt	65.6	-	40	15
Butter	130.5	-	60	0/4
Cheeses	78.6/86.1	-	50	25
Eggs	27.6	20	-	-
Honey	37	-	30	-
Potatoes	48.1	-	-	0/10
Tomatoes early	20/35	10/17	10	12
Tom. Seasonal	59.1	30	12/25	12
Onion	41	-	20	10/15
Cabbage	41	10/23	12	12
Cucumber seasonal	20/59.1	10/	-	0/30
Grapes	55.5	-	25	5.5/22
Apples	63.2	-	25	25
Apricots	49.2	8	25	25
Peach	49.2	9	25	25
Wheat	41	0	10	9
Maize	35	0	3	0
Rice	10/81.3	0	25	0
Flour wheat	49.2	15	12	-
Soybean	0			
Rape	0			
Sunflower	0			
Sf. oil crude	25	15	8	-
Sf. oil refined	40	20	8	8
Sugar	69.3/74	20	-	20
Fruit juices	39.1/44.5	0/25	10/20	10/20
Wines	68.3/74	-	40	21

Annex 1.20 : Domestic support : reduction commitments

Base total AMS	Base	Annual and final bound commitment levels					
		1995	1996	1997	1998	1999	2000
Mio HUF	42260	40851	39443	38034	36625	35217	33808
Mio ECU*	340	329	317	306	295	283	271

* For indicative conversion into ECU : 1 ECU = 124.26 HUF (1994 average; commitments are expressed in HUF, but a clause of excessive inflation may be applied

Annex 1.19 : Export subsidies : reduction commitments

	1986-1990				1995				2000 (without waiver)					2000 (with waiver)			
	mio HUF	mio ECU*	000 t**	ECU/t	mio HUF	mio ECU*	000 t	ECU/t	mio HUF	mio ECU*	000 t	ECU/t		mio HUF	mio ECU*	000 t	ECU/t
slaughter cattle	1597	12.77	70	182.4	1502	9.14	68	134.4	1022	3.79	55	68.9					
beef	1567	12.52	36	347.8	1472	8.96	35	256	1003	3.71	28	132.5	beef	2025	7.5	83	90.4
slaughter pig	1213	9.7	44	220.5	1140	6.94	42	165.2	776	2.87	35	82					
pork	4736	37.86	115	329.2	4451	27.1	111	244.1	3031	11.23	91	123.4	pork	5875	21.76	126	172.7
broiler chicken	5490	43.89	141	311.3	5161	31.42	136	231	3514	13.01	111	117.2	chicken	5302	19.64	111	176.9
slaughter sheep	821	6.56	29	226.2	771	4.69	28	167.5	525	1.94	23	84.3					
sheep meat	213	1.71	3	570	160	0.97	3	323.3	109	0.4	2	200	sheep	634	2.35	25	94
white cream cheese	48	0.38	2	190	45	0.27	1.9	139.9	31	0.11	1.6	69.6	dairy	600	2.22	13	164.7
apple	1504	12.02	411	29.2	1414	8.61	386	22.3	963	3.57	284	12.6	fruit	3929	14.55	311	46.8
red pepper meal	383	3.06	9	340	360	2.19	9	243.3	245	0.91	7	130	vegs	5262	19.49	327	59.6
sunflower seed	339	2.71	90	30.1	319	1.94	87	22.3	217	0.8	71	11.3	oilseeds	217	0.8	71	11.3
sunflower oil	1145	9.15	185	49.5	1076	6.55	179	36.6	733	2.71	146	18.6	sun. oil	733	2.71	146	18.6
sugar	234	1.87	166	11.3	219	1.33	144	9.2	149	0.55	32	17.2	sugar	149	0.55	32	17.2
wine (quantities in hl)	839	6.71	517	13	789	4.8	499	9.6	537	1.99	408	4.9	wine	2724	10.09	408	24.7
wheat	2055	16.42	1444	11.4	1931	11.76	1393	8.4	1315	4.87	1141	4.3	wheat	3309	12.25	2433	5
corn	231	1.85	1451	1.3	217	1.32	1236	1.1	148	0.55	164	3.4	corn	720	2.66	471	5.6
												other	1382	5.12	81	63.2	
	22413	179.18			21027	127.99			14318	53.01				32861	121.69		

Notes* Commitments are expressed in HUF. For indication. they are converted as follows : 1 ECU = 125.09 (1994 average) for 1986-1990; 1 ECU = 164.26 HUF (1995 average) for 1995; 1 ECU =270 HUF for 2000

** For apples. sugar and corn. these quantities are the average of years 1991-92 ("front-loading")

Annex 2: Sources and Glossary

1 Bibliography (main documents)

(1) BirdLife International (August 1997): *Proposals for pre-accession agri-environment schemes in Hungary*

(2) Central Statistical Office (1996): *Statistical Yearbook of Hungary, 1995 edition*, Budapest

(3) Central Statistical Office (1997): *Statistical Handbook of Agriculture and Food Industry of Hungary, 1996 edition*, Budapest

(4) European Commission, *Agenda 2000*, COM (97) 2000 of 15.07.1997, Vol. I, II and III, Strasbourg, Brussels

(5) European Commission, *Commission Opinion on Hungary's Application for Membership of the European Union*, 15.07.1997, Brussels

(6) Government of Hungary (1996): *Information provided for the Questionnaire of the European Commission, chapter 2, Agriculture*

(7) Ministry of Agriculture (March 1997): *The basic principles of the national agricultural programme*, Budapest

(8) OECD (1994): *Review of agricultural policies: Hungary* (co-published by OECD and the Centre for Co-operation with the Economies in Transition), Paris

(9) OECD (May 1997): *Agricultural policies in OECD countries, monitoring and evaluation 1997* C/MIN(97)19

(10) OECD (October 1997): *Agricultural credit problems and policies during the transition to a market economy in Central and Eastern Europe*, CCET/AGR/EG(97)79

(11) OECD (October 1997): *Challenges of agricultural finance in the CEEC and NIS countries*, CCET/AGR/EG(97)80

(12) OECD (June 1998): *The agri-environmental situation and policies in Poland and Hungary*, COM/AGR/CA/ENV/EPOC(98)57

(13) POULIQUEN Alain (September 1996): *Agro-food dynamics and competitiveness in Central Europe, implications for the EU enlargement*, INRA ESR, Montpellier

(14) World Bank (December 1996): *Hungarian agricultural policy update*, draft version

(15) World Bank (January 1997): *Hungarian land reform and farm restructuring*, draft version

2 Glossary/Abbreviations

CECs	Central European Countries
CEFTA	Central European Free Trade Agreement between Poland, Hungary, Czech and Slovak Republics and Slovenia (and Romania since 1997)
COMECON	Council for Mutual Economic Assistance (= CMEA)
c.w.	Carcass weight equivalent
EBRD	European Bank for Reconstruction and Development
EU	European Union
FAO	Food and Agriculture Organisation
GAO	Gross Agricultural Output, value of sold production plus own producer consumption
GATT	General Agreement on Tariffs and Trade
GDP	Gross Domestic Product
GIS	Geographical Information System
HS	Harmonised System (Harmonised Commodity Description and Coding System)
HUF	Hungarian Forint (national currency)
ILO	International Labour Organisation
NIS	Newly Independent States (from the former Soviet Union)
NUTS	Nomenclature of Territorial Units for Statistics
OECD	Organisation for Economic Co-operation and Development
o.w.	of which (in tables)
PPS	Purchasing Power Standard
TAIEX	Technical Assistance Information Exchange Office of the European Commission
WTO	World Trade Organisation

Annex 3: Phare assistance to Hungary's agriculture

1. General Framework and Background

After a first aid period for economic restructuring in 1989, and the first stage of the Phare programme for 1990-92, the second stage of the Phare programme in Hungary was put in place for the 1993-97 period. The key role of agriculture in Hungary's economy and its difficult circumstances since 1989 justified a large agricultural share in these successive programmes.

Between 1990 and 1995, Phare provided 78.05 MECU for Hungarian agriculture. In particular, the 1993 agricultural programme amounted to 30.5 MECU, which was representing 30.8% of the total Phare Assistance to Hungary in 1993.

There were no agricultural tranches in 1994 and in 1996, whereas for the 1995 Phare programme, the agriculture sector consisted of 10 MECU.

In 1997 the Phare programme was re-focussed and re-defined, in order to become a more effective instrument in the accession process. It was identified a need to enhance the institutional capacity to absorb funds available as the Structural Funds of the EU by the time of the Hungarian Accession. In line with the new Phare orientations, more attention than in the past, was given to Regional development which comprises, for the agricultural sector, a Rural Development component which, for the 1997 programme amounts to 9 MECU (table 3.1).

2. Specific Actions

Phare programmes have often been initiated at a time when the Government priorities were not clearly asserted and still fluctuating. The output of the programmes in 1990, 1991 and 1992 belongs generally to one or several of the following categories: the provision of flexible advice to respond to urgent situations, the provision of managerial and professional expertise, the supply of scientific or technical equipment, the endowment to lending funds with revolving character and the development of training activities. The corresponding expected impacts have been the development or enhancement of capacity to formulate policies and strategies, the transfer of managerial and professional know-how, the modernisation and the improvement of the efficiency of existing structures, the strenghtening of the institutional and legal framework, and general human resources development.

Over the 1990-93 period, the overall objective of the Phare Programme was to provide integrated financial and technical assistance to facilitate productive investment by private enterprises.

The 1990 programme mainly addressed two issues: the need for rural credit, through the rural credit guarantee scheme, and the land ownership issue, through the computerisation of the Land Registration Office.

The 1991 Programme was designed mainly to cope with the transformation of agricultural sector enterprises: state farms, cooperative ("collective farms")

Phare Assistance to Agriculture and Land Registration (MECU)

1990	1991	1992	1993	1994	1995	1996 Rur.Dev.	1997
20	13	5	30.5	0	10	0	9

and agro-processing industries. In continuation of the previous programme, further assistance was also given to the Land Registration Computerisation Project.

In 1992, no Phare funds were allocated to agriculture; however a rural credit project was financed with a 5 MECU grant.

The 1993 Programme was the logical continuation of the previous projects, but it mainly focussed on agricultural sector finance.

Examples of successful projects are:

- Rural Credit Guarantee Funds (20 MECU Phare contribution 1990-1993). Its aim was to provide capital assistance to contribute to the replenishment of the guarantee scheme for SMEs, enabling private investors to benefit from credit resources made available from the 1993 government budget and the EBRD agricultural loan. The Rural Credit Guarantee Foundation, which was managing the Fund, became operational on 28.11.91. In January 1995 the project was successfully evaluated: over 1200 small and medium business operations had been granted guarantees by the Foundation.
- Land Registration: the overall objective of this project was to provide an efficient Land Registration Sector which is able to efficiently and precisely maintain the Land Registration Records, which consists of over 7,000,000 property sheets and 55,000 cadastral maps in a decentralised system spread over 115 offices throughout the countries. The MoA is still working of a comprehensive modernisation programme for the LR network, largely financed by Phare, but including components funded by other sources.
- Agricultural Credit Channels (Cooperative Channels): the project contributed to the creation of a cooperative banking system dedicated to the agriculture area.

The 1995 Phare programme which is currently being implemented, is composed of the following projects:

Land Registration (4 MECU)

Supplementing previous Phare assistance, this project is aimed to provide and complete the computer network in the Land Registration Service, to improve the accuracy and efficiency of the electronic registration in the process of land consolidation.

Technical Assistance is provided to advise the implementing Ministry of Agriculture.

Implementation of Pre-accession Strategy (1.3 MECU)

This project is oriented to prepare the accession negotiations for the MoA, to define development strategy for the establishment of the institutions on market intervention, to finance visits and contacts with relevant EU organisations and institutes to better understand the consequences of taking over the acquis communautaire.

Technical Assistance will be provided to advise the leading decision makers of the Ministry.

Plant Protection, Phytosanitary Diagnosis (1.1 MECU)

The aim of this project is to assess the institutional set-up of human resources and technical condition of the Hungarian Plant Protection Service (HPPS). The purpose is to help the present institutions – with regard to the human resources – to be capable in the next four years to take over functions and responsibilities for the implementation of the acquis comunautaire. The project includes the provision of equipment to upgrade the obsolete equipment of the phytosanitary, soil and border inspections posts.

Quality Control of Grain (0.5 MECU)

The target of this component is to establish a unified control information network connecting the grain quality control laboratories and the Ministry of Agriculture.

Animal Health Service (1.8 MECU)

This programme sets up Technical Assistance and training for Veterinary Services, the provision to update the Veterinarian Information System and to bring it in conformity with the EU legislation. Some funds will be used to improve the existing laboratory unit for exotic diseases.

Agricultural Statistic (0.5 MECU)

The project concentrates on Agricultural Statistics, Market Information Systems and the Farm Accountancy Data Network. The strategy is to develop the existing informations systems in a way that ensures its conformity with the respective systems in the EU Member States.

Market regime, produce Councils and Chamber of Agriculture (0.7 MECU)

Some training courses have been planned in relation with the completion of the information system of Chamber of Agriculture.

The 1997 Phare activities have not started yet. The component of RURAL DEVELOPMENT (9 MECU) is targeted to declining rural areas in the selected regions, where the decrease in agricultural employment has led to high unemployment and resulted in significant out-migration.

Its immediate objectives are:

- to promote local capacity building for sustainable development in rural areas with the aim to reverse rural out migration, combat poverty, stimulate employment. Particular attention is to be given to private and community based initiatives which are well integrated into the national, EU and global markets;
- improvement of rural employment opportunities in order to retain viable rural communities;
- facilitate economic diversification, agricultural adjustment and efficient management of natural resources;
- create absorptive institutional and human capacity to effectively utilise EU Structural Funds on membership of the EU by building on the principle of partnership when generating, designing and implementing local development projects.

Whilst the initiatives and actions to meet the above objectives will vary from county to county and region to region, they could encompass both alternative (non-farming) activities in rural areas and small scale agricultural restructuring project, for adjusting production, product processing and marketing structures.

As this country report was in the process of being finalized, preparations were underway for programming the 1998 PHARE activities.

The Phare programme is, the main financial instrument of the reinforced pre-accession strategy as it was set out in the Agenda 2000. The Phare assistance focuses on the adoption of the Community acquis in particular on the priorities identified in the Accession Partnership and in the National Programme for the Adoption of the acquis.

On the basis of the Accession Partnership, the medium priorities and intermediate objectives for agriculture include reinforcement of phytosanitary and veterinary administrations, particularly as regards facilities at external borders, in setting up of structures needed for regional and structural policy, alignment with the agricultural acquis, attention to environmental aspects of agriculture and biodiversity.

Furthermore, they include development of the capacity to implement and enforce the CAP, in particular the fundamental management mechanisms and administrative structures to monitor the agricultural markets and implement structural and rural development measures, adoption and implementation of the veterinary and phytosanitary requirements, upgrading of certain food processing establishments and testing and diagnostic facilities and restructuring of the agri-food sector.

Annex 4: The veterinary sector in Hungary

The veterinary sector in Hungary forms an integral part of the agricultural and consumer protection policy. In fact, the State's role in animal health was first given a legal basis 100 years ago. Later on, veterinary matters related to public health followed the same approach. The process of bringing Hungarian veterinary legislation into conformity with that of the EU began more than 25 years ago, when EU import regimes were incorporated and applied to Hungary's exports to the EU. It is worth noting that agricultural exports are growing and highly important for Hungary, representing around 20% of all exports. Within agriculture exports, live animals and products of animal origin like meat represent over a third; this underlines the importance of and the need for a properly functioning veterinary sector.

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

1. Veterinary Education and Training Sector

1.1 At the University of Veterinary Science, Budapest, veterinary students can qualify and graduate following five years of veterinary education. Ninety to one hundred students are accepted annually, representing ~0.001% of the Hungarian population. This percentage is sufficient to cover the future needs of the veterinary profession in Hungary. The University already underwent, in 1995, an equivalency evaluation by the European Association of Establishments for Veterinary Education (EAEVE) on the basis of the corresponding EU Directives, with excellent results. The EAEVE study highlights the quality of teaching, the good quality of graduates and full conformity to the EU Directives.

1.2 Hungary has established an intensive system of postgraduate training. There are 2 or 3-year university courses, also open to state veterinarians, to become a specialist on an animal species (species approach) or on disciplines like state veterinary administration or food hygiene. A similar system provides a PhD for a scientific career. Other short courses are held by the Hungarian Veterinary Chamber and the Society of Hungarian Veterinarians, mostly in co-operation with the veterinary services of the Ministry of Agriculture; these also serve to ensure continuous professional development for official veterinarians.

1.3 A number of TAIEX activities and Phare projects have been used to present the EU veterinary acquis. Such training needs to continue.

2. The State Veterinary Sector

2.1 The State Veterinary Sector has benefited, since 1993, from several Phare projects. Despite some deficiencies in the number of effective staff, there is a centralised State Veterinary Organisation at the Ministry of Agriculture. The organisation is headed by a chief veterinary officer (CVO). Twenty county stations with 150-170 staff each, 6 veterinary institutes and 34 border inspection posts (BIPs) are directed by the headquarters' staff.

2.2 The development of Hungary's veterinary legislation in line with the EU veterinary acquis has progressed well. Negotiations on a veterinary and phytosanitary equivalency agreement between Hungary and the EU started in 1994 and encouraged the process of approximation. Nevertheless, important EU veterinary principles such as safeguard clauses, additional guarantees and regionalisation still need to be introduced.

2.3 At local level, veterinary legislation is enforced by the public veterinary officers of the county veterinary and food control stations. The network of BIPs is operated from the county office level. While it is clear that, following the accession of Hungary and neighbouring Associated Countries to the EU, the number of BIPs needed will reduce dramatically, the proper establishment and equipping of permanent veterinary BIPs on the land borders with the Ukraine, Croatia and Yugoslavia is essential, as well as those BIPs at international airport(s) and on international waterways. Import procedures will have to be brought into line with those required by EU legislation, e.g. physical checks need to be carried out on the border and not at destination as at present.

2.4 There are around 3300 veterinarians, of which about 2700 operate in private veterinary practice. State veterinary officers, except for the heads of state veterinary departments, are also permitted to work in private practice. Conversely, about 80% of private veterinarians are involved in state duties. The drastic reduction of state veterinary staff in 1992 explains the state service's reliance on private sector veterinarians. The competence given to the Hungarian veterinary service is, however, sufficient to cover the tasks laid down by the EU veterinary acquis. A computerised network exists between the central and county level, including the BIPs. The national Phare programme will assist with the further development of the network. Hungary would like to install "ANIMO" and other IT veterinary systems of the EU, like "ADNS", "SHIFT" and "Inforvet" soon and is also looking forward to an integrated software system.

2.5 The animal health situation appears to be quite satisfactory concerning OIE-List A diseases, taking into account that no outbreaks have been reported for at least five years. The cattle population also appears to be free of Tuberculosis and Brucellosis. However, Enzootic Bovine Leucosis (EBL) has not been eradicated yet. Aujeszky's disease is under a national voluntary eradication programme, while rabies' eradication is based on the oral vaccination of the fox population in an area west of the river Danube. The rabies project has shown excellent results but, like the Aujeszky programme, is endangered by financial problems. Less attention is paid to Infectious Bovine Rhinotrachitis in the domestic cattle population; only semen donor bulls at artificial insemination centres need to be free. Disease monitoring and surveillance plans as well as contingency plans have been elaborated under national Phare programmes and are being applied.

2.6 The application of EU animal welfare standards for keeping animals (calves, pigs, laying hens and laboratory animals), for the transport and slaughter of animals are pending ratification by the Parliament of the proposed Hungarian Animal Welfare Act. This Act will impose further tasks on the veterinary services.

2.7 Hungary's approach towards integrated animal health and food hygiene surveillance guarantees veterinary monitoring from stable to table. A monitoring plan on avian salmonellosis in accordance withy the EU Zoonosis Directive (92/117/EEC) has been worked out and is available to poultry flock operators as a voluntary programme. This programme should be evaluated, to see whether EU standards are being met. Detailed hygiene and technical standards, required by various EU directives for the approval or registration of the industries concerned are now applied by the largest food manufacturers, as are the CP/HACCP concepts.

2.8 Residue monitoring and sampling plans have been approved by the European Commission. No major problems have been identified by the execution of the plans.

3. The Private Veterinary Sector

3.1 The Hungarian Veterinary Chamber, currently under the legal supervision of the Minister of Agriculture, is a self-governing professional regulatory body, re-established in 1996. It has 2800 members at present, whereas the Hungarian Veterinary Association has 1000. The aim of the latter professional body is to formulate scientific opinions and deliver advice to the veterinary profession. The Hungarian Veterinary Chamber is an observer member of the Federation of Veterinarians of Europe (FVE).

3.2 Private veterinarians involved in public duties need a formal nomination as part time civil servants by the chief veterinarian of the county veterinary station. However, private veterinarians are not allowed to take part in the veterinary inspection of EU approved establishments, to work at BIPs, or to certify exports of animals or products of animal origin. Income difficulties for private veterinarians arose due to the drastic decrease in livestock. The situation has now been balanced to some extent by the considerable increase in pets. It is probably true that, despite these difficulties, there are few unemployed veterinarians in Hungary.

4. Livestock Sector

4.1 With the help of a national Phare project and on the basis of Hungarian-Dutch co-operation, a system of animal identification, registration and movement control is being set up. Data are entered into the system by the county stations and passed on to the central database held at the Agricultural Quality Control Institute. Only cattle are going to be identified individually, corresponding to the new EU requirements, whereas no official Hungarian regulation on identifying pigs or sheep and goats exists at present. However, livestock is only permitted to be moved in Hungary under the supervision of the veterinary service following a clinical examination and a veterinary certificate being issued at the place of origin. Veterinary inspection is repeated at the place of destination. The capacity of the IT system to process data on animal identification and movement control will have to allow for ~910.000 cattle, ~5.3 mio pigs, ~900.000 sheep and goats and 70.000 horses (estimation of the number of animals by 2001). The number of poultry at the beginning of 1998 was about 35.6 mio, and it is expected to rise in the next years.

4.2 Following disease eradication measures like slaughter, compensation to farmers is paid within 30 days following the imposition of the measure. Support to establish an animal health trust fund is not required by the Hungarian Ministry of Agriculture.

5. The Processing Industry under Veterinary Legislation

5.1 As mentioned above, the processing of products of animal origin is a central concern for Hungary. The further upgrading of the agri-food sector will improve the competitive capacity for exports but is also necessary for establishments supplying the national markets. This will help in meeting the detailed hygiene and technical standards laid down by the relevant EU Directives on meat, milk, fish, eggs and other products of animal origin or products for animals, like pharmaceuticals, biologicals and food. The introduction of CP/HACCP concepts and/or certification on ISO standards has just started by the larger food companies as part of their quality assistance systems. Good manufacturing/good laboratory practices are known and will be taken as the basis for the international accreditation of laboratories and pharmaceutical plants, and is particularly important, as the number of registered medicinal products has increased tenfold since 1990.

5.2 Despite the fact that the privatisation process has progressed well, it is estimated that substantial funds are needed for the upgrading of industries to comply with EU veterinary standards. Until now only a few meat (~50) and dairy plants (~20) have been approved on the basis of EU requirements. There is the further fear that an in-depth inspection mission by the European Commission in the dairy sector will show weaknesses in the hygiene standards of raw milk and facilities.

6. Conclusion

Hungary's interest in a veterinary sector functioning to EU requirements is quite evident and the animal health situation in Hungary appears to be satisfactory. A competitive agri-food industry, which implies continued investment, will safeguard Hungary's important position in export markets. Further adaptation of legislation and/or enforcement systems are however necessary, although good progress has been made. It is also essential that the direct chain of command in the State Veterinary Service is maintained and that the service is not weakened by strictures imposed by unnecessary reorganisation.

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