

# Agricultural Situation and Prospects in the Central and Eastern European Countries



## Hungary





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**Agricultural situation and prospects in the  
Central and Eastern European Countries**

**Hungary**

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## FOREWORD

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

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

The country reports attempt to provide an objective analysis of the current situation in agriculture and the agro-food sector in the CEECs and an assessment of the developments to be expected in the medium term.

*Extract conclusions Copenhagen summit of 22-23 June 1993*

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

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

## **About the data...**

The data used in the country reports are derived from a **CEEC dataset** established by DG VI in cooperation with other services of the European Commission and with national experts. Data have been selected after a number of analyses, carried out by both external research institutes (**Steinle, 1994; Jackson and Swinnen, 1995**) and DG VI services. They originate from various sources: FAO, OECD, World Bank, United Nations, USDA, national statistics, economic institutes and the European Commission (DG II, Eurostat).

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

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

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

In general, the FAO data for agriculture were used, but for certain countries and/or for certain products, and in particular for the most recent years, the figures were adjusted or replaced by data from other sources, after discussion with country specialists and with FAO statisticians. In such cases, FAO coefficients and standards were used to avoid a break in the time series.

Despite all efforts to create a coherent, reliable and up to date dataset, all figures presented in this report should be interpreted with care. Significant changes in data collection and processing methods have sometimes led to major breaks in historical series as the countries concerned have moved from centrally planned to market economies. One general impression is, according to some experts (**Tangermann and Josling, 1994; Steinle, 1994; Jackson and Swinnen, 1995**), that these problems may have led to overestimate the decline in economic activity in general and of agricultural production in particular in first years of transition, data from 1989 and before being somewhat inflated, and data after 1989 underrecording the increase in private sector activity.

## EXECUTIVE SUMMARY

### General economy

Economic recession has been far worse in Hungary than anticipated at the beginning of the transition process: Gross Domestic Product declined by 20 % over the period 1990-93. 1994 was the first year of recovery.

However, building on an already somewhat market-oriented economy, Hungary has rapidly developed an important private sector and attracted large inflows of foreign direct investment.

But the government could not prevent a considerable deterioration of the current account (-9.6% of GDP in 1994), a large public finance deficit (- 5.8 % of GDP in 1994) and growing unemployment (presently around 11 %).

The socialist-liberal government in place since July 1994, led by Gyula Horn, adopted in March 1995 a package of measures intended to restore confidence in its commitment to a market-led economy and to tackle the economy's deep structural problems: immediate devaluation of the Forint by 9 %, cuts in social and welfare spending, limitation of public sector wages, imposition of an 8 % import surcharge on all imports except capital investment, energy and outward processing.

### Agriculture

Hungary enjoys good natural conditions for agriculture: fertile plains, normally sufficient rainfall, extensive river network. Agriculture is traditionally an essential part of the economy, providing foreign exchange earnings, and a dominant factor in rural development.

Since 1990 however, the recession in agriculture has been even more pronounced than in the whole economy (- 34 % over the period 1990-93), leading to a sharp reduction of agricultural employment and social deterioration in rural areas. Specific reasons for this recession were the fundamental restructuring of land ownership, the collapse of traditional export markets in the former Soviet Union, as well as the immediate and delayed effects of abnormal droughts in 1992 and 1993.

The crop sector seems to have reached the bottom of this trough and already recovered in 1994, whereas livestock still lost ground. The respective share of the two sectors in the agricultural economy shifted from 50/50 in 1989 to 60/40 in 1994.

The main crops are cereals, in particular wheat and maize; production has begun to recover and was 11.6 mio t in 1994. But yields have been severely hit by the successive droughts and by the drastic fall of inputs. Exports have contracted in the '90s. Among oilseeds, sunflower, which represents 90 %, is rather promising and could gain in area, which would allow an expansion of sunflower oil exports. Sugar production is still handicapped by structural problems. Various fruits (apples, pears, plums, red fruits) and vegetables (tomatoes, onions, paprika), as well as a range of wines complete the picture of crop production and export opportunities.

In the livestock sector, pigmeat dominates supply and demand, but has been severely hit by the recession (43 % reduction of animal numbers over 5 years); production of pigmeat was 600 000 t in 1994. Poultrymeat follows, whereas cattle are less important and mainly milk-oriented. Despite the recession, the livestock sector (live animals and meat) remains of key importance to exports.

### **Farm structures**

Major changes of ownership have affected Hungarian farm structures. The transformation of **cooperatives** is nearly complete: in general, assets have been distributed as financial shares among members and land has been returned to private property (among members and "compensated" owners). Only 15 % of cooperative members opted to take their land and assets out of the common structures, to farm independently. The privatization of **state farm** assets other than land is quite well advanced. Land still remains in state ownership.

As a result, large-scale farms remain predominant; among them, "new-type" cooperatives (with merely formal changes in most cases and always severe financial difficulties) are still the most important players. Among the individual (and historically very small) farms, a new category of full-time commercial private farms is gradually emerging. The diversity of farm types is continuously increasing so that, in the very long term, the present dualistic situation (large-scale / small-scale) will probably evolve into a continuous spectrum of farms.

### **Up- and downstream activities**

The recession in agriculture was paralleled by a sharp and continuing recession in upstream industries (machinery, seed, fertilizers, pesticides), whereas upstream services (distribution of inputs) underwent rapid transformation and have already recovered.

Downstream services (marketing of agricultural products) are slowly evolving along "western" lines, with a combination of individual traders and service cooperatives.

The food industry contains contrasts: alongside dynamic sectors (vegetable oil, sugar, brewing, confectionery) where foreign investment has accelerated the privatization process, there are still problems in basic, traditionally export-oriented sectors (milling, poultry, meat processing).

The banking system is still weak in general, and especially in agriculture. The delay in land registration and the absence of a land and fixed assets mortgage system remain bottlenecks for long-term credit.

### **Systems of support and taxation**

At the beginning of the transition, Hungary favoured a liberal approach to international trade relations and reduced its support to agriculture. Since 1993, and more visibly since

1994, it has developed a more "protectionist" approach, seeking to stimulate domestic production and exports through border protection, price support and export subsidies.

However, several factors will moderate this new orientation: the high budget deficit, the risk of increased inflation, the necessity of preserving international competitiveness and, later, GATT constraints.

An intervention system similar to that existing in the EU, but applied at farm gate level and with much lower support prices, has been in place since 1994 for wheat, maize, pigmeat, beef and milk. Until now, market prices have been higher than intervention prices, so that only insignificant quantities have been bought at intervention.

Export subsidies remain the main policy instrument, despite their dubious efficiency in supporting domestic prices. They represent about half of the budgetary expenditure on agriculture and around 14 % of agricultural export receipts.

### **Agricultural trade**

Agricultural exports were irregular over the period 1990-94 but represent, on average, a quarter of all exports and are thus of crucial importance. Simultaneously, imports increased, so that the agricultural trade balance deteriorated.

The European Union is by far the most important agricultural trading partner for Hungary: 42 % of imports, 43 % of exports (average 1992-94), in particular as a consequence of the Association Agreement. Nevertheless the agricultural trade balance with the EU, which was traditionally largely positive for Hungary, has contracted since 1989, for various reasons: the preference of Hungarian consumers for western products, the impact of EU export refunds, Hungary's difficulties in adapting to the West's changing requirements, the administrative burdens linked to the tariff quotas.

Hungary's Uruguay Round commitments are not very constraining as far as border protection and domestic support are concerned (subject to the application of the clause of "excessive inflation"). On the export side, expenditure ceilings are very constraining because they are expressed in national currency: Hungary intends to negotiate a clause of "excessive inflation" in this case too.

### **Outlook for 2000**

As for the other CEECs, prospects have a very high degree of uncertainty. However, a scenario relying on **reasonably optimistic** assumptions has been built up. Under this scenario, GDP growth would increase from 2 % in 1996 to 5 % from 1999 onwards (21 % over the period 1995-2000). Hungarian agriculture would also recover, albeit at a slower pace (15 % over the same period). This would still be far from a recovery to 1990 levels. Projections for the main commodities (cereals, oilseeds, sugar, milk, beef, pigmeat, poultrymeat) over the period 1994-2000 are summarized in the following tables, in qualitative terms.

**Table 0.1**  
**Crop outlook for 2000**

	Area	Yield	Production	Export capacity
Cereals	=	+	+	+
Oilseeds	+	+	++	++
Sugar	-	++	+	low

**Table 0.2**  
**Livestock outlook for 2000**

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

**TABLE 1 : Hungary in comparison with other CEECs and EU-15**

	Population (mio)	GDP (bio ECU)	GDP pc (ECU)	Agricultural area		Arable area		Agricultural production		Agricultural employment (% tot. empl.)	Rainfall (mm/year)	
				(mio ha)	(% total)	(mio ha)	(ha pc)	(bio ECU)	(% GDP)			
Bulgaria	8.5	9.4	1110	6.2	55.9	4.0	0.47	1.131	12.0	694	21.2	550
Czech. Rep.	10.3	26.7	2586	4.3	54.3	3.2	0.31	0.871	3.3	271	5.6	491
Estonia	1.6	1.5	938	1.4	30.6	1.0	0.63	0.266	10.4	89	8.2	600
Hungary	10.3	32.5	3150	6.1	65.8	4.7	0.46	2.068	6.4	392	10.1	600
Latvia	2.6	2.2	850	2.5	39.2	1.7	0.65	0.232	10.6	229	18.4	680
Lithuania	3.8	2.3	627	3.5	54.0	2.3	0.62	0.259	11.0	399	22.4	625
Poland	38.5	73.4	1907	18.6	59.5	14.3	0.37	4.648	6.3	3661	25.5	550
Romania	22.7	21.8	961	14.7	61.9	9.3	0.41	4.500	20.2	3537	35.2	635
Slovakia	5.3	8.7	1643	2.4	49.0	1.5	0.28	0.512	5.8	178	8.4	611
Slovenia	1.9	9.8	5018	0.9	42.7	0.2	0.13	0.250	4.9	90	10.7	1350
CEEC-10	105.4	188.3	1786	60.6	56.2	42.3	0.40	14.7	7.8	9540	26.7	
EU-15	369.7	5905.1	15972	138.1	42.7	77.1	0.21	208.8	2.5	8190	5.7	

All figures are for 1993. Rainfall long term average.  
Source : DGV I CEEC dataset.



# 1. General Overview

## 1.1. Geographic and social aspects

### 1.1.1. Geography and climate

Hungary is a land-locked and mainly flat country, with an area of 93 000 km<sup>2</sup> (same as Portugal). The neighbouring countries are Austria, Slovakia, Ukraine, Romania, Serbia, Croatia and Slovenia (cf map on next page). The Danube and the Tisza rivers cross the country from north to south.

More than two thirds of the country are fertile plains, suitable for agriculture:

- the Kis Alföld (Little Plain) in the northwest, 120 to 180 m high on average;
- the Nagy Alföld (Great Plain), which covers almost half the country, to the east of the Danube, forming a loess- and wind-blown sand-covered landscape (puszta).

Approximately 19% of Hungary is wooded, with mainly deciduous forests.

Hungary's climate is predominantly continental, but tempered by Atlantic airflows. Annual rainfall varies from a level of under 500 mm in the central part of the Tisza river basin (Föhn effect) to 600-650 mm in the north eastern part and 800-850 mm on the higher hills. Droughts creating difficulties for agriculture occur in about 3 to 4 years out of 10: the last severe ones occurred in 1990, 1992, 1993. There are some fears that global warming would increase the risk of drought.

Pleasant landscapes, especially in the hilly areas, as well as valuable natural sites (lakes, thermal springs) and a rich historical heritage make Hungary an important tourist country. Around 23 million foreign tourists visited the country in 1993.

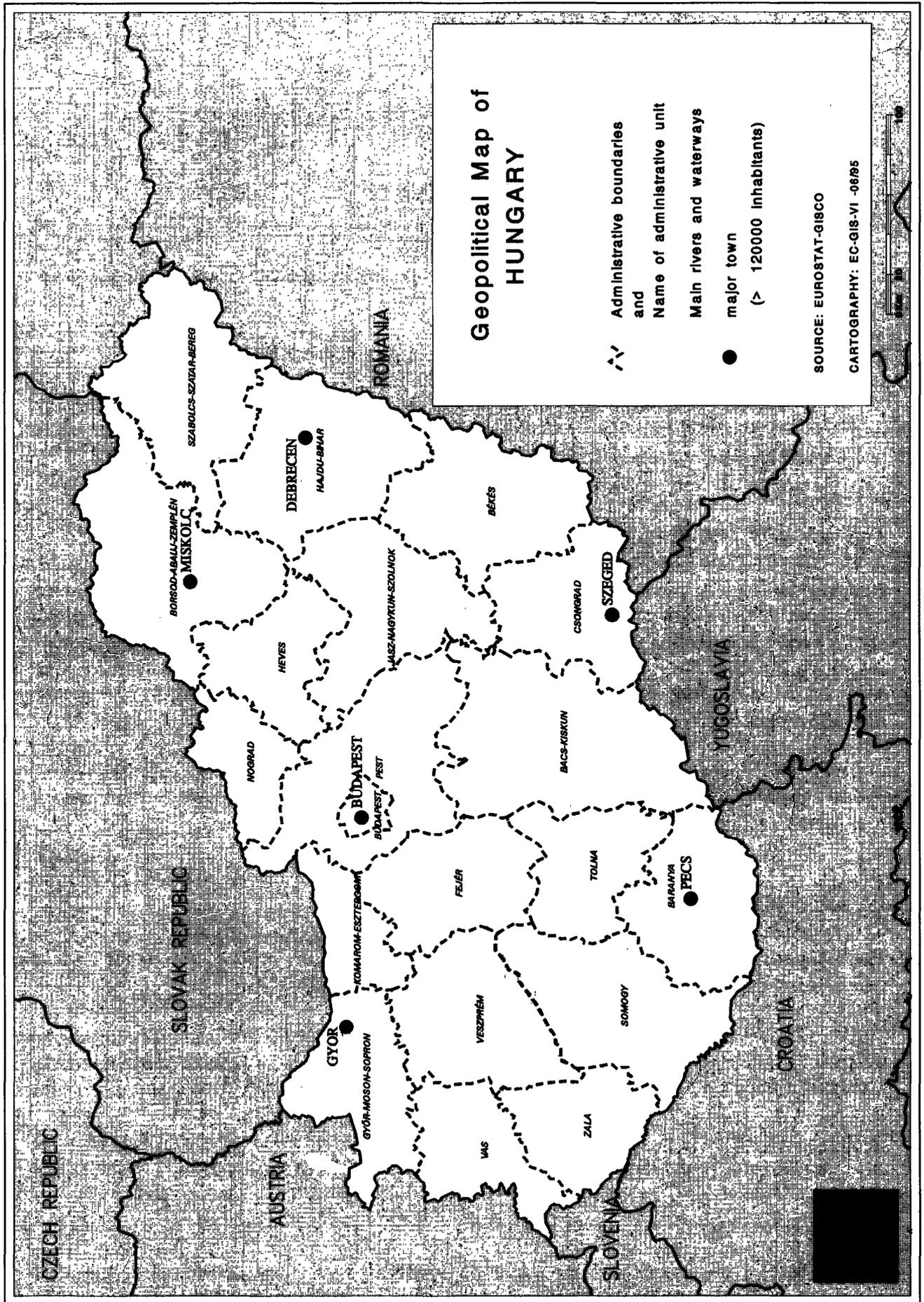
### 1.1.2. Population

The Hungarians belong to the Ugric branch of the Finno-Ugrics, probably originating in the middle reaches of the Volga and the southern Urals.

There are substantial ethnic Hungarian groups in Romania (1.6 to 2.0 million according to sources) and minorities in Slovakia (some 600 000) and the former Yugoslavia (approximately 500 000).

In Hungary itself there are also foreign minorities, to a much smaller extent (all figures based on self declaration) : Germans (31 000), Croatians (14 000), Romanians (11 000), and Slovaks (10 000). The Gypsies (around 140 000) are a distinctive ethnic group, although admittedly the majority have Hungarian as their mother tongue.

During the period 1960 to 1980 the population of Hungary grew by an annual average rate of 0,36 %, to 10.7 million. The birth rate peaked during the period 1975-80 because of social



support. Since then, due to low fertility and high mortality levels **the population declined to 10.3 million in 1994** (Greece : 10.3 ; Belgium : 10.1).

The average density of inhabitants is 111 per km<sup>2</sup> (France : 106 ; Germany : 226).

One fifth of the population (2.0 million) live in Budapest, the capital. The other main cities are much smaller : Debrecen (218 000 inhabitants), Miskolc (190 000), Szeged (179 000), Pecs (172 000), Győr (131 000). The rural population represents one third of the total.

Around 68 % of Hungarians are reported to be Catholics, and approximately 25 % Protestants.

Regarding education, it is worth noting that Hungary was the only country in Europe to show a substantial decline in numbers in higher education between the mid 1970s and 1990. A recovery seems to be taking place in the 1990s.

### **1.1.3. Health and social aspects**

The health of the Hungarian population has deteriorated over the past decades. Life expectancy decreased for males from 1965 (67 years) to 1993 (64.5 years). That for females increased in the same period from 72 to only 73.8 years. Nine out of ten deaths are caused by chronic illnesses: coronary and circulatory disorders, malignant tumours, diseases of the respiratory tract and digestive organs, alcoholism, as well as injuries, accidents and suicide (Hungary has the highest suicide rate in Europe, with 40 per 100 000 inhabitants per annum).

Experts estimate that frequent stress, lack of exercise and bad diet impair the health of the population. In particular, nutrition plays an important role and contains several risk factors: high energy content, high share of animal proteins, high fat intake, bulk of saturated fats, low intake of poly-unsaturated fats, high cholesterol intake, low complex carbohydrate intake but too much added sugar, low ascorbic acid intake, low magnesium intake, high sodium/potassium ratio, low calcium intake.

Although differences in wages and incomes within Hungarian society were much less marked than in countries of Western Europe, income differentials increased during the 1980s, partly because earnings from private property accounted for a growing proportion of total income (as the private sector expanded) and partly because, for a majority of wage-earners, real incomes plummeted as a result of inflation. By the end of the 1980s, broad sections of the population had to face a sharp deterioration of their standard of living. On average, real wages decreased by some 18 % between 1980 and 1990. This of course can damage health and family life.

## **1.2. Historical background and political situation**

Hungary's leap towards democracy was remarkable for the restrained way in which it was carried out. There were no mass street demonstrations, no violence and no bloodshed. Instead, Hungarians were accustomed to some degree of political freedom under the communist period. Overall, Hungary's democracy now appears to be well established.

## Main historical developments (since the 16th century)

Hungary is an old nation but the following will focus on the most recent developments. From the early 16th century until the end of the 17th century, a great part of Hungary was in the Ottoman Empire. Then the whole country became part of the Habsburg Empire (the Austro-Hungarian Empire from 1867). Hungary declared its independence on November 16th 1918. A few months later a communist revolution took place, but was suppressed and the shortlived communist republic was replaced by a right-wing regime under Admiral Miklos Horthy.

In the Second World War Hungary allied with Germany against Yugoslavia and the USSR and was subsequently defeated. In December 1944 a new government was constituted in Debrecen and in 1945 the first free general elections were executed. The Smallholders party reached 245 seats, the Communists only 70 and in 1946 the republic was proclaimed. But the Russian pressure increased and, under the leadership of Mátyás Rákosi (1949 to 1956), a constitution similar to the Soviet one was settled and in 1949 the Hungarian Republic was proclaimed as a state of "workers and peasants".

Economic hardship and political terror gave rise to a popular revolution in 1956, a revolution brutally suppressed by the Soviet army. In the terror that followed the leading revolutionaries (including the revolutionary prime minister, Imre Nagy) were executed.

The new longtime leader János Kádár (1956 to 1988) introduced a more conciliatory form of government. In 1968 Hungary introduced the "new economic mechanism" which, though still continuing to issue plans, ceased central production directives and gave more power to enterprises. The implementation of investment, pricing and production decisions was decentralised and more attention was paid to agriculture.

Although there had been economic reforms, it became clear that substantial measures were necessary. Thus, in early spring of 1988, in the wake of austerity measures and clear indications of the structural weakness of the economy, Mr Kádár was removed as general secretary of the Hungary Socialist Workers Party (HSWP, i.e. the communist party) and replaced by Károly Grósz. Rezso Nyers and Imre Pozsgay also joined the reform team. Mr Grosz quickly lost support as he was perceived as an excessively cautious reformer.

In June 1989, following a clash with Mr. Pozsgay over the nature of the 1956 revolution - now held to be a popular revolution and not a "counter-revolution" led by "reactionaries" - Mr. Grósz lost most of his power to a new Presidium headed by the chief reformers, who now included the Prime Minister, Miklós Németh. On October 16th 1989 hundreds of thousands of people saw a dignified ceremony commemorating the martyrs of the 1956 revolution. On October 23th 1989 Hungary repeated the proclamation of the republic.

The peaceful transition to democracy could not be prevented and other parties (than the Communists') were permitted. In late March and early April 1990 the first free elections since the Second World War took place. They resulted in a clear victory for the Hungarian Democratic Forum (HDF) and its allies, the Independent Smallholders and the Christian Democrats. The HDF chose József Antall to be Prime Minister. One of his first accomplishments was to negotiate a special agreement with the opposition party Alliance of Free Democrats in which he agreed to allow a Free Democrat nominee, Árpád Göncz to become President. In exchange for this the Alliance of Free Democrats agreed to waive the rule requiring a two-thirds vote of Parliament to pass important pieces of legislation.

The coalition worked for four years; it faced several difficulties, including internal disputes, corruption problems and public disappointment, following the non-fulfillment of many expectations regarding the speed and scope of economic transition.

After József Antall died, Péter Boross from the HDF (minister of Interior) formed a new government on December 21st 1993, just a few months before new general elections.

The general elections in May 1994 were won by the Hungarian Socialist Party (HSP). Gyula Horn, its leader, landed an overwhelming victory with 33 % of the votes (1st round) and 54 % of the seats (2nd round). The reasons for this swing of the pendulum were internal disputes within the coalition and public disappointment, following the non-fulfillment of many pre-election expectations regarding the speed and scope of economic transition, as well as the alleged occurrence of unethical practices. Persisting high inflation (although gradually falling) and increasing unemployment had also raised social tensions. In this context, some nostalgia for the former period could also have played a role.

Gyula Horn built a coalition with the Alliance of Free Democrats (AFD), which was settled in July 1994; it represents 72 % of the seats.

**Table 1.1**  
**Results of the general elections in 1990 and 1994**

Party	1990		1994	
	seats	%	seats	%
Hungarian Socialist Party	33	8.55	209	54.14
Alliance of Free Democrats	92	23.83	69	17.88
Hungarian Democratic Forum	164	42.49	38	9.84
Independent Smallholders Party	44	11.40	26	6.74
Christian Democrats	21	5.44	22	5.70
Young Democrats	21	5.44	20	5.18
Agrarian Association	1	0.26	1	0.26
Joint Candidate	4	1.04	1	0.26
Independent representatives	6	1.55	-	-
<b>Total</b>	<b>386</b>	<b>100</b>	<b>386</b>	<b>100</b>

The local elections of December 1994 reinforced the coalition.

### **International relations**

Until the August 1991 coup in Moscow, relations with the Soviet Union remained tense, due to the collapse of bilateral trade, especially the cutback in Soviet oil deliveries and the failure to settle the outstanding debt owed to Hungary by the USSR. Since the break up of the USSR links have been formed with individual successor republics.

Subsequently, relations with Russia have been good and a treaty on friendship and cooperation has been signed. Nevertheless, the possible NATO membership of Hungary is a sensitive issue.

Tensions with Romania have been high since the Treaty of Trianon (1918). The present conflict centres on the treatment of the Hungarian minority in Transylvania, formerly a part of Hungary. There are also tensions about minorities in Vojvodina (Serbia) and with Slovakia. A treaty has just been signed (March 1995) between Hungary and Slovakia: Hungary is committed to recognizing their common borders formally, whereas Slovakia is committed to protecting the rights of the Hungarian minority.

Hungary was a member of both the Warsaw Pact (1955) and the Council for Mutual Economic Assistance (COMECON, 1949). These two organisations were formally wound up in 1991.

Hungary is a member of the United Nations (1955), the General Agreement on Tariffs and Trade (1973), the International Monetary Fund (1982), the World Bank (1982), the European Bank for Reconstruction and Development (1990), the Council of Europe (1991), the Conference for Security and Cooperation in Europe (Hungary chairs this organization in 1995) and one of the founding members of the new World Trade Organization (1995).

In December 1991, Hungary attained associate member status of the European Community, along with Poland and Czechoslovakia. In April 1994, it applied for full membership of the European Union.

### 1.3. Economic situation

The following table highlights the main recent developments in the Hungarian economy. Despite the uncertainties, it also contains tentative prospects for 1995 and 1996<sup>1</sup>. Assumptions behind these prospects are moderately optimistic, assuming a successful continuation of reform.

**Table 1.2**  
**Main economic developments**

	1990	1991	1992	1993	1994	1995p	1996p
<b>GDP growth rate</b>	-3.3	-11.9	-4.3	-2.3	+2.0	+0.3	+2.0
<b>Sectorial Products (growth rates)</b>							
- Agriculture	-4.6	-8.1	-11.9	-14.7	+1.5	+1.0	+2.0
- Industry	-7.7	-17.9	-5.3	-0.9	+3.0	+3.5	+2.0
- Services	-0.7	-10.0	-2.6	-1.6	+1.6	-1.5	+2.0
<b>Unemployment rate</b>	1.3	5.8	9.3	11.3	10.5	12.0	12.4
<b>Prices and exchange rates</b>							
- consumer prices growth rate	+28.9	+35.0	+23.0	+22.0	+19.1	+28.0	+18.0
- nominal exch. rate : HUF/\$ (annual average)	63.2	74.7	79.0	92.0	105.0	130.0	152.0
- nominal exch. rate: HUF/ECU (annual average)	80.0	92.3	102.3	107.85	124.26	162.5	190.0
- for information 1 \$ =.... ECU	0.790	0.809	0.772	0.853	0.845	0.80	0.80
<b>Public finance</b>							
- govt total expenditure in % of GDP	57.2	54.3	57.9	54.8	54.3	51.5	50.7
- public deficit (-) in % of GDP	+0.5	-2.4	-7.7	-6.5	-5.8	-3.5	-2.6
- total consolid. public debt in % of GDP	67.6	75.9	80.8	91.1			
<b>External account</b>							
- current account (Mio ECU)	298	349	250	-2945	-3305	-2062	-1924
- current account in % of GDP	1.1	1.3	0.9	-9.1	-9.6	-6.6	-6.1
- external debt in % of GDP	63.2	69.7	62.9	65.7	73.2		
- internat. reserves (Mio ECU)	921	3250	3382	5746	6008		

(Source : European Commission, DG II, 04.04.1995)

<sup>1</sup>

The national currency is the Forint (Ft or HUF) : national authorities try to link it to a basket of currencies (30 % weight for the dollar and 70 % weight for the ECU). On 1.5.95 : 1 ECU = 162.014 HUF

## **Comments**

*(Main source : ADE-PHARE 1995)*

**The collapse of the economy has been much more pronounced than anticipated at the beginning of the transition process**

Over the period 1990-93 the Gross Domestic Product declined severely and continuously. The cumulative fall amounted to - 20 % for the whole economy, with - 34 % in agriculture, - 29 % in industry and - 14 % in services. However, these figures may overstate the extent of decline because of the substantial underground economy, which may have increased during this period. The decline has now come to an end and some recovery was observed in 1994 for each of the three sectors. Reductions in employment have accompanied the decline in production.

These negative developments have been the combined result of the collapse of the former COMECON markets, the inadequacy of production structures to meet changing consumption patterns, the rapid opening of borders, and a too relaxed budgetary policy.

**A gradual and credible approach to the reform of the economy produced positive effects but seems to have reached a standstill**

Some price and trade liberalisation had begun before the political changes of 1989-90. Their acceleration has permitted the development of the private sector and large inflows of foreign direct investment.

The development of the private sector took place through the privatization of state enterprises and the emergence of a buoyant informal sector. The privatization process was conducted on the basis of individual transactions with counterparts intending to take an active role in management. This brought in substantial foreign direct investment (on average \$bln 1.5 per year), but the process has slowed down since the end of 1992 and has now reached a turning point where there are diminishing returns to the sale of state property. However, large companies and banks are still to be privatized, which will provide fresh financing resources for the budget and the current account.

**Household consumption has been maintained but income disparity and poverty have increased**

Household consumption has been maintained, despite falling income from production, through increased social payments and declining saving rates. However, real disposable income has fallen for the majority of the population. Insufficient targeting of social assistance and protection has resulted in increased poverty hitting certain sectors of the population.

## **The persistence of a large public finance deficit endangers economic stabilisation**

The government's path has not been smoothed by fiscal policy. An inappropriate system of social transfers, as well as tax evasion benefitting the "hidden economy" have resulted in a large public finance deficit, depriving the government of the means to sustain the reform and contributing to the deterioration of the current account. A large public debt, both foreign and domestic, has accumulated and is placing additional pressure on public finance.

## **A weakened competitive position hampered the expansion of exports and growth**

Overall domestic prices and wages have been rising more than the currency depreciation, leading to appreciation of the real exchange rate and a deterioration of the competitive position of Hungarian products.

Total exports recovered rapidly after the collapse of COMECON and a redirection of exports towards the European Union took place. Imports surged even more during the same period, producing a marked deterioration of the current account (-2.9 Mio ECU in 1993 and -3.3 Mio ECU in 1994).

The main imports are energy, machinery and consumer goods, while the main exports are machinery again, transport equipment, textiles and pharmaceutical products.

## **Outlook**

Thanks to accumulated external reserves and to the dominance of long term debts, Hungary is not facing a payments crisis, short term. However, any further slippage in public finance, any slowdown of foreign investment and privatization revenue might rapidly provoke a macro-economic destabilisation.

Hungary faces difficult years. The rehabilitation of domestic supply capacities requires the completion of the reform in agriculture and the combined restructuring of the productive and financial sectors, at a time when the public finance deficit and external constraints severely limit growth prospects.

The restructuring of public finances is a major prerequisite to alleviating this situation and putting the economy back on a sustainable track.

**After several months of unclear policy, the new government adopted in March 1995 a package of measures intended to restore confidence in its commitment to a market-led economy and to tackle the economy's deep structural problems: immediate devaluation of the forint by 9 %, cuts in social and welfare spending, limitation of public sector wages, imposition of an 8 % import surcharge on all imports except capital investment, energy and outward processing.**

## **1.4. Regional economy**

There are regional economic contrasts in Hungary.

Heavy industry, the traditional specialization within COMECON countries, was located in particular in the **north-east** of the country. This region was severely hit by the recession and unemployment reached 20 % in 1993.

Agriculture is the main activity in the **south-east** of the country (Great Plain). This region was hit by successive droughts and by agricultural recession in general, with less direct consequences for unemployment rates.

The **western part** of the country has always been more developed, partly due to its closeness to western Europe. The recession was less dramatic and unemployment was kept under 10 % (1993). This does not exclude local problems, such as the recession of heavy industry in North Balaton.

**Budapest** remains by far the most prosperous economic pole; unemployment was only 6 % in 1993.

## 2. Agricultural economy

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

However, the political changes brought about from 1989 onwards destroyed the basic pillars of the socialist system, without putting in place rapidly enough the foundations of a developed market economy in the food sector. The transition appears to be a more difficult and lengthy process, during which a real crisis situation has developed.

### 2.1. Main agricultural indicators

The following table highlights the main macro-economic features of Hungarian agriculture since 1989.

**Table 2.1**  
**Main agricultural macro-economic indicators<sup>1 +2</sup>**

		1989	1990	1991	1992	1993	1994
<b>Products</b>							
GDP	% var	+0.7	-3.3	-11.9	-4.3	-2.3	+2.0
GAP	% var	-1.2	-4.6	-8.1	-11.9	-14.7	+1.5
Share of agriculture	%	13.7	12.5	8.6	7.3	6.4	6.3
Share of food ind	%	1.8	1.8	5.2	4.8	4.6	
<b>Employment</b>							
Share of agriculture	% var	17.9	17.5	15.8	13.5	10.1	6.7
Share of food ind	% var	4.3	4.2	4.2	4.6	5.5	5.2
<b>GAO</b>							
Total	var	-1.8	-4.7	-6.2	-19.9	-9.7	+1.5
Crops	var	-1.1	-9.3	+4.0	-26.1	-9.2	+10
Livestock	var	-2.5	-0.2	-15.6	-11.7	-10.4	-10
<b>Shares of subsectors</b>							
Crops	%	49.1	51.1	56.8	51.5	54.7	59.0
Livestock	%	50.9	48.9	43.2	48.5	45.3	41.0
<b>Price index</b>							
Agr input prices	100	130.0	189.1	250.7	271.0	325.2	387
Agr producer prices	in	129.4	166.4	164.9	179.1	212.2	269.5
Retail food prices	1986	143	193	236	282	364	450

(Sources : European Commission, DG II, April 1995; OECD, February 1995)

<sup>1</sup> Definitions and abbreviations: GAO Gross Agricultural Output; GAP Gross Agricultural Product; IC Intermediate Consumption; GAP = GAO - IC.

<sup>2</sup> The shares of agriculture and food industry have been affected by a change of enterprise classification between sectors : this partly explains the abrupt cut in the share of agriculture between 1990 and 1991, together with a steep increase in the share of the food industry. Another factor was the splitting of cooperatives and state farms.

## Comments

### **Collapse of production more pronounced in the agricultural sector than in the whole economy**

Contrary to other CEECs, the recession between 1990 and 1993 has been worse for agriculture than for the whole economy: over this period, the cumulative fall amounted to - 34 % for agriculture against - 20 % for the whole economy. Some recovery appeared in 1994, at a slower pace for agriculture than for the whole economy.

The main factors for the agricultural recession were:

- the collapse of traditional markets in the former Soviet Union;
- an unfavourable development of the terms of trade (input prices vs output prices);
- the fundamental restructuring of land ownership (cf chapter 3);
- the reorganization of farms<sup>3</sup>;
- the immediate and delayed effects of abnormal droughts in 1992 and 1993: less production one year means less cash for buying inputs the year after and/or pressure for decapitalisation.

As a result, the share of agriculture in the whole economy declined to 6.3 % in 1994: this is still far higher than in the European Union (2.5 % in 1992).

### **A sharp reduction of agricultural employment linked to social deterioration in rural areas**

The contraction of agricultural activity obviously resulted in a reduction of employment in the sector. However, the exact correlation is hard to appreciate. In fact, around one third of those people registered as agricultural employees (in state and collective farms) were employed in non-farm activities and are now normally registered in the industrial sector or in services (if their activity still exists). In absolute figures, the number of people registered in agriculture was 392 000 in 1993, that is 10.1 % of the active earners (Central Statistical Office).

Under the cooperative system of the socialist economy, the cooperative members could have so-called "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 cooperatives gave direct financial assistance to their members, after retirement or in case of illness. The cooperatives who could afford it accomplished the most important community tasks at village level, instead of the local authorities. Their industrial or service capacity served as an infrastructure

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<sup>3</sup> Non-farm activities, which traditionally represented more than 40 % of the activities of state farms and cooperatives, allowed the transfer of profits to farming activities. They have generally been taken out of the reorganized farms.

for the whole community, also to run or support social and cultural institutions. This "symbiotic" system has largely disappeared following the privatization process. Local authorities should have taken over these various services but generally lacked the financial resources, the infrastructure and the knowledge properly to do so.

All these issues have contributed to the worsening of living standards in rural areas.

#### **A progressive dominance of the crop sector over the livestock sector**

The evolution of the crop sector was negative over the period 1989-93 (except in 1991) and visibly affected by the droughts of 1992 and 1993. The recovery of 1994 could however mean that the bottom of the trough has already been reached. During the same period, a real collapse of the livestock sector took place as a consequence of structural reorganisation, droughts and lack of cash.

The result is the progressive dominance of the crop sector over the livestock sector: starting from 50/50 in 1989, the proportions became 60/40 in 1994.

#### **A sharp deterioration of the terms of trade for agriculture**

The terms of trade have deteriorated since 1989: the producer price index (100 in 1986) reached 269.5 in 1994, whereas the input price index was already at 387 and the retail food price at 450. The removal of residual consumption subsidies played only a marginal role in this deterioration. It then appears that agricultural production was squeezed between (inefficient) upstream and downstream sectors (cf chapter 4).

## 2.2. Land use

**Table 2.2**  
**Land use**

(000 ha)	1989	1990	1991	1992	1993	1994	1994 % (sub)total
<b>Arable land</b>	<b>4713</b>	<b>4713</b>	<b>4714</b>	<b>4707</b>	<b>4712</b>	<b>4714</b>	<b>77.0</b>
o.w: cereals (grain)	2805	2767	2850	2709	2703	2940	
cereals (silage)	268	335	256	252	230	165	
oilseeds <sup>4</sup>	465	449	484	492	418	472	
peas and beans	163	139	121	115	94	63	
sugarbeet	120	131	158	108	95	106	
fallow	-	66	102	329	411	236	
<b>Horticulture and permanent crops</b>	<b>269</b>	<b>269</b>	<b>266</b>	<b>265</b>	<b>260</b>	<b>260</b>	<b>4.2</b>
o.w: horticulture <sup>5</sup>	35	35	35	35	35	35	
orchards	94	95	94	95	93	93	
vineyards	140	138	136	135	132	132	
<b>Permanent grassland</b>	<b>1197</b>	<b>1186</b>	<b>1173</b>	<b>1164</b>	<b>1157</b>	<b>1148</b>	<b>18.8</b>
<b>Subtotal: agric area</b>	<b>6179</b>	<b>6168</b>	<b>6153</b>	<b>6136</b>	<b>6129</b>	<b>6122</b>	<b>100.0 65.8</b>
<b>Forests</b>	<b>1688</b>	<b>1695</b>	<b>1701</b>	<b>1712</b>	<b>1764</b>	<b>1767</b>	<b>19.0</b>
<b>Swamps and ponds</b>	<b>68</b>	<b>67</b>	<b>66</b>	<b>67</b>	<b>67</b>	<b>68</b>	<b>0.7</b>
<b>Subtotal: prod area</b>	<b>7935</b>	<b>7930</b>	<b>7920</b>	<b>7915</b>	<b>7960</b>	<b>7957</b>	<b>-</b>
<b>Uncultivated area</b>	<b>1368</b>	<b>1373</b>	<b>1383</b>	<b>1388</b>	<b>1343</b>	<b>1346</b>	<b>14.5</b>
<b>Land area, total</b>	<b>9303</b>	<b>9303</b>	<b>9303</b>	<b>9303</b>	<b>9303</b>	<b>9303</b>	<b>100</b>

(Sources : Central Statistical Office for the groups of products, FAO for the specific products)

### Comments

The breakdown of land use, by group, has not changed significantly since 1989. The most noticeable change is the increasing share of wooded areas at the expense of permanent grassland.

Within arable land, there are more year to year changes with no clear indication of trends on the 1989-94 period shown (for a long term analysis by product, see next paragraphs). Around 200 000 ha are equipped for irrigation, of which 163 000 ha (2.7 % of the agricultural area) were effectively irrigated in 1993.

Compared to the EU, permanent grassland has a much lighter weight: only 19 % of the agricultural area in Hungary, compared to 38 % in the EU (1992). Permanent grassland in Hungary is generally of poor quality and was practically not used by the large scale farms.

<sup>4</sup> Oilseeds are defined here as sunflower, rapeseed and soyabean

<sup>5</sup> The figures for horticulture (gardens) have been corrected by us for the years before 1992: in the official statistics, the area falls from 342 000 ha in 1991 to 35 000 ha in 1992, the difference being classified from that year onwards as uncultivated, built-up areas.

## 2.3. Crops

The following table gives a summary presentation of the main crops. As in the previous tables of this chapter, 1989 has been chosen as the starting point and was in fact a quite "normal" year as to the weather conditions. 1994, the last year with available figures, can also be qualified as "normal". Detailed data over a longer period (1987-94) are given in annex and comments are made below product by product.

**Table 2.3**  
**Summary presentation of main crops**

1994 figures and %change vs 1989	Cereals (grain)		Oilseeds		Peas and beans		Sugar	
	1994	change %	1994	change %	1994	change %	1994	change %
Area (000ha)	2880	+2.5	472	+1.6	63	-61	106	-12.0
Yield (t/ha)	4.02	-26.8	1.60	-18.8	2.49	-1	4.30	-4.0
Production (000t)	11600	-24.8	756	-17.4	157	-62	456	-15.6
Imports (000t)	250	+10.5	78				12	
Exports (000t)	970	-47.4	279				1	
Consumption(000t)	11080	-14.9	555				467	

(Sources : FAO in general, Central Statistical Office for 1994 trade figures)

### 2.3.1. Cereals (*Annex 2.1*)

The main cereals grown in Hungary are wheat, maize and, to a lesser extent, barley.

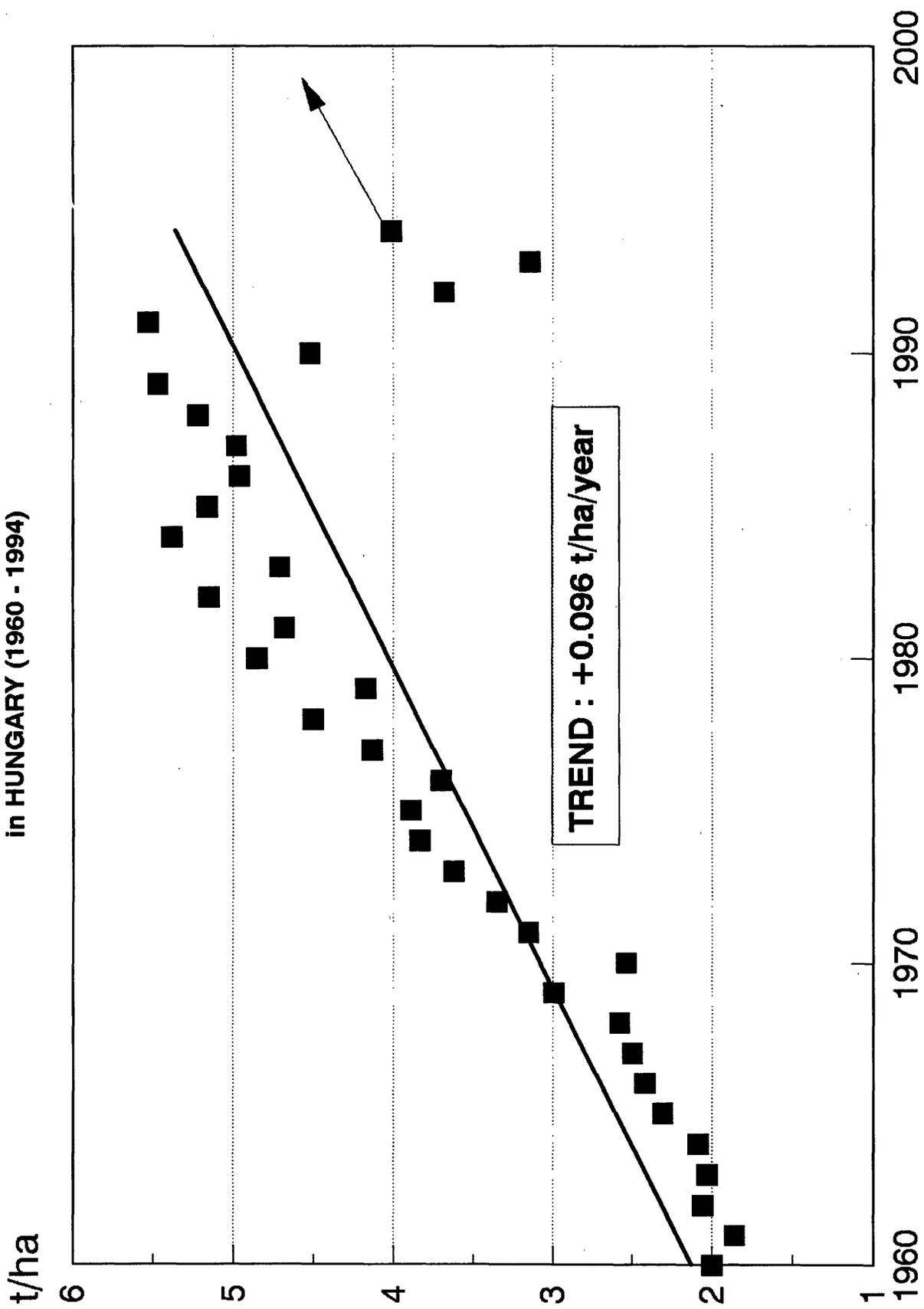
Contrary to the mid-term impression given by the table above, there is a clear declining trend of cereals area on the long term (1960-94), at the rhythm of 20 000 ha annually. Wheat with 1.06 mio ha in 1994 and maize with 1.20 mio ha are comparable, whereas barley represents only 0.42 mio ha.

The yields analysis shows a long term increase at the rhythm of 0,1 t/ha annually (graph on next page), for wheat and for maize separately, as well as for cereals as a whole. The present level of trend would be slightly more than 5 t/ha for cereals as a whole, which is close to the present EU average situation. But the succession of dry years (1992, 1993 and even 1994 for maize) and the drastic reduction of inputs raise serious doubts as to a possible recovery at the trend level. More probably, yields will resume their upward trend, but from a lower base.

Although the effect of drought is less visible on wheat than on maize yields, the confidence of farmers towards the latter does not seem to have been affected, probably because of higher prices and the shorter time between sowing and harvest.

# TOTAL CEREALS : YIELDS EVOLUTION

in HUNGARY (1960 - 1994)



Source : FAO

Cereals production has been notably lower in the recent past (except in 1991) than traditionally in the 80s. A first recovery occurred in 1994: 11,6 mio t of cereals, including 4.9 mio t of wheat and 4,7 mio t of maize.

Cereals domestic consumption and in particular animal consumption also contracted in the last five years (- 27 %), albeit at a slower pace than animal numbers (from - 34 % to - 43 %), as shown in the table below.

**Table 2.4**  
**Cereals consumption**

(000 t)	1989	1994	Variation
Total consumption of cereals	13030	11080	-15 %
Animal consumption of cereals	9560	6960	-27 %
Number of animals			
- cattle (from 31.12.89	1600	910	-43 %
- pigs to	7660	4356	-43 %
- poultry 31.12.94)	58560	38380	-34 %

(Sources : FAO, Central Statistical Office)

This remark on cereals consumption could indicate a deterioration of feed conversion ratios (taking into account that cereals substitutes do not play a major role in animal feeding in Hungary and that a similar remark will be made for oilmeals consumption).

In any case, the collapse of the livestock sector has worsened the difficulties for cereals.

On the external side, net exports have also contracted in the '90s, compared to the '80s, as a consequence of the break-up of the Soviet Union and all the other factors which contributed to the decline of production.

### 2.3.2. Oilseeds (Annex 2.2)

Sunflower is well adapted to the agri-climatic features of Hungary and widely grown. Rapeseed has a limited and declining area cultivated in the north of the country, with poor yields. Soya is also very limited.

The sunflower area shows a slight upwards trend, reaching 418 000 ha in 1994 (89 % of the oilseeds area). Until now, its minimum rotation is 5 years, because of disease problems (this is not the case in the EU).

Sunflower yield was close to the yield in comparable western regions of production (1.95 t/ha in 1989). As for cereals, it has been affected by successive droughts and agricultural recession, albeit to a lesser extent (- 20 % over the period 1989-94, against - 27 % for cereals). This resilience could point to a further extension of area.

1994 **sunflower production** is estimated at 664 000 t (88 % of oilseeds production). From this quantity, 270 000 t has been **exported** as seed and 260 000 t as oil (that is 110 000 t of oil).

In contrast, **the oilmeals market is characterized by a large deficit** despite the collapse of the livestock sector: imports cover more than half of needs. Soyameal is the main imported oilmeal.

As for cereals, the decrease in oilmeals consumption, roughly estimated at 10-15 % over the last five years (source : Oilworld) is less than the drop in animal numbers (- 34 % to - 43 %, cf table 2.4).

### **2.3.3. Protein crops** (*Annex 2.3*)

**Dry pulses** (peas and beans) have a modest and decreasing cultivated area: only 63 000 ha in 1994.

**Lucerne** is the main protein-rich fodder crop, with 255 000 ha in 1993. It can be dried on-farm.

### **2.3.4. Sugarbeet and sugar** (*Annex 2.4*)

The **area under sugarbeet** has contracted somewhat over the past few years, from 120 000 ha in 1989 to 106 000 ha in 1994, due to the following factors :

- dry conditions (more irrigation necessary);
- dispersal of cultivation over the whole territory, often far away from processing plants;
- restructuring of the sugar industry.

Because of insufficient irrigation, sugar yield and production are very dependent on weather conditions and have been irregular over the past few years: 1994 **yield** is estimated at 4.3 t/ha and **production** at 456 000 t.

Normally Hungary is, marginally, a **net exporter** of sugar; however, some imports were necessary in 1992 and 1993, because of low production.

### **2.3.5. Potatoes** (*Annex 2.5*)

With 58 000 ha in 1994, potatoes are not the backbone of Hungarian crops. They represent roughly 1 % of the agricultural area, the same percentage as in the EU (in Poland, it is 9.5 %).

### **2.3.6. Tobacco** (*Annex 2.6.*)

Tobacco production is concentrated in a few regions, in particular in the north-east of the country. Yields are rather poor.

Tobacco areas are stable and reached 12 800 ha in 1994. Production of leaves was 14 900 t in 1994.

### 2.3.7. Fruit and vegetables (*Annex 2.7*)

Statistical data for fruit and vegetables must be viewed cautiously because of the existence of private gardens, even before the transition (ca 300 000 ha, now mostly classified as built-up areas), the use of which is difficult to tackle.

According to the Central Statistical Office, the **area planted to vegetables and production** declined over the period 1989-93 to reach respectively 83 000 ha and 1 340 000 t in 1993. All sorts of vegetables are produced in Hungary, especially tomatoes, onions, white cabbages and the well known paprika.

**Fruit area** is stable at 93 000 ha. **Production** is variable, according to weather conditions: it was 1 270 000 t in 1993. The main produce is **apples** (two thirds of total fruit production), followed by **plums, sour cherries and pears**. Production of **soft fruits** (strawberries, raspberries, gooseberries, currants) is significant, at around 50 000 t in 1993.

### 2.3.8. Viticulture and wine production (*Annex 2.8*)

Wine grapes are grown in several regions of Hungary, covering 132 000 ha in 1993 (in slight decline), of which only 107 000 ha are considered as productive vineyards. **Wine production** was 3.64 mio hl in 1993.

Wine classification is close to the EU's. Hungary produces ordinary wines as well as high quality wines, such as the well known "Tokaj". Hungary is traditionally a **net exporter** of wine. The main markets are the NIS (mainly Russia and Ukraine) and the EU (mainly the United Kingdom and Germany).

## 2.4. Livestock

As stated earlier, the livestock sector is characterized by a dramatic decrease in animal numbers and production, for the following main reasons:

- abolition of consumption subsidies since 1988;
- drop in living standards, provoking a decline in meat consumption;
- collapse of traditional export markets (former Soviet Union);
- successive droughts in 1992 and 1993;
- lack of capital to reconstitute livestock numbers;
- disappearance of the symbiotic system between large scale farms and household plots (the latter played a major role in the Hungarian livestock sector - cf chapter 3 on farm structures).

The following table summarizes the main data of the livestock sector. Detailed data are given in annex and comments are made below, product by product.

**Table 2.5**  
**Summary presentation of livestock sector<sup>6</sup>**

1994 figures and %change vs 1989	Beef		Pork		Poultry	
	1994	change	1994	change	1994	change
<b>Animal numbers 000</b> (31.12.89 to 31.12.94)	910 415mc	-43 % -26 %	4356	-43 %	38380	-34 %
<b>Production (000t)</b>	80	-30 %	600	-41 %	341	-22 %
<b>Imports (000t)</b>	28	+135 %	40	0 in 1989	1	0 in 89
<b>Exports (000t)</b>	13	-63 %	42	-68 %	81	-55 %
<b>Disappearance (000t)</b>	95	+4 %	598	-32 %	261	+1 %
<b>Disappearance per capita (kg)</b>	9.2	+5 %	58.2	-32 %	25.4	+2 %

(Sources: FAO in general, Central Statistical Office for 1994 animal numbers ; m.c. = milk cow)  
N.B. This balance sheet deals only with meat, at a 1st processing level; it covers neither the trade of live animals, nor further processed products. Therefore, "disappearance" does not equal domestic consumption of meat products, as reported by national statistics.

#### 2.4.1. Milk and milk products (*Annex 2.9*)

Milk is traditionally produced by large-scale farms (75 % by ex-state farms and the cooperatives in 1993). Due to the lack of good quality pasture, cattle stocking relies on intensive methods: large stables, concentrated feedstuffs. There is a ban on the use of hormones which, according to official sources, is well respected.

Between 1989 and 1994 (31 December), the number of dairy cows dropped from 560 000 to 415 000 (- 26 %) and milk production dropped from 2.86 mio t to 2 mio t (- 30 %).

The average yield of dairy cows seems to have a slight downwards orientation. In 1994 it amounted to 4800 kg/cow, close to the EU level.

Until the beginning of the nineties, Hungary was a traditional net exporter of milk products: for example, cheese exports reached 21 000 t in 1990, i.e. 36 % of production. Since 1992, the trade situation tends to be approximately balanced.

The domestic market for dairy produce is developing rapidly under the following factors: dynamic foreign investment, strong competition between processing companies (to buy the milk from the farmers and to sell the produce to the retail chains), increased market differentiation.

<sup>6</sup> Meat production figures (and thus consumption figures) differ from one source to another, according to the reference used : live-weight / carcass-weight, boned / deboned meat.

#### **2.4.2. Beef and sheepmeat (*Annex 2.10*)**

Cattle are traditionally milk oriented in Hungary, where beef consumption is less important than pigmeat and poultrymeat. This can also be seen from the reduced proportion of male animals (12 % of total).

Between 1989 and 1994 (31 December), the number of cattle dropped from 1 600 000 to 910 000 (- 43 %). Because of the rapid rate of slaughter, the decline in production took place only from 1993 onwards. For 1994, production, expressed in carcass weight, is estimated at 80 000 t (- 30 % compared to 1989). A further decline is inevitable until 1996, even with a recovery of animal numbers.

Consumption of beef (in fact, disappearance of beef meat, as a raw product) is traditionally low but increased somewhat over the period 1989-94: from 8.8 kg per capita to 9.2 kg in 1994.

Sheep rearing is very limited and based on extensive grassland systems. Between 1989 and 1994 (31 December), the number of animals dropped from 2 070 000 to 947 000 (- 54 %). Production figures are unclear but lie probably around 10 000 t (carcass weight).

#### **2.4.3. Pigmeat and poultrymeat (*Annex 2.11*)**

Pigmeat is the major meat in Hungary. Between 1989 and 1994 (31 December), the number of animals dropped from 7 660 000 to 4 356 000 (- 43 %). Production dropped from 1 014 000 t to 600 000 t (- 41 %) over the period 1989-94.

Poultry numbers fell from 58.6 mio to 38.4 mio over the same period (- 34 %) and production from 436 000 t to 341 000 t (- 22 %).

Disappearance of pigmeat is declining substantially: from 85 kg per capita in 1989 to 58 kg in 1994. Disappearance of poultrymeat is almost stable at 25 kg per capita. The decline of "white meat" is not remotely compensated by the slight increase in beef. Declining living standards are likely to explain this global decrease of meat consumption, rather than health concerns.

### **2.5. Forestry**

Forests covered 12 % of Hungary's territory in 1945. Increased afforestation by the State, on unsuitable cropland, pushed this figure to 19 % in 1994 (1 767 000 ha).

In 1994, forestry was distributed as follows :

- forestry companies	60.4 %
- agricultural cooperatives	14.1 %
- individual farmers and households engaged in farming	18.2 %
- others	7.3 %

80 % of the forests serve for timber, the remainder for recreation, environmental protection, natural parks, game husbandry and experimental purposes.

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 5.7 Mio m<sup>3</sup> in 1993, producing gross earnings of 18 billion HUF (170 Mio ECU).

## **2.6. Agriculture and the environment**

On the one hand, pollution in general hurts Hungarian agriculture, particularly in certain regions. On the other hand, intensive agriculture has led to severe environmental degradation.

### **2.6.1. Environmental pressures on agriculture**

**Farming areas in the vicinity of industrial and urban centres** suffer from the immediate effects of dry and wet deposits, particularly from acid compounds (acid rain), but also from heavy metals such as lead, cadmium and mercury. They can also suffer from the improper dumping of hazardous waste.

**Water pollution**, due to insufficient wastewater treatment in Hungary - and in the surrounding countries of the Danubian basin - is also damaging for agriculture, especially when irrigation is needed.

### **2.6.2. Agricultural pressures on the environment**

Improper application of intensive farming techniques in crop production and animal husbandry have allowed severe environmental degradation to emerge in Hungary. **Since 1990, the deep cut in the use of inputs (particularly fertilizers) and the rapid decline in animal numbers have considerably relaxed pressures on the environment.** In other words, economic recession has led to a more environmentally friendly agriculture. However, some damage is not easily reversible. Furthermore, the (slow) recovery of agriculture will require close environmental monitoring.

The problems can be summarized as follows.

**Physical degradation** of the soil is widespread throughout the country. The most severe damage to the soil has been caused by erosion. About 25 % of Hungary's arable land is threatened with water erosion, 15 % with wind erosion and 10 % with water-logging.

**Biological degradation** of the soil has also been observed at many locations: acidification, salinisation, swamping.

**Pollution of surface and ground waters** is partly due to the (former) overuse of chemical inputs and to the concentration of large numbers of animals.

**Deterioration of nature and landscapes** is the consequence of intensive and large-scale farming. Wildlife suffers from open landscapes, reduction of grasslands and planting of non-native tree species (conifer, poplar, acacia...).

Furthermore, the Carpathian Basin could be one of the regions most affected by **global warming**. The climate would become drier with higher temperatures and evaporation rates, increasing the demand for water.

### 3. Farm Structures

Hungarian farming has experienced major structural changes from the point of view of ownership: this will be developed in paragraph 3.1. Changes have been less fundamental, but nevertheless highly significant, from the point of view of land use and agricultural production: this will be developed in paragraph 3.2.

#### 3.1. Transition to private ownership

##### 3.1.1. The scale of transition to private ownership

The summary table below underlines the scale of change in productive land ownership, (agricultural land + forests). Data were only available until 1993 but the restructuring process is still going on.

**Table 3.1**  
**Ownership of productive land 1990-93**

	Area (000 ha)		Area (%)	
	1990	1993	1990	1993
State farms	2215	1834	27	23
Cooperatives	3479	1482	42	19
Cooperative members	1977	1839	24	23
Others	565	2771	7	35
Total <sup>1</sup>	8236	7926	100	100

(Source : Ministry of Agriculture, quoted by World Bank)

Two main remarks arise from the above table:

- despite the various attempts to instil some market mechanisms in the socialist economy before 1989, full collective structures were still in place in 1990 (note that most of the cooperative members had no access to "their" land);
- since then, and up to 1993, (ex) state farms lost 0.4 mio ha and cooperatives lost 2 mio ha; this land was shifted to private ownership outside the collective sector, through compensation and through the allocation of about one hectare, on average, to landless cooperative and state farm employees.

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<sup>1</sup> The variation of total productive land between 1990 and 1993 is due to a statistical change, as explained in § 2.2 (private gardens, footnote 5); in the present table, we have preferred to stick to the original figures of the Ministry.

During the same period, both institutions (state farms and cooperatives) also experienced changes of legal status. In 1994, the restructuring process developed further and is not yet fully completed. This whole institutional process is presented in the following paragraphs.

### 3.1.2. The main concepts

The concepts of private ownership, restitution, compensation, privatization, transformation, are central in the debate on the post-communist reform of Hungarian agriculture.

#### The main concepts of the privatization process

**Private ownership** implies a title to property and thus freedom to exploit or dispose of the assets/land.

**Restitution** is the process by which property is returned to its legitimate owners.

**Compensation** is a question of repairing an injury done in the past; it does not necessarily imply a restitution of property rights and in particular does not imply a restitution of the actual physical property expropriated.

**Privatization** means the return to private ownership of property from state or collectivised ownership. Again, it does not imply in itself restitution or compensation but only the transfer of property rights to private hands.

**Transformation** is the term used to cover the legal conversion of the old entities into business entities used in market economies. In the Hungarian reform, transformation always precedes the process of privatization.

### 3.1.3. Compensation

Four successive laws provided **partial compensation** to former expropriated owners, and others who suffered material and non-material injury or damages by wilful acts of the former state. They covered not only the communist period (1948-1989), but also the war period (1939-1948).

"**Partial**" translated in a steeply digressive scale of compensation:

- full compensation up to 200 000 forints (10 hectares on average);
- decreasing compensation for the part between 200 000 forints and 500 000 forints (10 - 25 hectares on average);
- 10 % compensation for the exceeding part.

"**Compensation**" (as described above) meant that people received a "voucher" or "coupon" which entitled them to buy land, not necessarily located where the damage took place, or to buy assets, including non agricultural assets (urban flats...). Elderly people could, alternatively, use the voucher to get a life annuity from the State.

State farms and cooperatives were required to reserve land in order to satisfy the commitments resulting from the vouchers.

As we will see later on (paragraph 3.2.), this strategy has helped to preserve large farming units, i.e. to avoid a breaking up of farm structures.

### **3.1.4. Privatization of state farms**

Out of 121 state farms existing in 1992, 25 were assigned to remain in (partial) state ownership because of their so-called strategic tasks like seed production, breeding and upkeep of genetic banks; this number may be reconsidered downwards in the future.

The other 96 state farms were assigned to be privatized. By the end of March 1995, their situation was as follows:

- 34 went bankrupt and have been / are being liquidated now by offering their assets for sale;
- 39 can be considered as privatized;
- 23 are still in the process of being privatized (some of these may go bankrupt before completion, taking into account their financial difficulties).

Of the total assets of the former state farms, 46 % have been sold, 27 % will remain permanent state property and the remaining 27 % are still to be sold.

The approach generally used is decentralised privatization: state farms are broken down into smaller viable units, which are more easily sellable. Alternatively, some state farms are sold intact, while others are first transformed into joint stock companies before being sold by shares. The task of privatization was entrusted to the State Property Agency and partly to the State Holding Company.

**State farms are being privatized without their land (only the non-land assets are privatized).** The land remains state property and is leased for 10 to 15 years, with an option to buy after this period. This restriction was officially motivated by the uncertainties of the compensation process: state land is the pool of last resort for compensation, if cooperative land runs out before all the outstanding claims are satisfied. It also reflects the governmental wish to retain some control over the land.

Most of the new owners are former managers, employees and other private domestic investors. The participation of foreign investors has been low so far, at least partly due to the restrictions on land ownership.

### **3.1.5. Transformation of cooperatives**

The transformation of the 1333 cooperatives (collective farms) took place in accordance with two basic laws, passed in January 1992: the *Cooperative Transition Act* and the *Cooperative Act*. By the end of that year, all cooperatives had to be re-established as "new type" cooperatives based on private ownership of assets/land.

This reform is a very complex process and is still going on. The basic aim of the reform legislation was to force the former cooperatives to transform themselves into new business organisations (limited liability companies, etc) or, if the members wished, into new voluntary cooperatives organised on (more) internationally recognised principles.

**The non-land assets** of the cooperatives have been distributed as shares among members and heirs of former members. Two types of securities were created:

- cooperative shares, which are attributed to the members, give a vote entitlement on the basis "one man, one vote", but are not transferable;
- business shares, which represent fractional ownership of the non land assets, are non-voting but transferable.

This system of double security is an original characteristic of Hungarian "new type" cooperatives. As such, they have features of both western-style cooperatives and traditional private companies. But the owners of the cooperative shares, who are at the same time working members, are likely to prefer paying (higher) wages rather than making profits to be distributed among all the owners of the business shares.

**The land** of the cooperatives has been divided into four land funds:

- the land that was still privately (in theory) owned by the members;
- the land that had to be set aside for compensation;
- the members' and employees' land fund (they enjoy a minimal attribution);
- marginally, the land which had been rented for more than five years and which the renter could buy if he so wished.

At the end of the process of redistribution, the members' land (1st and 3rd items and the remaining land if there is any) becomes the members' "shared ownership": it has to be identified physically but not necessarily subdivided into individual lots.

Members were free to leave the collective farm before its transformation, together with their assets. Conversely, cooperatives have no obligation to employ their members.

By the end of 1992, official deadline for the transformation, more than 90 % of the former cooperatives had re-established themselves as "new type" cooperatives. In spite of the fact that they are now based on private ownership, **changes can be qualified as merely formal, in most cases.** Management often remains unchanged. Active members continue to regard their cooperative with the eyes of employees rather than shareholders. **Only ca. 15 % of members opted to take their land and assets out,** to continue farming independently or in a smaller group. The reasons for this low percentage were lack of capital, skills and experience in individual farming, as well as market uncertainties.

The financial situation of the "new type" cooperatives is not brilliant. In particular, their investment capacity is weak because of their indebtedness and their lack of collateral as borrowers (shared-ownership of land).

### **3.1.6. Land Law of 1994**

A new land law was approved by Parliament in April 1994. After long and turbulent procedures, and despite the change of government, it entered into force in January 1995.

**The law recognises only individual (Hungarian) ownership of agricultural land, and not corporate (cooperative, private company with legal entity) ownership.** This could severely limit the range of enterprises which might otherwise have wished to create consolidated, larger farms. Corporate inability to own land discourages them from investing, and negatively affects their credit-raising potential. The reason for this restriction was to help individual members against the former managers of state farms and cooperatives (the so-called "green barons").

The Land Law also establishes an upper limit of 300 ha for individual ownership and 2 500 ha for corporate rent (but the aggregated area rented from members of the cooperative or from shareholders of the company is not limited). These two restrictions are not likely to have big economic effects.

Finally, it limits the duration of an agricultural land rental to a maximum of 10 years (with a derogation for orchards and forest plantations). This could also prove a disincentive to some investors for land consolidation through renting, if the pay-off period of their projected investment exceeds 10 years.

"Hidden mines" (legal disputes) could appear in the near future as regards the application of the successive laws. For example, people may well have leased land before 1994, with a clause of property transfer at the expiration of the contract. They could then be hit by the individual limit of 300 ha or by the restrictions on foreign ownership.

### **3.1.7. Land registration**

Although the compensation process and the transformation of cooperatives are more or less achieved, unsettled disputes and administrative problems still delay the delivery of solid property titles to many (new) land owners. The staff resources dealing with land registration have been reinforced in 1995, but the situation will probably not be clear until the end of 1996. This of course restrains the development of agriculture as, for example, land cannot generally be taken as collateral for long term loans.

Moreover, a system of sales registration is still lacking. Incidentally, this explains the difficulties of having an updated view of the ownership situation (cf table 3.1).

## **3.2. The evolution of farm structures**

### **3.2.1. The diversity of farm types**

Before the reform, there were basically two farm types:

- large-scale farms: state farms and cooperatives;
- individual small plots (mostly part-time).

The number, average size and share in agricultural output of each category are presented in the table below (forests excluded).

**Table 3.2**  
**Farm structures in 1989**

	State farms	Cooperatives	"Small producers" (individuals)	Total
Number	130	1 245	1.4 mio	not rel.
Average area (ha)	7 138	4 179	0.25	not rel.
Total area (000 ha)	928	5 203	352	6 483
Share in area (%)	14	80	6	100
Share in cereals production	12.3	77.3	10.4	100
Share in cattle number	19.9	62.3	17.8	100
Share in pig number	22.0	33.0	45.0	100

(Sources : Central Statistical Office, OECD 1995, ADE-PHARE 1995)

Despite their small share in area, small plots represented 10 % of cereals production, 18 % of cattle numbers, 45 % of pig numbers: globally, their share in output was estimated to 35 %, the remainder being state farms production (15 %) and cooperatives production (50 %). The farm sector structure characterized by "symbiotic" coexistence of large units and small individual plots is often referred to as "the Hungarian model" of agriculture. It typically encouraged deeply integrated production relations between household farms and state farms / cooperatives, which sometimes verged practically on "contract" farming, and a high degree of autonomy from central authority.

**The restructuring process towards private ownership has generated a greater number of agricultural producers and a greater diversity, in terms of legal status, size and ownership structure.** Some individuals have left the cooperative 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 cooperatives have often split into several smaller, village-based or functional units, and these units have registered either as cooperatives or as business organizations (mainly limited liability companies and, to a lesser extent, joint stock companies). State farms have been divided into smaller but still viable units, which then reorganized, also as limited liability or joint stock companies.

However, relying on recent official surveys (next paragraph), two interesting conclusions can be drawn. **Firstly, large-scale farms remain the dominant form of farming: among them, "new type" cooperatives are still the most important players. Secondly, among the individual (and historically small) farms, a new category of full-time commercial private farms is progressively emerging: their number is estimated at 51 000 in 1994 and could grow to 70 000 (Ministry of Agriculture, 1995).**

This new category is emerging through the following processes:

- growing out of the household plots of former cooperative members and state-farm employees;
- being created by compensation beneficiaries;
- being created by members seceding from cooperatives with their land;
- a combination of the above, as well as buying and leasing land.

Their typical size is 10 to 30 hectares. Their role is already important in generating competition both in output and input markets. The majority of them may, however, face a difficult time in coming years, due to limited investment capacity and the shortcomings of the rural infrastructure.

### 3.2.2. Structure of land use and production

Tables 3.3 and 3.4 below, relying on recent publications by the Central Statistical Office (1994) and the Ministry of Agriculture (1995), are the follow-up of table 3.2, and represent a quantitative attempt to analyze the structure of **agricultural land use** (which is different from land ownership). All these figures should be viewed with caution, because the different source publications are not always consistent between themselves and because definitions of farm types have changed overtime.

**Table 3.3**  
**Number and size of land users**

	State farms and companies		Cooperatives		Household plots/ Individual farms	
	Number	Average size (ha)	Number	Average size (ha)	Number	Average size (ha)
1989	130	7138	1245	4179	1.4 mio	0.25
1990	147	6217	1261	3992		
1991	151	5687	1340	3498	1.4 mio	0.46
1992	:	:	:	:	:	:
1993	811	2879	1533	2374		0.56
1994	1117	1976	1410	1702	1.2 mio	0.97

As a result of splitting, the average area of state farms / companies dropped from some 7 100 ha in 1989 to 2 000 ha in 1994, whereas the average area of cooperatives dropped from 4 200 ha to 1 700 ha.

**Table 3.4**  
**Share of land users (% area)**

	Companies	Cooperatives	Indiv. farms
1989	11.3	63.1	
1990	11.1	61.1	
1991	10.4	57.0	7.8
1992	22.0	55.3	
1993	29.3	45.7	11.1
1994	27.7	30.2	18.8

Despite the statistical weaknesses, these data clearly show the continuing predominance of large-scale farms, with a progressive shift from cooperatives to companies (ex-state farms, ex-cooperatives, new-built companies, ...). They also show the growing importance of individual farming.

The **production** structure is summarized in the table below; we focus this analysis on 1993, the last year for which statistics are available.

**Table 3.5**  
**Share of producers in 1993 (%)**

	Companies	Cooperatives	Household plots/ individual farms	Total
Cereals	21.3	55.2	23.5	100
Cattle number	25.2	49.4	25.3	100
Pig number	27.3	25.0	47.7	100
Poultry number	19.7	13.1	67.2	100

Compared with the situation in 1989, as described in broad terms in § 3.2.1, it appears that the share of non large-scale farms has increased. This category comprises not only the individual plots (as in 1989), but also the new emerging middle-scale individual farms.

### 3.2.3. Mid- and long-term evolution of farm structures

The main conclusion of this chapter is that the privatization process has not led to a breaking up of farm structures in Hungary. On the contrary, large-scale farms remain the backbone of Hungarian agriculture while, besides traditional very small-scale production (deeply linked to the large-scale farms), a new individual, independent, middle-scale, commercial agriculture is appearing.

Officially, present government policy expresses no particular preference towards one or other type of farming. However, the general political orientation might understandably favour the large-scale model and, in particular, the transformed cooperatives. Recently, concrete measures under the Agricultural Development Fund could point in this direction (cf § 5.4).

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. As a matter of fact, the dominance of family farms in Western Europe is the result of historical and economic evolution; the recent past shows that other forms of farming are also viable (the big corporate farms of the new German Länder, new types of corporate farms in many EU Member States).

Given that, and relying on the World Bank's analysis (1994) and on the PHARE experience, large-scale farms will most probably keep their dominance in the mid-term, with a probable continuing shift from cooperatives to companies (because of the financial difficulties of the former) and a probable decrease of average size.

In the long run, these farms will probably evolve towards increased reliance on internal contracting agreements for most production activities, which will be the responsibility of individuals or small groups with private ownership of land and assets. The core of the (mother-)farm 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. Such farms will essentially be based on family labour, although to some extent they will also use hired labour. Gradually, these farms will be associated through "western-style" service cooperatives, jointly owned by the member farmers, and providing services which entail economies of scale, such as input supply, marketing, and even processing.

**In the very long term (20 to 30 years), one could imagine that the present dualistic situation of farm structures in Hungary will evolve towards a continuous spectrum of farms.** Decentralized units of production will operate with more or less reliance on service companies or cooperatives.

## 4. Up- and Downstream Activities

### 4.1. Upstream industry

#### Agricultural machinery

The structure of this sector has changed dramatically since transition. Falling domestic and export demand and increased competition from imports, as machinery trade was completely liberalized, resulted in a drastic decline in machinery production. Imports have increased to cover 50 % of domestic demand. This has led about half of the original 120 machinery manufacturing firms to close and employment to drop to one-third of previous levels.

#### Seed sector

The seed sector was historically strong but has been severely hit since transition. In 1992, approximately 150 000 ha were still used for seed production, but this represented a decline of 33 % from the 1990 level. The use of certified seeds by farmers dropped from 60 % prior to transition to 30 % in 1993. The sector is now faced with substantial overcapacity (about three times the domestic demand).

#### Fertilizers and pesticides

Hungary is one of the most important producers of fertilizers and pesticides among the Eastern countries, third behind Russia and Romania. But this sector too was severely affected by the restructuring process: production of fertilizers dropped by 70 % between 1990 and 1993, while production of pesticides dropped by 40 %.

In fact, the use of chemical inputs, in particular fertilizers, completely collapsed during the period 1990-93, as shown by the table below.

**Table 4.1**  
**Use of fertilizers**

(active ingredients)	1990	1991	1992	1993	1994e
Total use of fertilizers (000 t)	671	196	189	207	300
Use per hectare of arable land and permanent crops (kg/ha)	127	37	38	41	60
O.w: N	53	71	78	78	91
P (in %)	19	12	11	11	3
K	28	17	11	11	6

(Source : Central Statistical Office for the period 1990-93, own estimates for 1994, based on sales)

The decline in fertilizer use has been more severe than the fall in agricultural production. Lack of cash and the technical possibility of reducing fertilization for one or two years without causing too much damage explain this discrepancy. Within the different types of fertilizers, there has been a preference for nitrogen (short-term effect) at the expense of P and K fertilizers (long-term effect). A recovery appears in 1994, but it will take time to recuperate the fertility of soils. In the meantime, yields will be affected, as well as sensitivity to climatic hazards.

## **4.2. Upstream services**

Before the transition, upstream services (distribution of machines, seeds, fertilizers, pesticides, etc) relied mainly on state-owned companies called AGROTEK and AGROKERS and on "production systems" (technological know-how companies specialized in an agricultural product). Privatization is well advanced. But the transition has been characterized by the emergence of a very active new private sector, in a way close to western systems.

## **4.3. Downstream services**

Traditionally, **marketing of farm produce** (including produce from household plots) was carried out mainly by the cooperatives and state farms themselves, rather than by the "production systems". These vertically integrated organizations have now been transformed into private agribusiness conglomerates. New private forms of marketing are developing rather slowly; however, in the long term (10 years), the sector should evolve in a "western" style (cf chapter 3 on farm structures), with a combination of private traders and service cooperatives.

Rapid transformations are occurring in the **retail sales sector**, with important foreign investments, mainly in the category of supermarkets (Spar, Metro, Tesco, Tangelmann, Plus, Kaisers, Louis Delhaize, ....). Competition is becoming stronger in this sector.

## **4.4. Food industry**

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 agricultural and consumer cooperatives, state farms and, to a lesser extent, private companies and individuals.

The food processing industry has undergone a radical structural change. The number of companies rose from 353 in 1991 to 2302 in 1993 and the increment came mostly from newly established private enterprises. In parallel, the output of the food industry declined dramatically (- 14 % between 1990 and 1993), albeit at a slower pace than agricultural production. However, a recovery seems to have occurred in 1994.

The privatization of the food industry has progressed considerably and is nearly complete. By the end of 1994, private investors owned the majority of equity in each of the 15 main subsectors. Out of 138 former state food companies, 107 had been privatized by the end of March 1995 and another 21 have been / are being liquidated. Through splitting of former state companies, 8 new companies have emerged in the privatization process, so that the number of companies still awaiting privatization is 18 - including 6 dairy and 6 milling companies. **In the brewing, vegetable oil and confectionery industries, all the companies have been privatized.** The rate of privatization in the food industry is higher than in any other Hungarian industry.

Foreign investments have played a major role in the privatization process. At the end of 1994, foreign investors owned (in terms of equity) 38.2 % of the former state industry, the state still owned 31.6 % and other domestic investors 30.2 %. **Foreign ownership is dominant in the following subsectors: vegetable oil processing (100 % of the formerly state owned industry), confectionery (96.3 %), distilling (79 %), tobacco (74.4 %) and brewing (68.4 %),** while there is no foreign involvement at all in the milling industry. Annex 4.1 provides a list of food companies with foreign majority ownership.

The competitiveness and financial performance of the privatized firms in these sectors have improved in the light of considerable resources invested in upgrading their technical management and organisational efficiency.

One risk stemming from the restructuring of the food industry is too high a concentration of capital, leading to dominant positions in some subsectors. This is already noticeable in the vegetable oil sector (foreign capital) and maybe in the poultry sector (Hungarian capital), where imports could remain the only factor of competition. However, it should be remembered that the former system of state property was monopolistic in essence.

Financial performance in the food industry varies but, on the whole, the sector is performing poorly, with losses amounting to over 30 billion HUF (280 Mio ECU) in 1993. One particular reason is the very high debt load, inherited from the former system.

#### **4.5. Banking system**

*(Main source : ADE-PHARE, 1995)*

The banking system in general is weak in Hungary, as a consequence of the previous centrally planned economy. For agriculture in particular, there are a number of specific weak features, which cause a general lack of financial resources in the sector:

- **on the banks' side**, the structural inclination in favour of short term loans, together with the lack of specific expertise in the provision of agricultural banking services;
- high nominal and real interest rates in general, compared with the relatively low return to the majority of investments in the agricultural sector;
- **on the users' side**, the limited managerial skills of the farmers in terms of market analysis, business plan elaboration and financial management;

- the lack of reliable guarantees, due to the overall land tenure situation of most of the farms and the absence of a land and fixed assets mortgage system which could allow them to be used as collateral.

In addition, it is worth noting that there is no sizeable specialized bank for agriculture in Hungary.

Faced with this situation (and in addition to efforts to improve the banking system in general), government policy is developing in four directions:

- the establishment (with the assistance of PHARE) of a **Rural Credit Guarantee Foundation**: as of mid 1994, it had already provided guarantees of 7.61 billion HUF (73 Mio ECU), which represented 50 % of total banking system investment loans to agriculture;
- the initiation of studies on a **Land Mortgage Institute**: many problems are still pending, including the registration of land ownership;
- the development of rural banking facilities by the rehabilitation of the **Savinw Cooperatives** and other assistance to the banking sector in rural areas;
- assisting agricultural investment for some categories of farmers through investment subsidies by the **Agricultural Development Fund** (cf § 5.4).

It could well take another five years to really improve the ~~1394Xbanking~~ banking in agriculture, and in particular to build up a clear mortgage mechanism (after completion of land registration), and thus an efficient long-term loan system.

## 5. Agricultural policy

Hungarian agricultural policy is traditionally export-oriented. Historically, two distinctive political orientations are clearly visible:

- the first favours a liberal approach to international trade relations and low agricultural support: it is reflected in the long GATT membership of Hungary and in particular its pragmatic engagement within the Cairns group during the Uruguay Round;
- the second is a more "protectionist" approach, seeking to stimulate domestic production, and thus exports, through border protection, price support and export subsidies.

Since the Hungarian reform, the first approach was preferred during the period 1989-92 and materialized in a reduction of the "producer subsidy equivalent" (P.S.E.), from 23 % to 8 %; however, it did not exclude the use of quantitative restrictions on imports and of export subsidies. Since 1993, and more visibly since 1994, the second approach has returned, taking different elements of the EU common agricultural policy, albeit with a support price level much lower than present EU prices, and applying on 1.1.95 the (high) new bound GATT tariffs (with particular conditions for the EU, cf chapter 6).

Different factors will, however, moderate this second trend :

- the high global budget deficit (8.2 % in 1994, cf chapter 1);
- the risk of increased inflation, taking into account the rather important share of household income spent on food (around 30 %);
- the necessity of preserving Hungary's international competitiveness;
- at a later stage, possible GATT constraints (cf chapter 6).

### 5.1. Market regimes

A law passed in February 1993 clarified the instruments for market regulation. The new mechanisms were introduced for the first time in 1994, for the following commodities: wheat, maize, pork, beef, milk. One difference with EU intervention mechanisms is that the Hungarian system directly supports products at the farm gate and not at a secondary level (wholesale price or first-processing). This makes a direct comparison of Hungarian and EU institutional/market prices difficult. However, we have given the two sets of figures in the different tables below<sup>1</sup>. The system is operated by the "Office for Agricultural Market Regime" (intervention agency), depending on the Minister of Agriculture (under the supervision of an Interministerial Committee), with the support of local services.

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<sup>1</sup> The exchange rates used are the following: for 1994, 1 ECU = 124.26 HUF ; for 1995, 1 ECU = 162.5 HUF (cf table 1.2 in chapter 1)

Concretely, insignificant quantities were bought at intervention for the marketing year 1994/95, because market prices were higher than intervention prices. It is therefore too early to evaluate these measures fully.

### 5.1.1. Wheat and maize

Food wheat and maize have a guaranteed price set in practice, until now, below the average world price and domestic market price of the previous marketing year (in real terms).

**Table 5.1**  
**Prices of wheat and maize**

	Starting date	1994/95		1995/96 (prov for maize)	
		Wheat Sept 15	Maize Dec 15	Wheat July 1	Maize Dec 1
Hungary : intervention price	HUF/t ECU/t	8200 66.00	8500 68.40	8800 54.15	9600 59.08
Hungary : farm gate price	HUF/t ECU/t	9300 74.84	9000 72.43		
European Union : intervention price	ECU/t	128.72	128.72	119.19	119.19

In addition to the 1995/96 prices, there will be three "monthly increments" for wheat, starting from January 1996 and two for maize (draft decision), to take into account storage costs.

Access to intervention is limited individually: quantities are to be no more than 2.4 t/ha for wheat and 3.2 t/ha for maize, based on proven seeded area for each farm recorded by the county office, not later than May 31st.

Even if prices are not directly comparable, it appears from the above table that Hungarian cereals intervention and market prices are well under EU prices (very roughly 50 % lower), even after the CAP reform (1995/96 marks the end of the transition period). Hungarian guaranteed prices are also well under world market prices. Moreover, due to the anticipated devaluation of the Forint in 1995 (-24% compared to 1994), these guaranteed prices will decrease significantly in real terms.

### 5.1.2. Pigmeat

Pigmeat also has a guaranteed price, specified by quality for live animals (EUROP classification). The table below presents these guaranteed prices for the first two marketing years of application (1994/95 and 1995/96) and compares them to EU market prices.

**Table 5.2**  
**Prices for pigmeat**

		1994	1995prov
Hungary (liveweight) : intervention price	HUF/t ECU/t	98 000 789	113 000 695
Hungary (liveweight): farm gate price	HUF/t ECU/t	117 200 943	160 000 985
Hungary (equiv carcass) - intervention price	: 0.75 ECU/t	1052	927
- farm gate price	ECU/t	1257	1313
European Union (carcass) : wholesale price (cat U)	ECU/t	1281	1331

The trigger level for pig intervention is 2 % of pig numbers offered at intervention in a given county. When intervention occurs, the intervention agency contracts with meat plants to buy, slaughter and store the meat for a specified fee. Certain administrative difficulties still need resolving, for the system to operate smoothly.

Even if prices are not directly comparable, it appears from the above table that Hungarian pigmeat intervention prices are under EU levels, but not far, and that market prices are very close to EU levels. Hungarian intervention prices will decrease in real terms in 1995.

### 5.1.3. Beef

Beef market intervention is very similar to pigmeat. EU standards have not yet been introduced in this sector.

**Table 5.3**  
**Prices for beef**

		1994		1995prov	
		low quality	high quality	low quality	high quality
Hungary (liveweight) : intervention price	HUF/t ECU/t	90 000 724	110 000 885	100000 615	130 000 800
Hungary (liveweight): farm gate price	HUF/t ECU/t	111 300 896			
Hungary (equiv carcass) - intervention price	: 0.55 ECU/t	1316	1609	1118	1455
- farm gate price	ECU/t	1629	1629		
European Union (carcass) : wholesale price (cat R 3)	ECU/t	3133		2988	

For beef, intervention is triggered when 500 heads of a specified quality category of cattle are offered for intervention at the national level.

For beef, it appears from the above table that the Hungarian intervention and market prices are far below EU levels.

In Hungary, pigmeat and beef prices are rather close, which is not in line with the gap between feed conversion ratios. This is due to the milk orientation of cattle (beef is a "by-product") and to the consumer's preference for pork. In the EU, the large gap between pigmeat and beef prices is due both to the support systems and to the consumer's attitude. Hungarian beef prices would probably not be sustainable for a beef oriented production.

#### 5.1.4. Milk

The support mechanism is targeted directly on milk (and not on dairy products). The dairy processor qualifies for a subsidy if he pays at least a "minimum price" at the farm gate level. This scheme is presented in the table below. Class 1 and extra milk represent around 60 % of production.

**Table 5.4**  
**Support system for milk**

		1994		1995p	
		class 1	extra quality	class 1	extra quality
Hungary :					
- minimum price	HUF/t	23000	25000	28000	30000
- subsidy	HUF/t	1000	1500	1000	1500
Hungary :					
- minimum price	ECU/t	185	201	172	185
- subsidy	ECU/t	8.0	12.1	6.2	9.2
Hungary :					
farm gate price	HUF/t	24 280	27 300	29 500	32 000
	ECU/t	195	220	181.5	197
European Union :					
wholesale price	ECU/t	309.8 (indicative price)		306.8 (indicative price)	

In 1994, average producer prices were close to the minimum prices. In 1995, farm gate prices seem to be stable in real terms, whereas minimum prices will drop in real terms.

The price relation with the EU is roughly 2 to 3.

## **5.2 Border measures**

### **5.2.1. Border protection**

Until the end of 1994, import tariffs and licensing were used for a wide range of agricultural products. The average tariff rate was 22 % (arithmetic average), with peaks at 60 % for butter and 80 % for sugar. For food products, a "global quota" set a dollar limit on hard-currency imports and was subsequently allocated between items.

Since 1.1.1995, Hungary has tariffed all border measures, following the Uruguay Round agreement; the new average tariff rate is 45 % (see also § 6.2). This does not include the temporary additional duty of 8 %.

### **5.2.1. Export subsidies**

Export subsidy rates were reduced substantially between 1989 and 1991, then remained fairly stable with some small changes for specific products. Since 1993, the orientation has reversed and tends to go upwards.

The way of determining export subsidies changed on January 1st, 1995. In the former system, subsidies were all set as a percentage of the declared export value. This gave rise to some fraud concern: over-valuation of exports in order to benefit from a higher subsidy. In the new system, there are two groups of products:

- for the first group (most of the positions for meat, milk products, processed fruit and vegetables), the subsidy is a fixed amount per tonne (HUF/t);
- for the second group, the subsidy is defined in forint for each \$ of declared export value (which is close to the former system, but with an erosion of real value in case of currency depreciation).

The Ministry of Agriculture is currently reflecting on a tendering system, close to the EU system, which would increase the transparency of subsidy fixing.

In fact, the way of establishing the level of export subsidies remains unclear. They seem to be fixed rather approximately, without relying for example on a comparison between internal prices and international prices. In general, subsidy rates are higher for processed and value-added products, in order to maximize export receipts, but thereby providing 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 such an assertion, but the impression is that Hungarian farm gate prices are very close to world market prices, if not below.

Within the agricultural budget (cf § 5.7), export subsidies represent roughly one half: 322 Mio ECU in 1994, from a total budget of 574 Mio ECU. Another reference is the amount of agricultural exports: **in 1993, 239 Mio ECU of export subsidies "produced" 1697 Mio ECU of exports, i.e. an average proportion of 14 %.**

### **5.3. Direct subsidies**

Since 1992, direct subsidies have been used, on a small scale. Producers receive a grant of 2000 Ft/ha (16 ECU/ha in 1994). To qualify for the aid, producers must show that they have used certified seed and declare the acreage before May 31st.

This (small) aid per hectare can facilitate the control of the individual quota set for access to cereals intervention (cf § 5.1.1). The system for the annual registration of grants is unclear.

### **5.4. Investment subsidies**

In order to facilitate investments in agriculture, the government created in 1994 an **Agricultural Development Fund**. It is targeted to relatively small to medium size farms, with 60 or less employees. In 1994, production assets (mainly machinery) could benefit from a 50 % subsidy (zero interest rate and 5-year repayment period) and a 50 % interest rate subsidy on the associated commercial bank loan. Infrastructure investments (building, land improvement) could receive a 40 % grant.

This fund has proved popular with farmers. Total allocations for 1994 were estimated by the World Bank at 13.5 billion HUF (111 Mio ECU).

But claims were excessive in the first part of 1994, in particular after the decision no longer to require that Fund assistance be linked to a commercial loan. For 1995, the Ministry of Agriculture reestablished that requirement and introduced other modifications. In particular, **production assets (excluding machinery) will benefit from a 70 % interest-rate subsidy, whereas infrastructure will continue to benefit from a 40 % grant.** Later on, the farm size limit is likely to be removed.

Two of these modifications (the exclusion of machinery and the likely removal of the farm size limit) change the previous balance between small and large farms, in favour of the latter. It could be a first indication of the new government's policy in the debate on farm structures.

### **5.5. Short-term credit policies**

The following short-term (one year) credits have a 10 % interest subsidy:

- buying inputs for agricultural production;
- storage of food wheat and maize.

Commercial lending rates ranged from 33 % to 35 % in May 1995.

## 5.6. Taxation

**Personal income tax** for all private persons is progressive, with a maximum rate of 44 % (1994). Revenue of small agricultural producers up to 1 mio HUF (8 000 ECU in 1994) is tax-free and need not be declared. Those with a revenue of 1 to 2 Mio HUF pay at the normal personal tax rates and are allowed not to do cost accounting. Those with revenue above 2 mio HUF must do cost accounting and pay tax as a business.

The **corporate tax rate** on net income is 36 % (1994). Cooperatives pay corporate tax on joint income, and members pay personal tax rates on personal income.

**Value added tax** is 12 % for basic food and agricultural products and 25 % on other goods, including tobacco, spirits, and non-basic foods. Agricultural producers have the right not to report VAT on inputs and products if they are satisfied that the VAT received on products balances VAT paid on inputs.

An **excise tax** is applied to fuels, spirits and tobacco. Agricultural producers can be reimbursed 50 % of the excise tax for fuel.

Since the beginning of 1995, there is no more **land tax**.

## 5.7. Budgetary expenditure

**Table 5.5**  
**Budgetary expenditure on agriculture**

(Billion HUF)	1992	1993	1994	1995
<b>TOTAL</b>	47.3	59.5	71.3	86.1
o.w.				
- disaster payments	0.5	0.6	0.7	-
- export subsidies	22.9	25.5	40.0	35.0
- market support	7.3	17.2	6.7	7.5
- reorganization support	0.4	1.2	5.0	6.5
- infrastructure	1.4	1.0	1.2	1.6
- agricultural dev. fund	-	0.7	6.0	8.7

(Mio ECU) TOTAL	462	557	574	530
o.w. for the main items :				
- export subsidies	224	239	322	215
- market support	71	161	54	46

(Source : OECD 1995, exchange rates of table 2.1)

The 1995 figures are those from the Budget Law but could well be revised upwards, as happened in 1994.

This table shows some increase of agricultural expenditure in real terms, at least until 1994. It also stresses the scale of export subsidies, which represent about half of the budget.

## **5.8. PHARE assistance**

In the context of the PHARE programme, the European Union provided assistance to Hungary's agriculture. Between 1990 and 1993, this type of assistance amounted to **68.5 Mio ECU**, that is:

- 16.5 % of total commitments for CEECs' agriculture;
- 13.5 % of total PHARE commitments for Hungary.

In 1994, there was no agricultural tranche for Hungary. Discussion for 1995 is still going on.

PHARE activity is described in more detail in annex 5.1. In general, interventions focus more on technical assistance than on physical investment.

## 6. Agricultural Trade

### 6.1. Evolution of trade flows

#### 6.1.1. Global view

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 now, with the problem that the trade balance has sharply deteriorated (see chapter 1 and table below).

Within global external trade, agricultural products (commodities and processed products from the first 24 chapters of the combined nomenclature) represent a major part. **Agricultural exports, around a quarter of all exports, are of crucial importance for the trade balance.**

The table below describes the evolution of both total trade and agricultural trade since 1990.

**Table 6.1**  
**Agricultural trade within external trade**

(Mio ECU)	1990	1991	1992	1993	1994
<b>Imports</b>					
- all	6790	9177	8535	10700	12369
- agriculture	546	571	542	689	911
- % agric.	8.0	6.2	6.4	6.4	7.4
<b>Exports</b>					
- all	7529	8221	8247	7606	9083
- agriculture	1831	2185	2067	1697	1976
- % agric	24.3	26.6	25.1	22.3	21.8
<b>Trade balance</b>					
- all	+739	-956	-288	-3094	-3286
- agriculture	+1285	+1614	+1525	+1008	+1065

(Source : United Nations for 1990-93, Ministry of Agr. for 1994, own conversion from \$ to ECU)

Between 1990 and 1994, agricultural imports were on an upwards trend, whereas agricultural exports were more irregular. **However, the steep decline of agricultural production during this period did not translate in a parallel decline of agricultural exports.** This illustrates, as well as the decreasing domestic demand, the top priority given by the government to maintaining / improving agricultural exports.

### 6.1.2. Analysis by product

Among the 24 chapters of the Combined Nomenclature, we have identified 11 key chapters, which represent more than 80 Mio ECU, either on the import or the export side. They are the following :

- 10 chapters on the export side: **live animals, meat, vegetables, fruit, cereals, oilseeds, fats and oils, preparations of meat, preparations of fruit and vegetables, beverages/spirits.**
- 1 chapter on the import side: **animal feed.**

**Table 6.2**  
**Trade in key agricultural products (average 1992-94)**

Mio ECU	Imports	<i>% of imports</i>	Exports	<i>% of exports</i>
Live animals			112	<i>5.9</i>
Meat			400	<i>21.1</i>
Vegetables			112	<i>5.9</i>
Fruit			89	<i>4.7</i>
Cereals			201	<i>10.6</i>
Oilseeds			96	<i>5.1</i>
Fats and oils			81	<i>4.3</i>
Preparations of meat			111	<i>5.9</i>
Preps of fruit and veg.			210	<i>11.1</i>
Beverages / spirits			143	<i>7.5</i>
Animal feed	125	<i>18.0</i>		
Subtotal	125	<i>18.0</i>	1555	<i>82.1</i>
Total	696	<i>100</i>	1894	<i>100</i>

(Source : Ministry of Agriculture)

On the export side, 10 chapters out of 24 represent 82 % of the exports. Imports are more dispersed and include tropical products.

It is worth noting that, within these products, exports of meat and live animals are decreasing, whereas exports of beverages are increasing.

### 6.1.3. Analysis by partner

The following table highlights Hungarian agricultural trade with its main partners.

**Table 6.3**  
**Agricultural trade by partner (average 1992-94)**

Mio ECU	Imports	% of imports	Exports	% of exports
EU-12	289	41.6	815	43.1
EFTA (31.12.94)	83	11.9	221	11.7
NIS (New. Indep. States)	19	2.8	419	22.1
CEECs	38	5.5	172	9.1
Other	266	38.3	266	14.0
Total	696	100	1893	100

(Source : Ministry of Agriculture)

The European Union (EU-12) is by far the first agricultural trading partner of Hungary. Its share of imports increased from 16 % in 1989 to 44 % in 1994. Its share of exports increased from 34 % to 43 % during the same period. With the accession of Austria, Sweden and Finland, ex-members of EFTA, the Union's lead will be even more pronounced.

Then follow the Newly Independent States, mainly Russia, on the export side only, with a rather stable share of around 22 %: **the development of this outlet is crucial for the agriculture trade balance.**

Other CEECs play a relatively minor role in agricultural trade, mainly on the export side, with a share of around 9 %.

### 6.1.4. Agricultural trade with the European Union

The (enlarged) European Union, as Hungary's first trading partner, is playing an increasingly important role. **But while the balance has always been largely in Hungary's favour, it has contracted severely since 1989.**

**Table 6.4**  
**Agricultural trade with EU-12**

Mio ECU	1989	1990	1991	1992	1993	1994
Imports from EU	112	119	152	229	340	436
Exports to EU	758	714	920	831	715	799
Balance	+646	+595	+767	+602	+375	+363

(Source : EUROSTAT)

## **Breakdown of agricultural imports from the EU**

As for the other CEECs, **Tangermann and Josling (1994)** analyzed the composition of Hungarian imports from the EU, by using two types of classification:

- level of processing: raw materials, lightly processed products, highly processed products;
- granting of EU export refunds: products with refunds, products without refunds.

Data were analyzed at a convenient disaggregated level: the four-digit level of the Combined Nomenclature.

By level of processing, imports are roughly well balanced into three similar parts, but imports of highly processed products increased fourfold between 1988-90 and 1993, whereas imports of raw materials and lightly processed products grew by a multiple of only 1.7 over the same period.

Products in receipt of EU export refunds in 1993 represented 60 % of Hungarian imports, their value having increased by a multiple of 3.5 since 1988-90. Products "without" represented 40 % and were practically unchanged (this very different evolution is a particular feature of Hungary among other CEECs).

## **Composition of agricultural exports to the EU**

The main agricultural products exported to EU-12 are roughly the same as to the world in general, with more accent on meat and live animals and less on cereals.

Further analysis of agricultural trade with the EU will be made in § 6.3 on the Association Agreement.

## **6.2. Uruguay Round agreement**

### **6.2.1. Border protection**

Under the Uruguay Round agreement:

- all non-tariff barriers must be converted to tariffs;
- a minimum quantity of protected goods, increasing over 6 years, must be allowed access at a preferential rate;
- the maximum non-preferential rates must be reduced by a minimum of 15 % each and by 36 % on arithmetic average (over 6 years).

Hungary started the implementation of its GATT schedules on 1st January 1995:

- the "global quota" for food products and the licensing system have been abrogated;
- the tariffs remain "ad valorem";

- the preferential tariffs are very similar to the 1994 rates;
- the non-preferential rates are fixed in general very close to the maximum allowed levels for the most important products, much higher than the 1994 levels: 45 % on arithmetic average, instead of 22 % in 1994.

*Annex 6.1 reviews the different parameters for the main items (extracted from World Bank, 1994 and from official publications of the Ministry of Agriculture).*

At first sight, the implementation of the GATT agreement means, paradoxically, a steady increase of border protection, so that there is no pressure on internal prices from this point of view, with the 1993 world market prices (Tangermann and Josling, 1994). This increase is explained by the high level of protection during the reference period 1986-88 and by the political will to restrain imports. In practise, the binding rates will probably apply only on limited quantities:

- depending on the result of current negotiations on the adaptation of the Association Agreement, the enlarged EU (which represents more than half of Hungarian imports) is likely to enjoy conditions similar to those in force in 1994, at least for the imports under tariff quota and perhaps also for quantities exceeding the quota (see also next paragraph on Association Agreement);
- in the context of the revival of the CEFTA, the other main CEECs (6 % of imports in 1994) may, sooner or later, also enjoy preferential treatment;
- remaining imports are mainly tropical commodities, coming from developing countries, and their new tariffs have already been fixed under the maximum allowed.

However, border protection will remain a commercial weapon for Hungary. It can also be used to protect the (still) inefficient food industry more than the farming sector, as shown by the table below.

**Table 6.5**  
**Tariffs for selected products (unprocessed / processed)**

(%)	Unproc. product	Processed product
Live chicken / Slaughtered chicken	30	61
Barley / Malt	41	50
Sunflower seed / sunflower oil	0	46

(Source : GATT schedules, maximum rate 1st year)

The introduction, on 20th March 1995, of an 8 % import surcharge on all imports except capital investment, energy and outward processing, in order to improve the balance of payments, is on its way to being accepted by the EU as a temporary measure.

### **6.2.2. Export subsidies**

Under the Uruguay Round agreement, exports subsidies are subject to the following constraints, by commodity groups, with reference to the period 1986-90:

- expenditure must be reduced by 36 %;
  - quantities of subsidized products must be reduced by 21 %;
- over the period 1995-2000.

*Annex 6.2 describes these constraints, by commodity group.*

**The main products concerned are bovine products (live cattle, slaughter cattle, beef), pork, broiler chicken and wheat.**

Apples, sugar and maize are concerned by the "front-loading" clause, i.e. the implementation period starts from the 1991-92 average.

The export schedule does not contain products which presently benefit from an export subsidy, for example fresh vegetables, frozen/ canned fruit and vegetables, sausages, goose liver, etc... This would normally imply that export subsidies should be removed for these products.

At first sight, the expenditure constraint, **which is expressed in forints**, appears to be very severe, because of rather high inflation. However, although there is no clause of "excessive inflation" in this regard, the Hungarian government seems confident that trading partners within the WTO will accept a revision of financial amounts. This does not appear so easily negotiable.

As far as the quantitative restrictions are concerned, there seems to be no particular problem, short term. In the mid-term, the picture could be different, as we will see in chapter 7 (mid-term outlook).

### **6.2.3. Domestic support**

Under the Uruguay Round agreement, domestic support must be reduced by 20 % over 6 years, with reference to the period 1986-88. Subject to the application of the clause of "excessive inflation" (which appears in the GATT agreement in this regard), this commitment does not mandate additional reduction of domestic support, but precludes substantial resubsidization.

*Annex 6.3 describes this issue.*

## 6.3. The Association Agreement

### 6.3.1. Description

The Association Agreement between Hungary and the European Union was signed in December 1991. Its trade provisions came into force under the Interim Agreement on 1 March 1992, and the full Agreement became effective, after ratification, on 1 February 1994.

For Hungary, the main provisions of the Agreement as regards agricultural products consist in asymmetric concessions in the form of increasing tariff quotas, as shown in the following table.

**Table 6.6**  
**Agricultural concessions under the Association Agreement**  
**(general approach - initial timetable)**

(index)	Base year	Year 1 (1992)	Year 2 (1993)	Year 3 (1994)	Year 4 (1995)	Year 5 (1996)
<b>EU imports</b>						
- duty/levy	100	80	60	40	40	40
- quota	100	110	120	130	140	150
<b>Hungarian imports</b>						
- duty/levy	100	90	80	70	70	70
- quota	100	105	110	115	120	125

(Source : elaboration from OJ nr L347, 31.12.1993)

Other particular points are :

- a minimum EU import price for soft red fruits for processing;
- preferential EU tariff rates for some products, without limitation on quantities (goose and duck liver, game meat....);
- the gradual elimination of the EU "non-agricultural component" for processed products.

Based on 1990 trade figures, excluding items with zero duty, 77 % of Hungarian agricultural exports to the European Union were concerned by this type of provision (Duponcel, quoted by Tracy 1994).

In addition, two general clauses apply:

- a safeguard clause, in case of serious disruption of markets;
- a standstill clause: no increase of duties for any product (however, this provision "shall not restrict in any way the pursuance of the respective agricultural policies").

Following the European Council of Copenhagen in June 1993, the Community decided to bring forward by six months the application of the tariff reductions and of the tariff quota increases.

### **6.3.2. Results**

Despite the asymmetric nature of the Association Agreement, Hungary's agricultural exports to the EU have declined, while Hungary's agricultural imports from the EU have grown (cf subparagraph 6.1.4).

#### **Exports to the EU**

Very often, the preferential export quotas have been under-utilized (pigmeat, beef, etc...), as shown by annex 6.4. Analysts (Tracy 1994, World Bank 1994), have identified different factors:

- the administration of quotas: licenses are issued by the EU, to trading companies registered in the EU, using a relatively complicated procedure; moreover, these companies make a profit from the quotas;
- difficulties on the supply side in Hungary, following the collapse of agricultural production, the successive droughts, and the problems of the food industry;
- the commodity composition of quotas, which was not always in line with changing market conditions in the EU and changing production patterns in Hungary;
- the disruption caused in 1993 by the ban on CEECs meat products (following veterinary problems) ;
- the low level of preferential margin at the beginning of the implementation period (this is no longer the case).

However, some specific quotas have been over-utilized.

#### **Imports from the EU**

In general, quotas have been exceeded, despite the full application of tariff rates to excess quantities. Accordingly, imports from the EU have increased. The different factors could be:

- the preference of Hungarians for Western products, considered of better quality, and the developing consumption of highly processed products (cf 6.1.4);
- the rather moderate level of border protection: 22 % on average, with however a system of import licenses within a "global quota";
- the impact of EU export refunds, which seem to play an important role in Hungarian imports (cf 6.1.4)

### **6.3.3. Adaptation of the Association Agreement**

Following the GATT agreement and EU enlargement, the Association Agreement with Hungary, as for the others, needs at least technical adaptations. In broad terms:

- the application of new tariffs on both sides (including those replacing the EU levies) modifies the significance of present concessions;
- the bilateral agreements existing between the new Member States and the CEECs have to be incorporated.

Furthermore, this adaptation could provide an opportunity to "improve" the Association Agreements. Different ways can be imagined: speeding-up of the timetable, further reduction of preferential tariff rates, globalization of tariff quotas, modifications to the licensing system, particular rules on export refunds, etc.

At mid June 1995, it was clear that the negotiations would not be concluded before the deadline of 1 July 1995. Autonomous measures will therefore be required to avoid disruption of trade flows and to comply with the standstill provision.

## 7. Outlook for 2000<sup>1</sup>

In this chapter, we will try to put together all our findings in order to build a possible scenario for Hungarian agriculture up to the year 2000. In concrete terms, the aim of the exercise is to elaborate tentative balance sheets for the main commodities, including projections for production, domestic consumption and trade.

The margin of error of such projections is of course very high in the case of Central and Eastern European Countries (it is already very uncertain for western economies). Their evolution since 1989-90 is something totally new, depriving the traditional econometric instruments of their basis. Moreover, it is impossible to assume the continuation of current policies, as is usual in these exercises, because of rapid changes. In general, assumptions tend to be moderately optimistic, assuming a successful continuation of reform: the ex-post analysis of past forecasts (EBRD, 1994) show that important errors have been made. The time horizon of the present scenario, five years ahead, makes the exercise even more fragile. **The following developments, based on qualitative analysis and the judgement of individual experts, must therefore be taken very cautiously.** Figures will be given but they matter less than the story they embody.

Before reasoning for each main commodity (§ 7.4), a number of considerations will be made on the likely evolution of the overall Hungarian economy (§ 7.1). In fact, the recovery of agriculture relies heavily on general economic growth, for the following main reasons:

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

We will then briefly recapitulate (§ 7.2 and § 7.3) the likely background of farm structures, as well as market-policy prospects, both of which will heavily determine the capacity for agricultural recovery.

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<sup>1</sup> This chapter has been realized with the help of the external experts, but the authors, within DG VI, take full responsibility for its whole content.

## 7.1. Overall economy

Hungary has experienced several years of recession and still faces a difficult economic situation: deteriorated current account (- 9.6 % of GDP in 1994), large public finance deficit (- 5.8 % of GDP in 1994), important unemployment (presently around 11 %). However, the economy recovered slightly in 1994 and some positive elements brighten the outlook. The first is the external factor: Hungary is well inserted within the European and world economy, which are now recovering. The second is internal economic policy. The government adopted in March 1995 a package of measures intended to tackle the economy's structural problems: devaluation of the forint, imposition of an 8 % import surcharge, cuts in social and welfare spending, limitation of public expenditure.

In this context, two main scenarios emerge for the Hungarian economy:

- the first is a **pessimistic scenario**: the government fails to stick to the measures announced, the social situation deteriorates further, foreign investors withdraw their confidence; this scenario could lead to a payments crisis in two or three years;
- the second is a **reasonably optimistic scenario**: the government succeeds in applying the announced measures, despite short-term opposition, and regains investor confidence; economic growth recovers gradually and deficits are reduced.

Social acceptance is probably the most important obstacle to the full application of the governmental package; in this respect, the present neo-socialist government still enjoys high support and has a few years at its disposal before the next elections (1998). For this main reason we will suppose in the following developments that the second scenario takes place.

In this scenario, recovery will be slow and in any case slower than in other CEECs (for example, Poland is expected to enjoy a 5 % growth in 1995). Just for cautious illustration, the growth of GDP until 2000 could develop as indicated in the following table. This would lead Hungary's economy to be back in 2000 to its 1990 level, in terms of GDP.

**Table 7.1**  
**Illustrative assumptions of GDP growth until 2000**

1994	1995	1996	1997	1998	1999	2000	Cumul 1995-2000
+2.0	+0.3	+2.0	+3.0	+4.0	+5.0	+5.0	21

(Sources : Commission, DG II for 1994-96, own assumptions for the remainder)

Within the Hungarian economy, the share of agriculture declined over the period 1990-93, but seems to stabilize at around 6 % (cf table 2.1). 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 brighter outlook for world market prices as a result of the Uruguay Round agreement, it is not unreasonable to think that this share could be maintained or only slightly decrease. This would mean that the growth of the GAP (gross agricultural product) could follow the growth of GDP, say with one percentage point of discrepancy. **This would give a cumulated growth for agriculture of around 15 % over the period 1995-2000, which would still be far from a recovery to the 1990 economic level (the cumulative decline of agriculture between 1990 and 1993 was - 34 %).**

## **7.2. Farm structures**

As described in chapter 2, the privatization process in agriculture has not led to a breaking up of farms: on the contrary, large-scale farms remain the backbone of Hungarian agriculture 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, even if one can always argue in favour of one or the other model.

However, there are still a number of problems:

- the investment capacity of the different farm types is very 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, land renting is fragile;
- the related services (mainly downstream) are still in the process of being restructured.

## **7.3. Market-policy context**

We will assume that the recent orientations (described in chapter 5) continue to develop: nominal high border protection with a number of derogations (eg Europe Agreement), price support at a "low" level (cf § 5.1), use of export subsidies. This assumption is justified by different factors pulling in opposite directions:

- the crucial importance of agricultural exports;
- the framework provided by Uruguay Round commitments;
- the limited budget available for agriculture;
- the important share of household income spent on food (around 30 %).

In the following per commodity analysis, the issue of export subsidies seems one of the most difficult to tackle. On the one hand, export subsidies are used quite extensively and represent around half of the agricultural budget: in this context, GATT ceilings on expenditure and

quantities are at first sight a heavy constraint. In particular, the ceilings on expenditure, expressed in forints, are very binding (except in the case of a negotiated derogation, following "excessive inflation"). On the other hand, they are perhaps not so crucial:

- domestic prices are not far from world market prices, if not lower (cereals);
- world market prices themselves are expected to increase in real terms, following the GATT agreement;
- exports subsidies represent on average "only" around 14 % of export value;
- more efficient marketing channels and food industries could relax the constraints on agriculture;
- the new system for fixing export subsidies tends to erode their value in real terms.

In this context, and depending on the commodity, there could be a chance for Hungarian agriculture to export at world market prices and to drop export subsidies.

#### **7.4. Analysis by commodity**

Only the main commodities will be reviewed: cereals, oilseeds, sugar, milk, beef, pigmeat, poultrymeat. Only 1994 figures and tentative 2000 prospects will be highlighted, as well as key Uruguay Round information (preferential quotas and ceilings on volume of subsidized exports for 2000). Further analysis would be needed for other specialized commodities, such as wine, apples, soft fruit, which are very significant in the export context.

### 7.4.1. Cereals (as a whole)

**Table 7.2**  
**Tentative cereals balance sheet for 2000**

		1994	2000	GATT 2000
area	000 ha	2876	2810	
yield	t/ha	4.02	4.59	
production	000 t	11569	12900	
imports	000 t	251	381	381
exports	000 t	973	2361	1305
utilization	000 t	11085	10919	
- o.w. feed use	000 t	6958	6994	
self-sufficiency	%	104	118	

#### **Main assumptions :**

- **areas:** stable (average 1993-94), justified by the recent past situation;
- **yield:** new starting point at the (low) level of 1994, then **paralleling the historical long-term trend (+ 0.1 t/ha per year)**; the cumulated yield increase over the period 1994-2000 would be 14-15 %, in line with the expected growth in agriculture in general;
- **imports** as the preferential minimum access (with a duty of only 3 %);
- **feed use** following the development of livestock (next paragraphs);
- **other uses** constant.

**The exportable surplus of cereals in 2000 would reach around 2.4 Mio t.** The GATT ceiling would be overshoot but, given the level of domestic prices, non-subsidized exports are realistic.

#### **Distribution between cereals**

In recent years, maize yield has severely decreased because of the dry summer conditions and low inputs. Wheat and barley have resisted better. Therefore, maize will likely lose ground in comparison with wheat and barley.

## 7.4.2. Oilseeds

**Table 7.3**  
**Tentative oilseeds balance sheet for 2000**

		1994	2000	GATT 2000
area	000 ha	472	574	
yield	t/ha	1.60	2.05	
production	000 t	756	1177	
imports	000 t	78	80	
exports	000 t	279	228	71
disappearance	000 t	555	1029	

### **Main assumptions:**

- **areas:** stable for minor Hungarian oilseeds (rapeseed, soyabean); increasing sunflower area (+ 17 000 ha per year), following the long-term evolution and agronomic capacity;
- **yield:** new starting point at a lower level (1993 has been chose as reference), then paralleling the historical long-term trend;
- **stable imports** (low duty on imported oilseeds);
- the distribution of total supply between exports and disappearance (domestic crushing) assumes an increased crushing capacity.

**With such a scenario, Hungary would considerably reinforce its export position on sunflower oil (from around 100 000 t to around 300 000 t).**

The domestic market for oilseeds and oilseed products is already at the level of the world market (no export subsidies, or at a very limited level). Therefore, the Uruguay Round constraints are not particularly binding.

### 7.4.3. Sugar

**Table 7.4**  
**Tentative sugar balance sheet for 2000**

		1994	2000	GATT 2000
area	000 ha	106	86	
sugar yield	t/ha	4.30	5.90	
production	000 t	456	507	
imports	000 t	12	0	-
exports	000 t	1	32	32
utilization	000 t	467	475	
self-sufficiency	%	98	107	

Unlike other crops, costs of sugar production are high. This is due to the poor location of beet-growing and the sensitivity of yields to climatic hazard. Therefore, the present high border protection of 80 % (to be reduced to 68 % by 2000) is fully used to protect the domestic market.

The rationalization of production which is currently taking place may encourage a recovery of sugar yields (from 4.3 t/ha in 1994 to 5.9 t/ha in 2000). But the import regime will pressure prices downwards and prevent any surplus beyond the permitted export ceiling. Therefore, areas are likely to decline and to concentrate in the most suitable areas (with irrigation where possible).

The establishment of production quotas, according to the EU model, would not be sufficient to circumvent the GATT ceiling on exports (by the export of "C sugar") because of pressure on the import side.

Short-term, the favourable world market situation and the establishment of a temporary 8 % additional duty (on all imports) may improve the picture, but mid-term prospects remain mixed.

#### 7.4.4. Milk

**Table 7.5**  
**Tentative milk outlook for 2000**

	1994	2000	GATT 2000
number of cows (000) (on 1 January)	420 (415 in 95)	540	
milk yield (t/cow)	4.76	4.95	
production (000 t)	2000	2670	181

#### **Main assumptions:**

- number of cows: the low level of 415 000 on 1 January 1995 is supposed to be the minimum before a possible slow recovery, due to low investment capacity (a significant growth could only occur from 1998 onwards);
- milk yield: increase of 1 % per year, from 1996 onwards.

Under this scenario, the number of cows would remain slightly lower in 2000 than in 1990 (540 000 instead of 560 000), as would milk production (2.67 mio t instead of 2.85 mio t).

The processing and marketing of such quantities are not likely to raise particular problems, due to the dynamism of the downstream sector and to an increased consumption of dairy produce. External trade in milk products would remain relatively limited.

#### 7.4.5. Beef

**Table 7.6**  
**Tentative beef balance sheet for 2000**

	1994	2000	GATT 2000
cattle numbers (000) (on 1 January)	999 (910 in 95)	1185	
production (000 t)	80	80	
imports (000 t)	28	53	14
exports (000 t)	13	5	28
disappearance (000 t)	95	128	
per capita disapp (kg)	9.2	12.5	

#### Main assumptions :

- **cattle numbers:** the low level of 910 000 on 1 January 1995 is supposed to be the minimum before a possible slow recovery, due to low investment capacity;
- **beef production:** would decrease from 80 000 t in 1994 to 60 000 t in 1996-97, due to the delayed effect of decapitalization, before recovering back to 80 000 t in 2000.
- **beef disappearance:** is presently very low and could increase if living standards improve.

N.B. This tentative balance sheet concerns only beef as raw product (after slaughtering). It deals neither with the export of live animals, nor with processed beef.

Under this scenario, cattle numbers would remain much lower in 2000 than in 1990 (1.2 Mio instead of 1.6 Mio), as would beef production (80 000 t instead of 114 000 t in 1989). This would then mean a strong net import position in 2000, instead of the traditional net export position.

#### 7.4.6. Pigeat

**Table 7.7**  
**Tentative pigmeat balance sheet for 2000**

	1994	2000	GATT 2000
pig numbers (000) (on 1 January)	5000 (4400 in 95)	5828	
production (000 t)	600	699	
imports (000 t)	40	20	20
exports (000 t)	42	5	126
disappearance (000 t)	598	714	
per capita disapp (kg)	58.2	70.0	

#### Main assumptions :

- **pig numbers:** the low level of 4.4 Mio on 1 January 1995 is supposed to be the minimum before a possible slow recovery;
- **pigmeat production:** would recover from 0.6 Mio t in 1994 to 0.7 Mio t in 2000, following animal numbers;
- **pigmeat disappearance:** has been decreasing since 1989 but could recover if living standards improve.

N.B. This tentative balance sheet concerns only pigmeat as raw product (after slaughtering). It does not deal with processed pigmeat.

The rather slow rhythm of recovery is justified by the poor efficiency of pig production in Hungary: concentration in small farms, inefficient animal feeding and animal care.

Under this scenario, pig numbers would remain much lower in 2000 than in 1990 (5.8 Mio instead of 7.7 Mio), as would pigmeat production (0.7 Mio t instead of 1 Mio t in 1989). Trade would be almost balanced in 2000.

#### 7.4.7. Poultrymeat

**Table 7.8**  
**Tentative poultrymeat balance sheet for 2000**

	1994	2000	GATT 2000
poultry numbers (000) (on 1 January)	33 600 (38 400 in 95)	46 700	
production (000 t)	341	420	
imports (000 t)	1	11	11
exports (000 t)	81	148	111
disappearance (000 t)	261	284	
per capita disapp (kg)	25.4	27.8	

#### Main assumptions :

- **poultry numbers:** the low level of 38.4 Mio on 1 January 1995 already marks the beginning of an assumed recovery;
- **poultry production:** would recover from 340 000 t in 1994 to 420 000 t in 2000, following poultry numbers;
- **poultrymeat disappearance:** has been fairly stable since 1989 and could increase somewhat following the improvement of living standards and western trends.

N.B. This tentative balance sheet concerns only poultrymeat as raw product (after slaughtering). It does not deal with processed poultrymeat.

Under this scenario, poultrymeat production would still be under the 1989 level (440 000 t). Hungary would remain a net exporter in 2000, but some non-subsidized exports would be necessary, which does not seem unrealistic.

## Conclusion of the per commodity analysis

In the context of a slow but accelerating agricultural recovery (from 1 % in 1995 to 4 % in 2000, i.e around + 15 % over the period 1995-2000), prospects differ for the main commodities, as summarized by the table below.

**Table 7.9.**  
**Production outlook for the main commodities**

Commodity	Expected growth 1994 - 2000
Cereals	11.5
Oilseeds	55.7
Sugar	11.2
Milk	33.5
Beef	0.0
Pigmeat	16.5
Poultrymeat	23.2

(N.B.: 1994 was considered as a normal climatic year)

Hungarian agriculture would still be under the 1990 levels for all these products except oilseeds (sunflower).

Export capacity could be reestablished more quickly for the crop sector (cereals, oilseeds) than for the livestock sector. The main results are presented in qualitative terms at the end of the executive summary.

## **GLOSSARY / ABBREVIATIONS**

<b>CEECs</b>	Central and Eastern European Countries
<b>CEFTA</b>	Central European Free Trade Agreement between Poland, Hungary, Czech Republic and Slovakia, also known as the Visegrad four, with Slovenia in the process of joining
<b>COMECON</b>	Council for Mutual Economic Assistance (= CMEA)
<b>EBRD</b>	European Bank for Reconstruction and Development
<b>EFTA</b>	European Free Trade Agreement
<b>EU</b>	European Union
<b>GDP</b>	Gross Domestic Product
<b>HUF</b>	Hungarian Forint (national currency)
<b>NIS</b>	Newly Independent States (from the former Soviet Union)
<b>OECD</b>	Organisation for Economic Co-operation and Development
<b>o.w.</b>	of which (in tables)
<b>p.c.</b>	per capita (consumption)
<b>WTO</b>	World Trade Organisation

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**ANNEX 2.1 : CEREALS**

<b>wheat balance sheet</b>								
	1987	1988	1989	1990	1991	1992	1993	1994 (e)
beg. stocks (000 t)	2738,0	2451,0	2771,0	3056,0	3033,0	3417,0	2093,0	2101,0
area (000 ha)	1300,6	1280,7	1242,2	1220,8	1157,6	848,4	985,5	1060,0
yield (t/ha)	4,42	5,49	5,26	5,08	5,19	4,07	3,06	4,61
prod (000 t)	5747,8	7025,8	6539,5	6198,3	6007,9	3453,1	3020,7	4888,0
imports (000 t)	52,3	34,6	0,1	19,5	68,7	1,1	48,3	56,4
exports (000 t)	1281,2	1789,8	1425,9	1120,3	924,6	990,2	93,6	759,0
feed (000 t)	2484,0	2063,2	2781,6	2593,3	2267,5	1170,0	1100,0	1500,0
seed (000 t)	403,1	394,2	390,3	360,6	305,6	289,0	300,0	300,0
end. stocks (000 t)	2451,0	2771,0	3056,0	3033,0	3417,0	2093,0	2101,0	2100,0
utilization (000 t)	4805,9	4950,6	4828,7	5120,5	4768,0	3788,0	2967,3	4186,4
pc utilization (kg)	458	474	465	494	461	367	288	407

<b>barley balance sheet</b>								
	1987	1988	1989	1990	1991	1992	1993	1994 (e)
beg. stocks (000 t)	324,0	490,0	605,0	528,0	723,0	751,0	696,0	498,0
area (000 ha)	204,9	263,7	282,6	297,0	356,7	480,0	429,3	423,0
yield (t/ha)	3,87	4,49	4,74	4,61	4,36	3,59	2,65	3,73
prod (000 t)	793,7	1183,4	1340,0	1368,6	1555,3	1723,0	1138,1	1576,0
imports (000 t)	373,2	112,3	69,4	297,5	174,8	13,4	29,4	187,9
exports (000 t)	0,6	51,0	172,5	11,9	75,6	383,4	24,6	33,3
feed (000 t)	733,0	854,0	993,0	946,8	1012,7	962,0	900,0	1000,0
seed (000 t)	60,9	66,6	70,2	75,9	77,6	94,0	90,0	93,5
end. stocks (000 t)	490,0	605,0	528,0	723,0	751,0	696,0	498,0	500,0
utilization (000 t)	1000,4	1129,7	1313,9	1459,3	1626,4	1408,1	1340,9	1728,7
pc utilization (kg)	95	108	127	141	157	136	130	168

<b>maize balance sheet</b>								
	1987	1988	1989	1990	1991	1992	1993	1994 (e)
beg. stocks (000 t)	4660,0	5301,0	4739,0	5281,0	3664,0	5922,0	2796,0	2796,0
area (000 ha)	1169,9	1144,9	1105,4	1082,4	1154,2	1206,8	1121,0	1200,0
yield (t/ha)	6,18	5,46	6,33	4,16	6,71	3,65	3,61	3,89
prod (000 t)	7234,0	6256,0	6996,0	4500,1	7744,6	4404,9	4044,5	4664,0
imports (000 t)	101,6	1,7	142,5	144,9	176,5	3,1	6,3	6,4
exports (000 t)	188,0	151,6	219,3	156,0	494,1	2525,2	169,0	180,6
feed (000 t)	6186,6	6028,8	5447,0	5097,3	4532,4	4607,0	4200,0	4200,0
seed (000 t)	39,9	38,1	37,4	38,1	85,3	100,1	103,6	109,9
end. stocks (000 t)	5301,0	4739,0	5281,0	3664,0	5922,0	2796,0	2796,0	2559,0
utilization (000 t)	6506,6	6668,1	6377,3	6106,0	5169,0	5008,8	3881,7	4726,8
pc utilization (kg)	620	639	614	589	500	485	377	459

**ANNEX 2.1 : CEREALS (follow-up)**

rye balance sheet								
	1987	1988	1989	1990	1991	1992	1993	1994 (e)
beg. stocks (000 t)	110,0	155,0	171,0	144,0	163,0	201,0	129,0	108,0
area (000 ha)	93,7	96,7	96,7	91,7	94,0	70,7	67,7	88,5
yield (t/ha)	1,98	2,64	2,76	2,53	2,37	1,92	1,67	2,18
prod (000 t)	185,5	255,0	266,7	231,5	222,8	135,7	113,2	193,0
imports (000 t)	107,4	35,9	14,8	20,1	9,7	0,0	2,9	
exports (000 t)	1,4	33,0	1,5	1,7	0,1	4,8	4,2	
feed (000 t)	165,8	173,9	166,8	177,9	131,0	143,0	100,0	101,6
seed (000 t)	21,8	20,2	20,0	19,7	15,2	12,0	12,0	12,0
end. stocks (000 t)	155,0	171,0	144,0	163,0	201,0	129,0	108,0	
utilization (000 t)	246,5	241,9	307,0	231,0	194,4	202,9	132,9	
pc utilization (kg)	24	23	30	22	19	20	13	

oats balance sheet								
	1987	1988	1989	1990	1991	1992	1993	1994 (e)
beg. stocks (000 t)	87,0	65,0	84,0	83,0	95,0	100,0	87,0	60,0
area (000 ha)	39,6	41,9	44,7	47,8	50,8	52,4	52,8	56,0
yield (t/ha)	2,49	3,31	3,34	3,41	2,65	2,81	1,82	2,32
prod (000 t)	98,6	138,4	149,5	163,0	134,7	147,2	96,2	130,0
imports (000 t)	7,4	0,2	0,0	0,0	0,0	0,1	0,3	
exports (000 t)	2,4	8,8	10,9	0,5	1,0	7,7	7,3	
feed (000 t)	111,9	101,5	105,2	109,7	75,8	114,0	80,0	80,0
seed (000 t)	9,0	8,0	13,4	9,0	7,4	8,3	7,0	7,1
end. stocks (000 t)	65,0	84,0	83,0	95,0	100,0	87,0	60,0	
utilization (000 t)	125,7	110,8	139,5	150,5	128,8	152,5	116,3	
pc utilization (kg)	12	11	13	15	12	15	11	

other cereals balance sheet								
	1987	1988	1989	1990	1991	1992	1993	1994 (e)
beg. stocks (000 t)	15,0	17,0	31,0	40,0	23,0	56,0	27,0	9,0
area (000 ha)	22,9	23,6	33,4	27,2	37,0	51,0	47,0	49,0
yield (t/ha)	3,00	2,55	2,89	2,23	3,00	2,01	1,87	2,41
prod (000 t)	68,9	60,2	96,5	60,6	110,8	102,3	88,0	118,0
imports (000 t)	0,7	0,4	0,1	0,5	0,2	0,1	0,1	
exports (000 t)	28,6	37,4	21,1	17,8	33,5	49,0	31,5	
feed (000 t)	21,9	11,8	64,3	48,9	26,0	72,6	62,3	76,3
seed (000 t)	1,2	1,1	1,5	2,3	4,4	6,9	5,0	2,6
end. stocks (000 t)	17,0	31,0	40,0	23,0	56,0	27,0	9,0	
utilization (000 t)	39,0	9,1	66,5	60,4	44,5	82,4	74,6	
pc utilization (kg)	4	1	6	6	4	8	7	

total cereals balance sheet								
	1987	1988	1989	1990	1991	1992	1993	1994 (e)
beg. stocks (000 t)	7934,0	8479,0	8401,0	9132,0	7701,0	10447,0	5828,0	5572,0
area (000 ha)	2831,6	2851,5	2805,0	2766,8	2850,3	2709,2	2703,4	2876,5
yield (t/ha)	4,99	5,23	5,49	4,53	5,53	3,68	3,14	4,02
prod (000 t)	14128,5	14918,7	15388,2	12522,1	15776,1	9966,2	8500,6	11569,0
imports (000 t)	642,6	185,0	226,8	482,5	429,8	17,9	87,4	250,7
exports (000 t)	1502,1	2071,6	1851,2	1308,1	1528,8	3960,4	330,3	972,9
feed (000 t)	9703,2	9233,2	9557,9	8973,8	8045,5	7068,6	6442,3	6957,9
seed (000 t)	535,9	528,2	532,7	505,5	495,6	510,2	517,6	525,1
end. stocks (000 t)	8479,0	8401,0	9132,0	7701,0	10447,0	5828,0	5572,0	5334,0
utilization (000 t)	12724,0	13110,2	13032,8	13127,6	11931,1	10642,7	8513,7	11084,8
pc utilization (kg)	1213	1255	1255	1267	1153	1031	827	1077

**ANNEX 2.2 : OILSEEDS**

<b>rapeseed balance sheet</b>								
	1987	1988	1989	1990	1991	1992	1993	1994 (e)
beg. stocks (000 t)								
area (000 ha)	53,9	38,9	51,9	60,0	66,5	34,6	13,0	25,0
yield (t/ha)	2,01	2,10	1,89	1,76	1,68	1,28	1,46	1,56
prod (000 t)	108,3	81,9	98,0	105,6	111,7	44,3	19,0	39,0
imports (000 t)	0,0	0,0	0,0	1,3	0,1	0,4	0,5	
exports (000 t)	16,9	8,9	22,7	13,4	24,5	18,0	8,5	
feed (000 t)								
seed (000 t)	0,7	1,0	0,8	0,7	1,5	0,6	0,6	0,6
end. stocks (000 t)								
utilization (000 t)	91,3	73,0	75,4	93,4	87,2	26,6	11,0	

<b>sunflower balance sheet</b>								
	1987	1988	1989	1990	1991	1992	1993	1994 (e)
beg. stocks (000 t)								
area (000 ha)	380,4	366,9	359,1	346,9	392,6	429,6	389,4	418,0
yield (t/ha)	2,11	1,95	1,95	1,97	2,07	1,78	1,75	1,59
prod (000 t)	803,2	715,8	699,0	683,7	812,7	764,7	681,7	664,0
imports (000 t)	0,5	5,0	44,1	107,8	7,2	8,7	12,9	71,6
exports (000 t)	141,5	172,3	66,0	36,7	115,0	109,1	297,1	271,4
feed (000 t)	11,1	10,9	3,9	5,8	5,4	5,4	5,4	5,4
seed (000 t)	3,7	2,4	2,8	3,8	6,9	6,0	6,0	6,4
end. stocks (000 t)								
utilization (000 t)	662,1	548,5	677,2	754,9	704,9	664,3	397,6	464,2

<b>soyabeans balance sheet</b>								
	1987	1988	1989	1990	1991	1992	1993	1994 (e)
beg. stocks (000 t)								
area (000 ha)	36,0	66,2	53,7	42,3	25,0	27,9	16,0	29,0
yield (t/ha)	1,92	1,59	2,20	1,29	2,30	1,43	1,69	1,83
prod (000 t)	69,0	105,0	118,0	54,4	57,5	39,9	27,0	53,0
imports (000 t)								
exports (000 t)								
feed (000 t)								
seed (000 t)								
end. stocks (000 t)								
utilization (000 t)								

<b>oilseeds balance sheet</b>								
	1987	1988	1989	1990	1991	1992	1993	1994 (e)
beg. stocks (000 t)								
area (000 ha)	470,4	472,1	464,6	449,2	484,1	492,2	418,4	472,0
yield (t/ha)	2,08	1,91	1,97	1,88	2,03	1,72	1,74	1,60
prod (000 t)	980,4	902,7	915,0	843,7	981,9	849,0	727,7	756,0
imports (000 t)								78,0
exports (000 t)								279,0
feed (000 t)								
seed (000 t)								
end. stocks (000 t)								
utilization (000 t)								555,0

**ANNEX 2.3 : PROTEIN CROPS**

<b>peas production</b>								
	1987	1988	1989	1990	1991	1992	1993	1994 (e)
area (000 ha)	93,2	126,4	157,7	134,9	114,6	111,1	88,3	57,0
yield (t/ha)	2,43	2,70	2,58	2,26	2,35	2,18	1,59	2,65
prod (000 t)	226,5	341,3	407,0	305,0	269,3	242,3	140,3	150,8

<b>beans production</b>								
	1987	1988	1989	1990	1991	1992	1993	1994 (e)
area (000 ha)	18,9	8,6	5,7	4,0	6,1	4,3	6,1	6,1
yield (t/ha)	0,69	0,84	0,88	0,88	1,02	0,85	1,05	1,05
prod (000 t)	13,1	7,2	5,0	3,5	6,3	3,7	6,4	6,4

<b>peas and beans production</b>								
	1987	1988	1989	1990	1991	1992	1993	1994 (e)
area (000 ha)	112,0	135,0	163,4	138,9	120,7	115,5	94,4	63,1
yield (t/ha)	2,14	2,58	2,52	2,22	2,28	2,13	1,55	2,49
prod (000 t)	239,6	348,6	412,0	308,5	275,6	246,0	146,7	157,2

**ANNEX 2.4 : SUGARBEET AND SUGAR**

sugarbeet and sugar balance sheet								
SUGARBEET	1987	1988	1989	1990	1991	1992	1993	1994 (e)
area (000 ha)	117,2	114,7	120,5	131,4	157,9	107,7	95,0	106,0
yield (t/ha)	36,32	39,33	44,01	36,10	37,16	27,19	22,96	33,02
prod (000 t)	4257,5	4510,8	5301,5	4742,7	5866,9	2928,4	2182,1	3500,0
<b>SUGAR</b>								
beg. stocks (000 t)								
yield (t/ha)	4,20	4,16	4,49	4,24	4,32	3,56	2,97	4,30
production (000 t)	492,1	476,6	540,4	557,6	682,4	383,3	282,0	456,0
imports (000 t)								12,0
exports (000 t)	13,0	79,0	96,0	8,0	170,0	162,0		1,0
ending stocks								
utilization (000 t)								467,0
self sufficiency (%)								98

**ANNEX 2.5 : POTATOES**

potatoes balance sheet								
	1987	1988	1989	1990	1991	1992	1993	1994 (e)
beg. stocks (000 t)	765,0	670,0	708,0	659,0	598,0	598,0	598,0	598,0
area (000 ha)	67,3	76,1	71,6	71,8	77,8	71,9	56,3	57,7
yield (t/ha)	16,01	18,50	18,60	17,08	14,47	16,85	18,77	14,26
prod (000 t)	1076,8	1407,1	1332,3	1226,2	1126,2	1211,6	1057,4	823,0
imports (000 t)	54,7	23,8	8,0	10,0	27,3	13,1	11,0	
exports (000 t)	24,2	30,7	87,6	17,7	22,9	30,4	2,3	
feed (000 t)	355,2	315,5	257,0	201,8	209,9	221,0	200,0	150,0
seed (000 t)	205,9	142,6	217,0	222,6	195,2	132,9	140,0	120,0
end. stocks (000 t)	670,0	708,0	659,0	598,0	598,0	598,0	598,0	
utilization (000 t)	1202,3	1362,3	1301,6	1279,4	1130,6	1194,3	1066,1	
pc utilization (kg)	115	130	125	123	109	116	104	

**ANNEX 2.6 : TOBACCO**

tobacco production								
	1987	1988	1989	1990	1991	1992	1993	1994 (e)
area (000 ha)	11,5	9,6	12,1	8,7	12,2	12,8	12,8	12,8
yield (t/ha)	1,72	1,67	1,21	1,57	1,44	1,02	0,84	1,16
prod (000 t)	19,7	16,0	14,7	13,6	17,5	13,1	10,8	14,9

**ANNEX 2.7 : FRUIT AND VEGETABLES**

fruit production								
	1987	1988	1989	1990	1991	1992	1993	1994 (e)
area (000 ha)			94,0	95,0	94,0	95,0	93,0	93,0
production (000 t)			1589,0	1444,0	1332,0	1151,0	1271,0	
ow : - apples	1064,4	1130,8	959,1	945,5	859,2	665,8	819,4	700,0
- pears	77,8	86,8	90,0	64,2	69,7	65,0	63,5	60,0
- plums	222,2	182,4	179,0	152,3	140,3	142,0	123,4	120,0
- sour cherrie	83,5	72,4	91,1	61,2	62,5	77,3	75,7	70,0

vegetable production								
	1987	1988	1989	1990	1991	1992	1993	1994 (e)
area (000 ha)			105,0	116,0	112,0	82,0	83,0	102,0
production (000 t)			1993,0	2036,0	1993,0	1401,0	1336,0	

**ANNEX 2.8: VITICULTURE AND WINE PRODUCTION**

wine balance sheet								
	1987	1988	1989	1990	1991	1992	1993	1994 (e)
area (000 ha)			140,0	138,0	136,0	135,0	132,0	132,0
ow productive			110,0	111,0	110,0	112,0	107,0	107,0
yield (hl/ha)			33,7	49,3	41,9	34,6	34,0	
production (000 hl)			3710,0	5470,0	4610,0	3880,0	3640,0	
imports (000 hl)								73,0
exports (000 hl)	552,0	602,0	540,0	362,0				1035,0
utilization (000 hl)								

## ANIMAL NUMBERS

animal numbers									
1 JANUARY	1987	1988	1989	1990	1991	1992	1993	1994	1995 (e)
cattle (000)	1725	1664	1690	1598	1571	1420	1159	999	910
o.w. cows	577	572	568	560	518	487	430	420	415
pigs (000)	8687	8216	8327	7660	8000	5993	5364	5001	4356
o.w. sows									
poultry (000)	66508	64895	61604	58564	48036	39330	39719	33612	38382
o.w. lay. hens	27167	27184	26950	25992	25171	22000	22000	22000	
sheep (000)	2337	2336	2215	2069	1865	1808	1752	1252	947
o.w. ewes									
horses (000)	95	88	76	75	76	75	75	71	

## ANNEX 2.9 : MILK AND MILK PRODUCTS

milk balance sheet								
	1987	1988	1989	1990	1991	1992	1993	1994 (e)
cows (000)	576,9	571,9	567,5	560,0	518,0	487,0	430,0	420,0
yield (l/cow)	4,88	5,02	5,04	5,08	4,81	4,72	4,84	4,76
prod (000 t)	2816,5	2873,4	2862,0	2846,0	2490,1	2301,0	2080,1	2000,0
imports (000 t)	6,2	0,5	0,0	0,1	0,8	0,6	2,6	
exports (000 t)	36,4	25,3	56,0	60,1	9,0	13,5	5,2	
utilization (000 t)	2786,3	2848,7	2806,0	2785,9	2481,9	2288,1	2077,4	
pc utilization (kg)	265,7	272,8	270,2	268,9	239,9	221,6	201,9	

## ANNEX 2.10 : BEEF

beef/veal balance sheet								
	1987	1988	1989	1990	1991	1992	1993	1994 (e)
slaughters (000)	471,0	380,0	398,0	418,0	473,0	563,5	355,0	300,0
weight (kg)	275	290	286	272	260	218	273	267
prod (000 t)	129,3	110,1	113,9	113,8	122,8	123,0	97,0	80,0
imports (000 t)	11,9	14,4	11,9	3,9	0,0	6,3	16,5	28
exports (000 t)	43,4	33,0	34,78	38,16	28,29	24,5	8,6	13
utilization (000 t)	97,8	91,5	91,0	79,5	94,5	104,8	104,9	94,9
pc utilization (kg)	9,3	8,8	8,8	7,7	9,1	10,2	10,2	9,2

**ANNEX 2.11 : PIGMEAT AND POULTRYMEAT**

<b>pigmeat balance sheet</b>								
	1987	1988	1989	1990	1991	1992	1993	1994 (e)
slaughters (000)	11589,0	11123,0	10905,0	10797,0	9732,5	7793,0	7201,8	6200,0
weight (kg)	89	92	93	94	96	98	99	97
prod (000 t)	1036,7	1021,9	1014,3	1017,7	930,5	764,3	710,0	600,0
imports (000 t)	0,0	0,5	0,0	2,0	0,0	6,4	16,7	40,1
exports (000 t)	128,1	134,2	131,88	178,30	184,45	54,7	45,0	41,6
utilization (000 t)	908,6	888,1	882,4	841,5	746,1	716,0	681,7	598,4
pc utilization (kg)	86,6	85,0	85,0	81,2	72,1	69,4	66,3	58,2

<b>poultrymeat balance sheet</b>								
	1987	1988	1989	1990	1991	1992	1993	1994 (e)
slaughters (000)	334100	332300	305000	267600	210014	203984	194800	206200
weight (kg)	1,39	1,44	1,43	1,68	1,68	1,67	1,60	1,65
prod (000 t)	463,3	478,1	436,4	450,5	352,7	340,0	310,8	341,2
imports (000 t)	0,1	0,2	0,1	0,5	0,1	0,4	1,1	1,1
exports (000 t)	207,4	236,2	178,1	193,2	118,4	69,9	73,3	81,0
utilization (000 t)	256,1	242,0	258,4	257,8	234,4	270,5	238,6	261,3
pc utilization (kg)	24,4	23,2	24,9	24,9	22,7	26,2	23,2	25,4

<b>eggs balance sheet</b>								
	1987	1988	1989	1990	1991	1992	1993	1994 (e)
lay hens (000)	27167	27184	26950	25992	25171	22000	22000	22000
yield (kg/hens)	8,7	9,4	9,4	10,0	9,8	10,5	10,6	10,5
prod (000 t)	235,4	254,7	254,4	259,9	246,5	231,3	234,1	230,0
imports (000 t)	2,2	2,7	4,9	7,7	1,7	6,5	5,0	
exports (000 t)	11,8	9,2	6,8	6,8	11,7	7,7	5,8	
for hatching (000 t)	28,3	26,8	23,8	20,5	14,4	15,0	15,0	
utilization (000 t)	197,4	221,3	228,7	240,3	222,0	215,1	218,3	
pc utilization (kg)	18,8	21,2	22,0	23,2	21,5	20,8	21,2	

**ANNEX 4.1**

**List of Hungarian food companies with foreign majority ownership**

<b>Hungarian company</b>	<b>Hcadquarters in Hungary</b>	<b>Majority shareholder</b>	<b>Home country</b>
<b>Meat industry</b>			
Möbiusz Húsipari Rt. Landhof Budapest Hús kft. Kolos Rt. Kaposvári Húskombinát Borsodi Ilúsipar Pick Szegedi Szalámi Rt.	Pécs Budapest Tatabánya Kaposvár Miskolc Szeged	Pankl u. Hoffmann Landhof Kolos Pini Kolos dispersed stakes	Austria Austria Denmark Italy Denmark mixed
<b>Dairy industry</b>			
Fejértej-Parmlat Rt. Répcelaki Sajtgyár Rt. Veszprémetj Rt.	Székesfehérvár Répcelak Veszprém	Parmlat Bongrain Bongrain	Italy France France
<b>Poultry processing industry</b>			
Orosházi Baromfi Élip. Rt. Sárvári Baromfiipari Rt.	Orosháza Sárvár	Marian GmbH Mathews	Germany UK
<b>Canning industry</b>			
Globus Konzervgyár Rt. Kecskeméti Konzervgyár Rt. Trösch Prima kft Sigma Konzervipari kft. Bonduelle Nagykörös kft.	Budapest Kecskemét Magyaróvár Szigetvár Nagykörös	dispersed stakes Heinz-Hillsdown H. Trösch Manz Bonduelle	mixed USA - UK Austria Germany France
<b>Frozen food industry</b>			
Bajai Hűtőipari Rt. Mirelite Hűtőipari Rt. Goldsun Hűtőipari Rt.	Baja Budapest Zalaegerszeg	Unilever First Hungarian Fund Shamrock Capital Inv.	Holland-UK USA USA
<b>Distilling industry</b>			
Szabadegyházai Szeszipari Rt.	Szabadegyháza	Agrana-Amylum  (Agrana is a subsidiary of Südzucker AG)	Austria-Belgium
BUSZESZ Rt. BULIV Budapesti Likőripari kft	Budapest Budapest	Mautner-Markhof Zwack-Underberg	Austria Hungary-Germany
<b>Sugar industry</b>			
Kabai Cukorgyár Rt.	Kaba	Eastern Sugar (Tate and Lyle, Générale Sucrière)	UK - France
Mátravidéki C. gyárak Rt.	Hatvan	Eridania - Beghin Say	France - Italy
Szerencsi Cukorgyár Rt. Szolnoki Cukorgyár Rt. Petőházi Cukoripari Rt. Kaposcukor Rt.	Szerencs Szolnok Petőháza Kaposvár	Eridania Béghin-Say Eridania Béghin-Say Agrana Agrana	France - Italy France - Italy Austria Austria

<b>Wine industry</b>			
Hungarovin Rt.	Budapest	Henkell-Söhnlein	Germany
<b>Brewery industry</b>			
Kőbányai Sörgyár Rt. Pannónia Sörgyár Rt. Borsodi Sörgyár Rt. Nagykanizsai Sörgyár Rt. Soproni Sörgyár Rt.	Budapest Pécs Böcs Nagykanizsa Sopron	SAB Ottakringer AG Interbrew SAB ÖBAG	South Africa Austria Belgium South Africa Austria
<b>Tobacco industry</b>			
Nyidofer Rt. SD Tabak Rt. Egri Dohánygyár kft Pécsi Dohánygyár kft Debreceni Dohánygyár kft	Nyiregyháza Sátoraljaújhely Eger Pécs Debrecen	Univeral Leaf T. Reynolds Philip Morris B.A.T. Reemtsma	USA USA USA UK-USA Germany
<b>Confectionery industry</b>			
Györi Keksz kft Quintie Édesipari kft Intercokoládé kft Nestlé	Győr Budapest Szerencs	United Biscuits Stollwerck Nestlé	UK Germany Switzerland
<b>Vegetable oil processing</b>			
Cereol Növolajipari Rt.	Budapest	Cereol (Eridania Béghin-Say)	France - Italy
Unilever Élelmiszer-és Mosószergyártó Rt	Budapest	Unilever	Holland-UK

## Annex 5.1

### 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 1990-1992, the second stage of the PHARE programme in Hungary has been put in place for the 1993-1997 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 1993, PHARE provided **68.5 Mio ECU** for Hungarian agriculture, that is:

- 16.5 % of total PHARE commitments for CEECs' agriculture;
- 13.6 % of total PHARE commitments for Hungary.

In particular, the 1993 agricultural programme represented **30.5 Mio ECU** (30.8 % of total PHARE assistance to Hungary in 1993). There was no agricultural tranche in 1994. Discussion about an agricultural programme for 1995 is still going on.

Within Hungary, the Ministry of Agriculture is the authority responsible for implementing PHARE assistance; a Project Management Unit has been set up within the Ministry.

#### PHARE agricultural commitments for Hungary (Mio ECU)

1990	1991	1992	1993	1994	Total
20	13	5	30.5	0	68.5

#### 2. Specific actions

Given that economic activity in the agricultural and food sector declined substantially over the 1990-93 period, and that prospects for revitalisation of the sector are hampered by the lack of capital and managerial capacity, the overall objective of the PHARE Programme is to provide integrated financial and technical assistance to facilitate productive investment by private enterprises.

In the 1990-93 period, there were 16 PHARE financed projects in Hungary, in 4 major fields: financing the agricultural sector, restructuring the agricultural sector, strengthening the Ministry of Agriculture technically, and strengthening the Ministry of Agriculture's services.

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, cooperatives ("collective farms") 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 specifically allocated to agriculture, since the sector had been well endowed for the two previous years; however a rural credit project was financed with a 5 Mio ECU grant.

The 1993 Programme was the logical continuation of the previous projects, but it mainly focussed on agricultural sector finance. Its various objectives are described in detail below.

#### *Rural Credit and Guarantee Fund (10 Mio ECU)*

This heading was the main part of the programme. The aim was to provide capital assistance to contribute to the replenishment of the guarantee scheme for small and medium sized enterprises, enabling private investors to benefit from credit resources made available from the 1993 government budget and the EBRD agricultural loan (cf § 4.5).

PHARE financial support was accompanied by a provision for technical assistance to assist and monitor management of the funds in areas such as cash-flow, risk management and management information systems.

#### *Agricultural Credit Channels (7 Mio ECU)*

Further capital assistance had to be given to help replenish the Mutual Assistance Fund, providing insurance for deposit liabilities and banking risks of the Saving Co-operatives: this part of the programme benefitted from a 6 Mio ECU PHARE commitment (cf § 4.5).

Technical assistance (for an amount of 1 Mio ECU) was provided for the establishment of an International Co-operative Advisory Council and to extend support for the integration of the Saving Co-operatives into a unified co-operative bank.

#### *Investment Preparation and Promotion (6.3 Mio ECU)*

In this part of the programme, 3 Mio ECU were dedicated to co-finance the government replenishment of the Agricultural Development Fund (cf § 4.5 and § 5.4), providing small rural enterprises with a 50 % grant or soft loan. Technical assistance (3.3 Mio ECU) aimed to help the government's executive agencies for the scheme assess the feasibility and economic viability of loan applications, to carry out pre-feasibility studies of non-traditional types of rural investment, and to develop training schemes on investment preparation.

*Land Registration (3.5 Mio ECU)*

Supplementing previous PHARE assistance, this programme provided for further support to improve the accuracy and efficient use of the basic cartographic and land information system (cf § 3.1.7).

*Animal Health Quality (3 Mio ECU)*

This component, which was supposed to complete and reinforce the 1990 PHARE-funded programme to strengthen animal health and quality control, aimed to help Hungary meet international trading standards and requirements.

*Foreign Aid Co-ordination (1 Mio ECU)*

This assistance was provided for management advice and training to enhance the institutional capacity of the Ministry of Agriculture.

## ANNEX 6.1

## SELECTED IMPORT TARIFFS OF 1994 COMPARED WITH IN-QUOTA AND BOUND TARIFFS IN GATT

Commodity	1994 Level %	Tariff Rate Quota <sup>1</sup>		Tariff for quota %	Applied on 1.1.95 %	Maximum Bound Rates		Reduction year 1-6 %
		1st year tons	6th year tons			1st year %	6th year %	
Live pigs	15			15	57.5	59	50.15	15
Live chicken	15			15	29.2	30	25.50	15
Pork	15	11339	19909	25	59.5	61	51.85	15
Beef	15	13595	13595	25	105.3	112	71.68	36
Slaughtered chicken	20	6748	11425	35	57.3	61	39.04	36
Milk with cream	30	9990.1	18101.5	30	75.2	80	51.20	36
Powder milk. no sugar	20			30	75.2	80	51.20	36
Powder milk. w/sugar	30			30	75.2	80	51.20	36
Yogurt. sour crm. kaphir	15	247	252	40	75.2	80	51.20	36
Butter	60	178	178	60	149.5	159	101.76	36
Cheese. ewes	25	319	1206	50	96.2	105	52.50	50
Cheese. cows	25			50	96.2	105	67.20	36
Eggs. in shell	30				29.2	30	25.50	15
Potato	10	29600	29600	10	50.7	52	44.20	15
Tomato	12	1619	3178	12	20-67.7	72	46.08	36
Grapes	40	3016	3016	40	30-58.0	60	51.00	15
Apples. pears	25	3232	10212	25	72.4	77	49.28	36
Wheat	10	17251	48623	10	47.0	50	32.00	36
Barley	3	109058	109058	3	37.6	41	32.80	20
Corn	3	116896	222935	3	47.0	50	32.00	36
Wheat flour	0				56.4	60	38.40	36
Sugar beets	30	0	7514	30	34.1	35	29.75	15
Sunflower oil	8	1098	2600	8	40.0	46	39.10	15
Margarine	30	3899	3977	30	40.0	57	48.45	15
Sausages	25	1564	2607	25	58.0	60	48.00	20
Ham. liver. proc. meat	20	1238	1238	25	73.3	78	49.92	36
Sugar. raw and refined	80				78.0	80	68.00	15
Pasta	20	406	980	25	56.4	60	38.40	36
Fruit and veg. juices	20	8338	8505	20	45.7	49	39.20	20
Wine in barrels	15	383500	383500	40	72.1	74	62.90	15
Other wine	40				72.1	74	62.90	15
<b>AVERAGE</b>	<b>22</b>			<b>22</b>		<b>66</b>	<b>47.0</b>	<b>29</b>

<sup>1</sup> Pork includes live pigs, beef includes bovine animals and meat, chicken includes live chicken, milk includes powdered products. cheese includes ewe and cow cheese, wheat includes flour, wine includes all wine products.

## Annex 6.2

### Hungary

#### Export subsidies : reduction commitments

	1986 - 1990				1995				2000			
	mio HUF	mio ECU*	1000t**	ECU/t	mio HUF	mio ECU*	1000t	ECU/t	mio HUF	mio ECU*	1000t	ECU/t
slaughter cattle	1597,4	12,86	70,00	183,65	1502,0	12,09	68,00	177,76	1022,0	8,22	55,00	149,54
beef	1566,5	12,61	36,00	350,18	1472,0	11,85	35,00	338,46	1003,0	8,07	28,00	288,28
slaughter pig	1213,2	9,76	44,00	221,90	1140,0	9,17	42,00	218,44	776,0	6,24	35,00	178,43
pork	4735,6	38,11	115,00	331,40	4451,0	35,82	111,00	322,70	3031,0	24,39	91,00	268,05
broiler chicken	5490,0	44,18	141,00	313,34	5161,0	41,53	136,00	305,40	3514,0	28,28	111,00	254,77
slaughter sheep	820,6	6,60	29,00	227,71	771,0	6,20	28,00	221,60	525,0	4,23	23,00	183,70
sheep meat	213,4	1,72	3,00	572,38	160,0	1,29	3,00	429,21	109,0	0,88	2,00	438,60
white cream cheese	48,2	0,39	2,00	193,75	45,0	0,36	1,93	187,64	31,0	0,25	1,58	157,90
apple	1504,0	12,10	411,00	29,45	1414,0	11,38	386,00	29,48	963,0	7,75	284,00	27,29
red pepper meal	382,5	3,08	9,00	342,01	360,0	2,90	9,00	321,91	245,0	1,97	7,00	281,67
sunflower seed	339,1	2,73	90,00	30,32	319,0	2,57	87,00	29,51	217,0	1,75	71,00	24,60
sunflower oil	1144,6	9,21	185,00	49,79	1076,0	8,66	179,00	48,38	733,0	5,90	146,00	40,40
sugar	233,5	1,88	166,00	11,32	219,0	1,76	144,00	12,24	149,0	1,20	32,00	37,47
wine (quantities in hl)	839,0	6,75	517,00	13,06	789,0	6,35	499,00	12,72	537,0	4,32	408,00	10,59
wheat	2054,5	16,53	1444,00	11,45	1931,0	15,54	1393,00	11,16	1315,0	10,58	1141,00	9,27
corn	230,8	1,86	1451,00	1,28	217,0	1,75	1236,00	1,41	148,0	1,19	164,00	7,26
	22412,7	180,37			21027,0	169,22			14318,0	115,23		

#### Notes

\* For all calculations : 1 ECU = 124.26 HUF (1994 average) ; commitments are expressed in HUF; therefore, ECU figures are purely indicative  
 \*\* For apple, sugar and corn, these quantities are the average of years 1991-92 ("front-loading")

## Annex 6.3

### Hungary

#### 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	272

#### Note

\* For all calculations : 1 ECU = 124.26 HUF (1994 average) ; commitments are expressed in HUF; therefore, ECU figures are purely indicative

**ANNEX 6.4 : UTILIZATION OF THE ASSOCIATION AGREEMENT QUOTAS**

PRODUCT (tonnes)	Quota available	Quota utilized	% of utilization	Quota available	Quota utilized	% of utilization
	<b>01.07.93-30.06.94</b>			<b>01.07.94-30.06.95</b>		
<b>CEREALS</b>						
<i>Soft wheat</i>	<b>200000</b>	<b>24000</b>	<b>12.0</b>	<b>216000</b>	<b>215943</b>	<b>100.0</b>
<b>DAIRY PRODUCTS</b>						
<i>Cheese</i>	<b>1200</b>	<b>1200</b>	<b>100.0</b>	<b>1300</b>	<b>668</b>	<b>51.4</b>
<b>BEEF</b>						
<i>Beef</i>	<b>5800</b>	<b>3461</b>	<b>59.7</b>	<b>6475</b>	<b>1305</b>	<b>20.2</b>
<b>POULTRY &amp; EGGS</b>						
Duck meat	1700	1700	100.0	2840	2840	100.0
Chicken meat	23450	14575	62.2	20220	13001	64.3
Chicken meat, deboned	4000	4000	100.0	7700	7700	100.0
Turkeymeat	3600	3124	86.8	3800	2995	78.8
<b>Total Poultry meat</b>	<b>32750</b>	<b>23399</b>	<b>71.4</b>	<b>34560</b>	<b>26536</b>	<b>76.8</b>
Eggs in shell	1250	0	0.0	1350	232	17.2
Whole eggs, dried	250	0	0.0	270	0	0.0
<b>Total Eggs</b>	<b>1500</b>	<b>0</b>	<b>0.0</b>	<b>1620</b>	<b>232</b>	<b>14.3</b>
	<b>1993</b>			<b>01.01.94-30.06.94</b>		
<b>GOOSE MEAT</b>						
<i>Goose meat</i>	<b>13800</b>	<b>13388</b>	<b>97.0</b>	<b>7500</b>	<b>1943</b>	<b>25.9</b>
	<b>1993</b>			<b>1994</b>		
<b>PIG MEAT</b>						
Sausages	5000	5000	100.0	5400	5063	93.8
Processed products	250	79	31.5	270	73	26.9
Meat of swine salted or in brine	1250	67	5.3	1350	81	6.0
Meat of swine, fresh, chilled, frozen	25000	5665	22.7	27000	7429	27.5
<b>Total pig meat</b>	<b>31500</b>	<b>10810</b>	<b>34.3</b>	<b>34020</b>	<b>12645</b>	<b>37.2</b>
<b>SHEEP &amp; GOATS</b>						
Live sheep and goats	10575	7712	72.93	10925	9698	88.8
Sheep and goat meat	1300	754	58.00	1400	425	30.4
<b>Total sheep &amp; goats</b>	<b>11875</b>	<b>8466</b>	<b>71.29</b>	<b>12325</b>	<b>10123</b>	<b>82.1</b>
<b>LIVE BOVINE ANIMALS</b>						
Poland-Hungary-Czech & Slovak Republic						
<i>Live bovine animals (heads)</i>	<b>39600</b>	<b>39600</b>	<b>100.0</b>	<b>59400</b>	<b>59400</b>	<b>100.0</b>
	<b>01.01.93-30.06.94</b>			<b>01.07.94-30.06.95 (utilization until 24.05.95)</b>		
<b>MAIN FRUIT &amp; VEGETABLES</b>						
Onions : 070310	73800	3617	4.9	54400	11905	21.9
Sweet pepper : 07096010	17273	13403	77.6	14027	12853	91.6
Frozen peas : 07102100	15200	6205	40.8	11302	6698	59.3
Plums : 080940	7600	4663	61.4	6350	5640	88.8
Processed cucumbers & gherkins: 20011000	25550	22557	88.3	20027	18334	91.5
Processed tomatoes : 20029030+20029090	9400	1906	20.3	6400	1565	24.4
Apple juice : 20097019	7600	2286	30.1	5800	2011	34.7

For cereals, dairy products, poultry & eggs, beef, live bovine animals and pig meat, the quota utilized refers to the quantities for which import certificates were requested.

For sheep & goats, fruit & vegetables, goose meat, the quota utilized refers to actual utilization.

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dans les ateliers de la Commission Européenne