




European Union
Agriculture and rural development

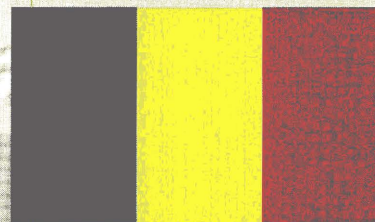
Agricultural Situation and Prospects

**in the Central
and Eastern
European Countries**

A map of Romania is shown on the left side of the cover. The capital, Bucharest, is highlighted in a light blue color and labeled "Bucuresti".

Bucuresti

Romania



Working Document
May 1998



European Commission
Directorate General for Agriculture (DG VI)

Romania

Agricultural Situation and Prospects in the Central European Countries

Working Document

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

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Geopolitical Map of ROMANIA

- Administrative boundaries and Name of administrative unit
- Main rivers and waterways
- major town (> 200000 inhabitants)

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Introduction

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

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

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

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

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

About the data...

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

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

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

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

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

Executive summary

General situation

Following a violent upheaval (December 1989) against the Ceausescu regime, a coalition of former officials formed a provisional government, then won the ensuing elections (May 1990). The first phase of transition was accompanied by political instability. After 4 years of decline, the Romanian economy started to grow again slowly in the years 1993 to 1996, but with an extremely high inflation rate.

November 1996 elections brought to government a centre-right coalition with the objective of speeding up economic reform.

In February 1997 a radical market oriented economic reform in particular liberalised foreign trade. The immediate effect was negative on '97 growth (-6.6%) and inflation (150%). Growth should resume in 1999 and inflation should slow down. Foreign direct investment is still low, the trade balance and current account are negative, and deficits are not expected to be reduced within the next two years.

Agriculture and the food industry

Already of primary importance when Romania served as breadbasket to Western and Central Europe in the 19th century, agriculture remains central to the Romanian economy. Romanian agriculture has undergone at least three dramatic changes over the last 100 years, nearly one per generation. Uniquely among the CECs, agriculture represents one fifth of GDP and has grown in terms of employment (39.6% in 1997) during the '90s. As in most CECs, the share of livestock in agricultural output fell by 7% over the same period.

Land use

Of Romania's total 23.8 million ha, 28% is covered by forest and more than 60% is used for agriculture. Of the agricultural area, one third is permanent pasture and some 63% is arable, more than half of which is planted with cereals, mainly maize and wheat. Around a tenth is oilseeds. Vineyard renewal has not led to any increase in the permanent crop area (less than 4% of UAA).

Farm structures

In 1989, nearly 90% of the UAA was occupied by State and Co-operative farms; independent farmers took up less than 12%, with small plots. Privatization and redistribution of agricultural land has involved 5 million people, fragmenting land-ownership and causing the average farm size to fall to less than 2 ha of arable land and 3 ha in total. The structure of farming is, however, less fragmented than ownership. Besides independent farmers (58% of UAA) are found the non-privatized former State farms (12% of UAA), farmers association, with legal status, grouping individual owners (12% of UAA with an average size of 451 ha) and family associations, with no legal status, cultivating the land of family members (8% of UAA with an average size of 103 ha). The private sector now represents around 85% of the final agricultural production.

Production and utilization

At over 20 mio t, 1997 was an excellent year for cereals, confirming Romania's return to being a net cereals exporter since 1995. The deterioration of production conditions (agricultural structures and input supply) has led to a sharp increase in maize production. Sugar also suffered from the economic disorder.

ganisation which followed privatisation, while oilseeds production recovered in 1995, allowing a small positive net trade balance to be achieved in 1996. Romania is a traditional wine producer and export opportunities (485,000 hl in 1996) boosted vineyards.

Livestock developments have been quite divergent from those in the crop sector. After falling considerably, the decline in herd sizes now seems to have slowed. Milk production has been recovering visibly since 1993 and production overshot 5 mio t in 1997. Cattle numbers continued to fall in 1997, even if production increased again. Pig numbers were still falling in 1997 but poultry numbers have stabilised over the last three years, as has production. Total meat utilization is 55 kg per capita (against 62 kg/head in 1989), more than half being pigmeat.

Trade

Romania's trade balance is negative, as is the agri-food trade balance, but its share in the global trade deficit decreased from 38% to 4% between 1993 and 1996. The regional breakdown of agri-food trade flows shows that the most important market for Romanian exports is the EU with 55%. On the import side, the EU is the major trading partner (50%). Surprisingly, the CECs are at present minor economic partners, but imports from the NIS are on the increase (16%). The structure of agri-food trade is dominated by foodstuffs and beverages, which are mainly responsible for the agri-food deficit, while the trade balance for animal products has been consistently positive since 1993. The improvement in the agricultural trade balance is almost exclusively due to cereals, which returned to achieving a positive balance in 1995.

Up- and downstream industry

While the use of inputs has fallen drastically since 1989, some recovery can be seen since 1994. Up till 1997, upstream industry was organized around "integrators" and "agromecs", the latter being companies supplying mechanisation services to farmers. The "integrators", which supplied farmers with fertilizers, pesticides, seeds and even credit, also occupied a monopolistic position in grain procurement. Almost all wheat was purchased by Romcereal. Their presence was seen as an obstacle to the development of competitive up- and downstream agricultural industries.

The Romanian food industry was built 20-30 years ago, with major production plants in each county. There has been little investment in plant renewal or upgrading, and output is of a relatively poor quality.

The privatization process is mainly affecting "agromecs" and small and medium food processing companies. In view of the lack of capital and legal uncertainties, it would be safe to say that economic and financial restructuring is just starting.

Support policy

Until early '97, a guaranteed minimum price system existed for products of "national importance", namely wheat, milk, pigmeat and poultrymeat. To benefit from this system, farmers had to contract to sell their production to "integrators".

Following World Bank recommendations, this system was removed and prices for all agricultural products may now be considered fully liberalised. The government has introduced a system of input subsidies based on vouchers distributed to farmers. These can be exchanged to pay for all kinds of inputs and mechanical work. A limited credit policy and support for less-favoured areas seem to be important tools for specific sectors (e.g. cattle, pigmeat, sugarbeet, ..).

GATT commitments

Uniquely among the CECs, Romania opted for the status of developing country and tabled its offer in constant Lei. Commitments regarding ceilings on domestic support therefore do not appear to represent a particular policy constraint. Concerning border protection, Romania was able to set very high binding ceilings for agricultural products. Tariffs applied since May 1997 have, however, been largely below the bound rates, the average weighted applied tariff being 27%.

Outlook

Romania is currently supporting the restructuring of its agricultural industry towards a market economy. Only small changes in land use are expected. Self-sufficiency in cereals is expected to increase, consolidating their net export position. In the livestock sector, poultry and pig numbers are expected to recover somewhat, production being boosted by an increasing domestic demand and the availability of cereals on the domestic market. Overall agricultural self-sufficiency will slightly increase and the agri-food trade balance will turn positive.

Introduction: general overview

1.1 Historical background

Despite vigorous attempts at industrialisation under the Ceausescu regime, Romania has retained a strong rural culture, with agriculture still central to its economy.

Well-known historically as the bread-basket of the Ottoman Empire, it is perhaps less well known that, after gaining independence in 1878, Romania continued to export its surplus grain, to Western Europe. While subsistence farming was carried on by undernourished peasants across most of the land, 40% was taken up by larger farms (over 20 ha) which, while they represented only 2.5% of all Romania's farms, were responsible for the whole exportable surplus.

The pattern of holdings behind today's land restitution emerged from a radical land reform in 1918, which was part of the Government's attempt to ensure the loyalty of the largely peasant army. A decree expropriated the land of foreigners, absentee owners and native owners of over 250 ha in grain-producing areas, with different limits applying in hill and mountain regions. Exceptions were made for well-managed farms. Five hectares were made available to the landless and to small-holders, in return for twenty annual payments to the State - although the areas eventually redistributed averaged only 2.8 ha.

Redistribution, surveying, and issuing of new titles went slowly but a large share of Romania's agricultural land finally changed hands. By 1941 over half the farms had less than 3 ha and only about 6-7 percent more than 10 ha. The 1945 Land Reform was even more radical and eliminated nearly all prosperous "Chiabur" farms.

The extent to which regional differences have endured is striking. The earliest statistics available confirm the lower productivity of the plains areas of the Old

Kingdom (Oltenia, Muntenia, and Moldova) compared with the regions north and west of the Carpathians, documented in *Farm Survey: Private Agriculture in Romania*. The difference in productivity seems to have been connected with climate, topography and product mix, as well as cultural factors. Co-operatives and market structures were better developed in regions which formed part of the Hapsburg Empire, while the plains were a semi-frontier area even in the mid-19th century and more affected by large estates and contract managers. Under communism, they continued to suffer from large-scale, extensive cultivation and the destruction of peasant culture.

An important result of the 1918 Land Reform was to shift production away from wheat, which was mainly exported, to maize, which was domestically consumed. The cause was dual: seed costs were lower for maize, but marketing channels had also been disrupted by the Reform. Crop output fell and stayed below the 1909-13 average for most of the inter-war years, until the second half of the 1930s. It plummeted again in 1950.

As Romania was on the verge of famine in the late 1940s, the increase in output during the '50s was significant but relative. Output fell again in the '60s, during the collectivisation years, when the urban population was the poorest-supplied in Central and South-eastern Europe. While output grew again in the 1970s, by 1980 Romanians were obliged to spend a much higher proportion of their income on food than other countries in the region. Up until 1985 more than half the population still lived in rural areas, although by the mid-'70s the share engaged in agriculture had fallen to 28%. Ceausescu's draconian foreign debt repayment measures made the situation much worse in the '80s, so that one of the first actions of the new government in 1990 was to greatly increase imports of agricultural and food products, to alleviate poor nutrition standards. The lifting of import restrictions,

together with a ban on food exports, was part of a significant change in trade policy.

The Communist emphasis on industrialisation led to an acute drop in the agricultural labour force (in the 1940s 75% of the labour force was still engaged in agriculture) but in 1995 agriculture still accounted for 19.1% of GDP (2.5% in EUR-12) and the agricultural labour force had risen back up to 33.6% (5.3% in EUR-15).

Romania's post-war pattern of industrialization was influenced by its historical base in oil and gas production and oil refining. The socialist strategy emphasised heavy industry and within the Council for Mutual Economic Assistance (CMEA) Romania assumed the role of major petrochemicals supplier, as well as oil drilling, mining and a range of other industrial equipment.

Around the end of the 1960s, difficulties in maintaining production obliged Romania to become a net importer of oil, helped by its relations with Iran and the Arab countries. Imports were paid for in machinery and projects. But in the 1970s, the price it was getting per ton for refinery products fell below the cost of imported raw materials. This was one of the reasons Romania stopped servicing its dollar debt in 1981.

Romania was in constant conflict with the CMEA over its refusal to specialize in the supply of raw materials and foodstuffs, and was prompted to turn to the West for financial and technical assistance to build up its heavy industry.

One legacy of this period is the characteristic high energy requirement of industry (e.g. fertiliser manufacture). It was also typical of this time to give approval for huge projects, without ensuring the availability of funds for their maintenance.

This industrial policy was reinforced by a drive for current account surpluses in the 1980s. Agriculture was deprived of resources and investment. Production

dropped steadily after 1986, but Romania remained a net agri-food exporter throughout most of the decade. This was achieved by cutting food imports - they fell from 800 mio ECU in 1986 to 450 mio ECU in 1988 and 600 mio in 1989 - and domestic consumption suffering.

1.2 Political developments since 1989

In the wake of the coup deposing Ceausescu, a National Salvation Front (NSF) was formed by a coalition of reformists and former officials, who constituted a provisional government. The Front, with a message of stability, social benefits and gradual reform, secured 66% of the vote in the May 1990 elections, defeating a disunited opposition. The NSF's candidate, Ion Iliescu, also won the presidential election, with 85% of the votes.

The political situation during the first years of the transition was unstable. In September 1991 the Prime Minister, Petre Roman, resigned and was replaced by Teodor Stolojan.

Roman remained the Front's leader, but Iliescu founded a new party, the Democratic National Salvation Front (DNSF) - now called the Party of Social Democracy of Romania (PSDR) - which emerged from the September 1992 elections as the strongest party in the Parliament, with 28% of the votes. The Democratic Convention, a centre-right coalition with 20% of the votes, performed reasonably well in many urban areas, but failed to make substantial inroads into the DNSF worker and peasant vote. Petre Roman's NSF (now the Democratic Party) took 10%. Iliescu was later re-elected with 48% in the first round and 61% in the second round of voting in the presidential election.

A new government was finally formed in November 1992 under Nicolae Vacariou, a former planner and not a PSDR member. The administration, made up of non-party technocrats as well as PSDR members (and, after August 1994, of the Party of Romanian National Unity (PRNU) with 8% of the votes) also relied on

the parliamentary support of neo-communist and ultra-nationalist parties.

Timid towards structural improvement, the government also failed to pursue a sustainable public finance policy, which would have necessitated greater deregulation, privatisation and the withdrawal of subsidies. Taking advantage of the low external debt, it borrowed heavily from a diversity of lenders and, when these became concerned about the slowness of reform, from international capital markets.

Rapid growth in 1995 was followed by inflation, devaluation and industrial slowdown in 1996, making a return to price and currency controls necessary. Reform measures put forward by the Vacariou administration under pressure from the IMF and the World Bank, in particular an ambitious mass privatisation programme for 4,000 companies, were ineffectively implemented.

In November 1996, fresh elections brought to power a centre-right coalition headed by Mr Constantinescu, who was later elected President. Although the PSDR's rural vote held up in 1996, its previously strong support in rural areas was weakened by the failure of farmers to benefit from a bumper harvest in 1995, due to bad management by the Romcereal monopoly, and the inadequate support provided for crop failures the following year.

The new coalition government is made up principally by:

- the Democratic Convention (DC), whose main party is the National Peasant-Christian Democratic Party (NP-CDP);
- the Social Democratic Union (SDU), the most important component of which is Petre Roman's Democratic Party (DP);
- the Hungarian Democratic Union in Romania (HDUR), representing the ethnic Hungarian interest.

The government's objective is to accelerate reform and establish the basis for long-term economic growth.

In February 1997 Prime Minister Ciorbea, working in close cooperation with the IMF and the World Bank, announced a radical market-oriented reform which would involve the removal of most remaining price controls, a restrictive monetary and fiscal policy, and the liberalisation of the foreign exchange regime.

Early membership of the EU and NATO were declared key policy objectives. However, Romania was excluded from the first round of NATO enlargement and was not included in the first wave of applicant countries with which the EU would start accession negotiations.

By the end of January 1998, Petre Roman's Democratic Party (DP) had withdrawn from the government, with the resignation of its five ministers. The political crisis within the coalition eventually led to Ciorbea also resigning, on 30 March, and being replaced by Radu Vasile. The DP has now rejoined the government.

1.3 The Romanian economy

After 4 years of decline, the Romanian economy registered growth in the years 1993 to 1996. Improvements in agriculture and in processing industries linked to exports (clothes, furniture, metallurgy, textiles...) were mainly responsible. However, GDP in 1996 was still 12% lower than in 1989 (Table 1).

The 1997 reform package caused a negative GDP growth rate in real terms. The fall can be attributed mainly to a very sharp, double-figure drop in gross value added in the service sector (including construction). Industrial gross value added declined by more than 8%, while agriculture grew by more than 3% (Table 2).

Table 1: Main macro-economic indicators

		1991	1992	1993	1994	1995	1996	1997 (e)	1998 (f)
GDP (current prices)	Bio Rol					72560	109515	250964	394830
GDP (current prices)	Bio ECU	23.2	15.1	22.5	25.1	27.3	28.0	31.0	33.6
GDP (real terms)	% change	-12.9	-8.8	1.5	3.9	7.1	4.1	-6.6	-1.6
GDP per head	000 ECU	1000	653	983	1102	1203	1239	1375	1493
PPS per head	% EU average			21	22	23	24		
inflation	% change	170.2	210.4	256.1	136.8	32.3	38.8	154.8	60.0
unemployment (1)	% labour force	3.0	8.2	10.4	10.9	9.5	6.3	8.8	11.1
unemployment	% ILO								
budget balance	% GDP	-1.9	-4.4	-2.6	-4.3	-4.1	-3.5	-4.9	-4.2
trade balance (3)	Mio ECU	-1254	-1461	-1392	-805	-1810	-2638	-2510	-2580
current account	Mio ECU					-1997	-1863	-1926	-2065
foreign debt (1) (4)	Mio ECU	1526	2470	3584	4632	5123	6854	7362	
intern.reserve (5)	Mio ECU	514	638	849	1757	1304	1657		
exchange rate (2)	ROL/\$	76	308	760	1655	2033	3084	7168	
exchange rate (2)	ROL/ECU	95	400	890	1969	2660	3916	8129	

(1) December

(2) Average

(3) Export FOB, Import CIF

(4) Foreign net convertible debt

(5) International reserves, excluding gold and SDRs

Table 2: Share and evolution of sectors

		1991	1992	1993	1994	1995	1996	1997 (e)
share agric & forestry	% value added	18.3	18.6	20.6	19.3	20.5	19.1	20.4
share industry	% value added	46.8	40.7	42.4	42.4	42.5	44.3	
share services	% value added	34.8	40.6	36.9	38.2	36.9	36.5	
agriculture	% change	0.8	-13.3	14.2	2.9	4.8	-3.3	3.1
industry	% change	-22.8	-21.9	1.3	3.3	9.4	8.3	-8.4
services	% change	-0.3	-1.1				2.9	-10.0

It is likely that the decline in GDP will continue in 1998, but growth should resume in 1999, provided that the reforms are accelerated.

The private sector's share in GDP has increased continuously since 1989, reaching 52% in 1996 and 58% in 1997. In 1996 GDP per capita was 1,237 ECU, or 7% of the EU-15 average of 18,181 ECU. Expressed in PPS it was 24% of the EUR-15 average.

Between 1990 and 1996 employment was cut by 13.5% overall and in the same period employment in industry fell from 43% to nearly 30% of total employment.

From 8.2% in 1992 the unemployment rate grew to 9.5% in 1995, but fell to 6.3% at the end of 1996. At the end of 1997 it was back up to 8.1%. In December 1995 more than half the total unemployed had been jobless for 12 months or more. Young people (under 30) represented 58% of the total; 55% of the total were women.

Inflation continues to be a major cause for concern. The elimination of remaining subsidies in May 1993 (including subsidies on electricity, but not some other energy prices, medicinal drugs, rents or public transport), the introduction of VAT, the continuing depreciation of the Lei and large wage increases without a corresponding rise in productivity, provoked an accel-

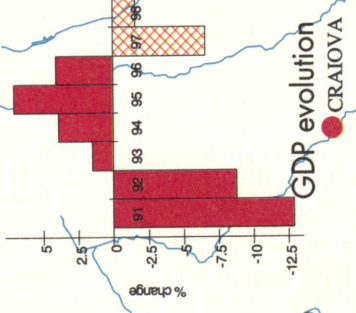
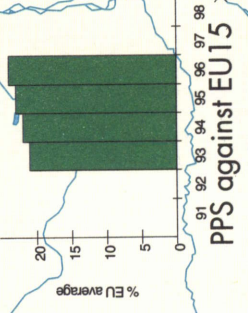
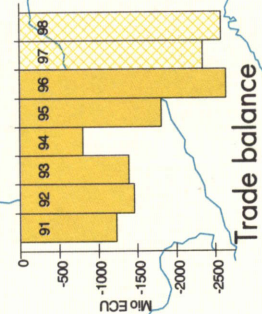
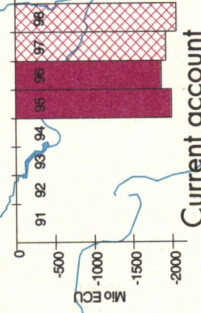
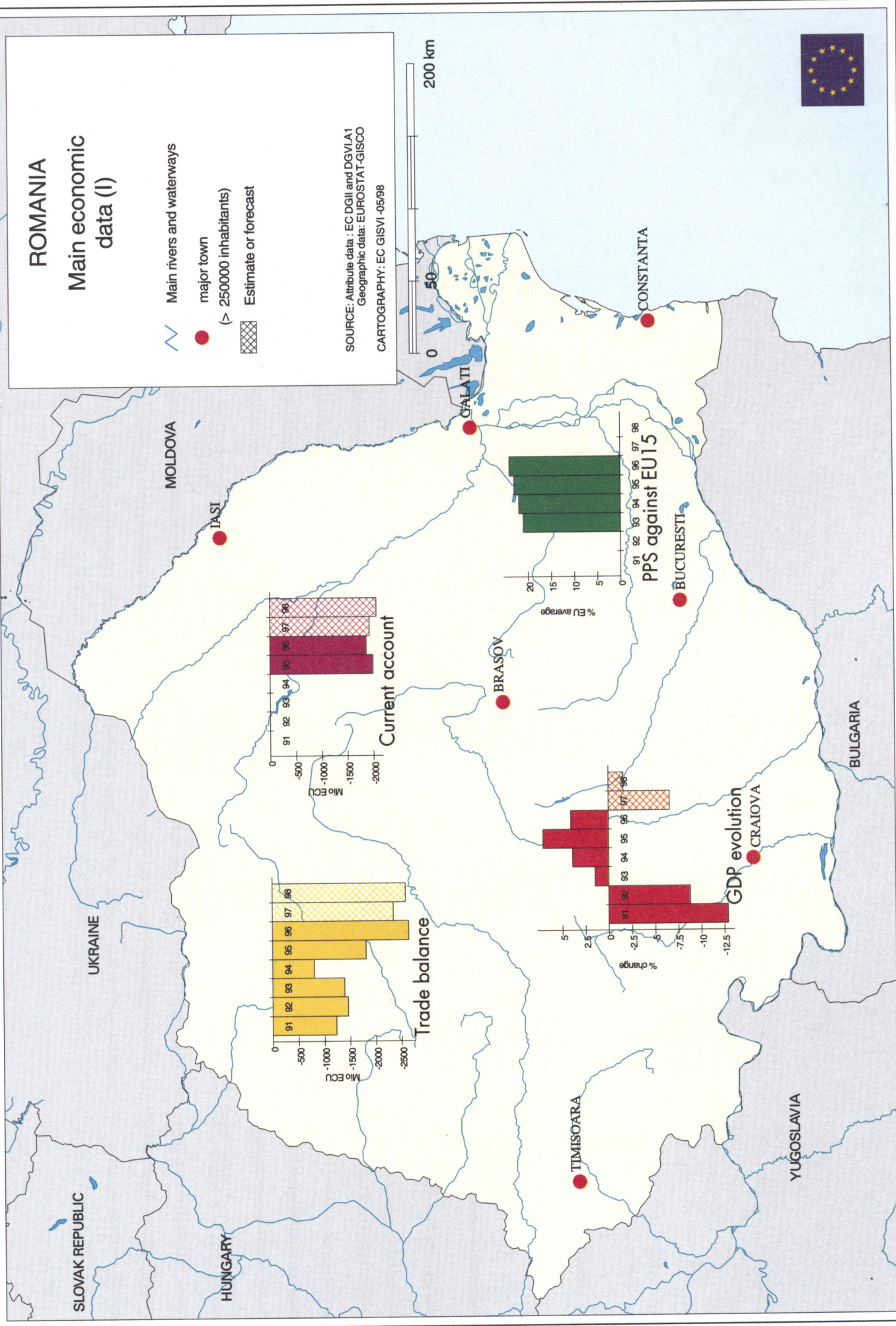
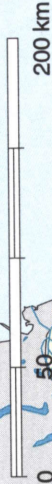


ROMANIA

Main economic data (I)





- Main rivers and waterways
- major town (> 250000 inhabitants)
- Estimate or forecast

SOURCE: Attribute data: EC DGII and DGVI/A1
 Geographic data: EUROSTAT-GISCO
 CARTOGRAPHY: EC GISVI -05/98

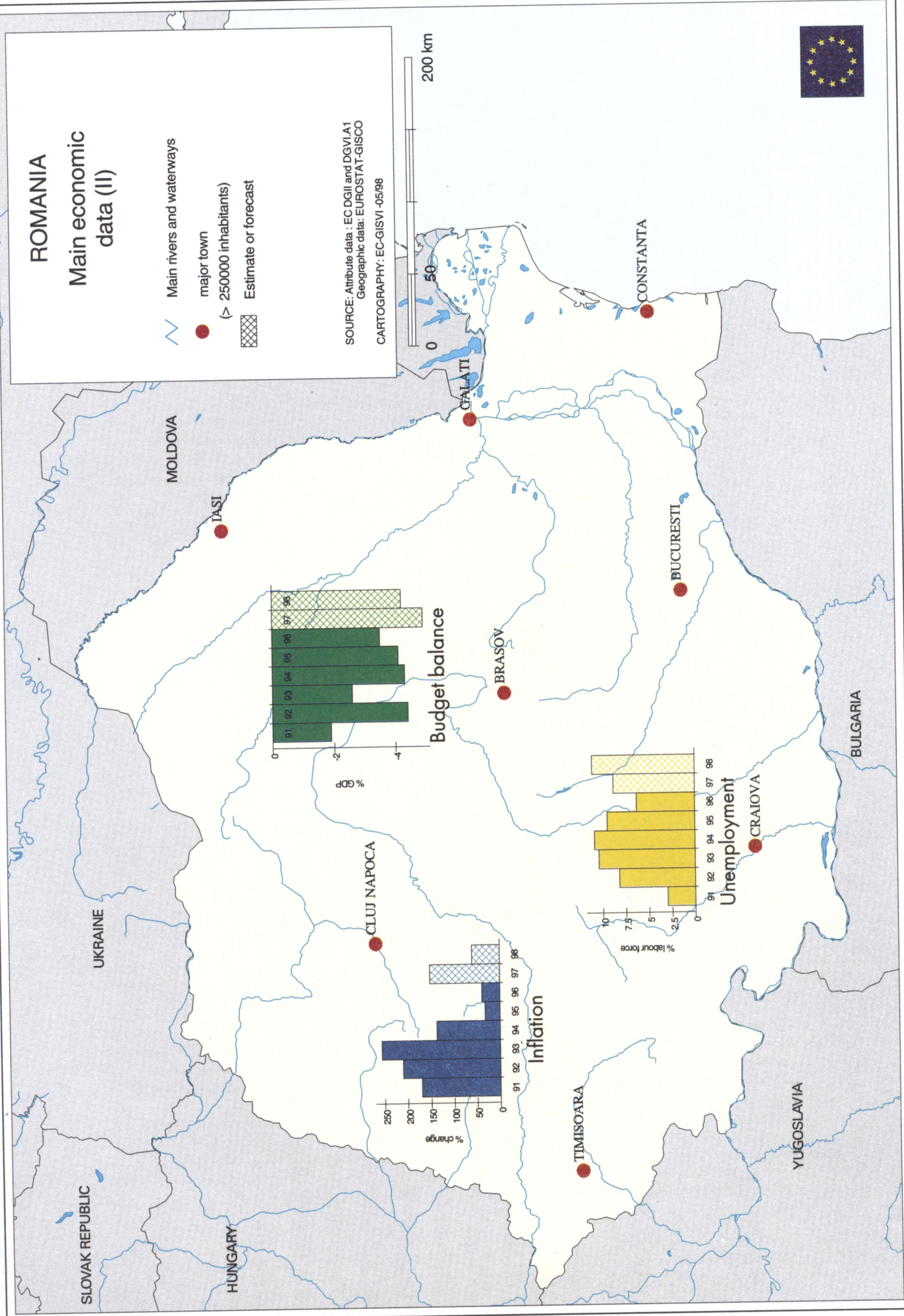


ROMANIA

Main economic data (II)

-  Main rivers and waterways
-  major town
-  (> 250000 inhabitants)
-  Estimate or forecast

SOURCE: Attribute data: EC DGII and DGVI.A1
 Geographic data: EUROSTAT-GISCO
 CARTOGRAPHY: EC-GISVI -05/98



eration that year. A lack of discipline within the State enterprises and remaining monopolies also served to fuel inflationary pressures.

There was a substantial improvement in 1994, even though energy prices increased to world levels in the middle of the year. 1995 saw a further fall, to 32.3%, the result of a tight monetary policy, fiscal discipline and a limited depreciation of the currency.

During 1996, three peaks occurred in the inflation rate:

- May (5.3%), when the increase was mainly determined by the ending of consumer subsidies and was especially important for meat and meat products (16.5%), milk and dairy products (39.6%);
- July (7.5%), due mainly to price increases in bread (46.3%), mill products (21.5%), fuel (31.9%), electricity, gas and central heating (39.4%), post and telecommunications (55.6%);
- December (10.3%), due to the impact of seasonal factors and the devaluation of the national currency. There were price increases in: vegetables (23%), fresh fruits (22.3%), eggs (27.2%), citrus and other southern fruits (21.4%), alcoholic beverages (38.7%), coffee and cacao (28.9%), sugar and sugar products (12.2%), footwear (15.6%), clothing (8.3%), domestic objects and furniture (10.9%).

In 1997, the liberalisation of prices caused a dramatic surge in inflation. Prices at the end of December were up by 151% on the previous year end. Food, fuel and services (railway transport, post and telecommunications...) were mainly responsible.

Forecasts point to inflation rates of 40-45% in 1998 and 20% in 1999.

In 1996 the public deficit (computed on a cash basis) was 4.9% of GDP. It was higher than in 1995 because State enterprises failed to pay fiscal and social security obligations, and because of subsidies to State agriculture and energy-intensive industries.

However, a large part of the expenditure was committed in 1996, to be paid by the new government after the elections. It is estimated that quasi-fiscal deficits (QFD) may add another 5 % to the cash deficit (OECD). Half of the QFD comes from subsidised credits directed by the government to the non-creditworthy agricultural State enterprises. These have little prospect of being repaid. The other half is represented by the large losses incurred by the energy-intensive State enterprises and utilities, which at some point must be assumed by the budget. The total public sector deficit in 1996 can be estimated at 10% of GDP.

Foreign debt is low in absolute terms but is rising fast. The medium and long term foreign debt grew from less than 1% of GDP in 1990 to 15.2% in 1994 and 23.6% in 1997. At the end of 1997, it had reached more than 8.2 billion dollars. Almost 40% of this consists of loans from the International Monetary Fund (IMF), the World Bank, the European Bank for Reconstruction and Development and the European Investment Bank. A similar amount is owed to international private banks and the rest is mainly debts in the context of bilateral relations. The structure of the debt is: 58% public debt, 25% guaranteed public debt and 17% private commercial debt. Romania's short-term net debt was 500 million dollars at the end of 1997.

Romania's legislative and institutional framework for direct investment was created by the Law on Foreign Investment (N° 35/1991). At 2.8 billion US\$, the Foreign Direct Investment (FDI) which benefited Romania in the period 1990-97 was much lower than in the other CEFTA countries. 52% of the capital came from the EU and was invested in 35% of the companies concerned by FDI. Registered companies with foreign capital number 53,183.

At the end of 1997 the Government changed the foreign investment legislation, to reduce procedural bureaucracy and to adapt tax benefits to stimulate investment (Table 3).

Table 3: FDI in agriculture and in food industry

	1991	1992	1993	1994	1995	1996	Jul. 1997
Total FDI							
No. Companies	8031	21056	29134	43100	49206	53581	55694
Subscribed capital Mio ECU	24	411	650	1069	1219	1740	2274
s. w. Agriculture (%)							
No. Companies	<1	<1	6.4	4.4	3.1	4.1	5.1
Subscribed capital Mio ECU	3.4	2.1	2.8	2.8	2.6	2	1.9
s.w. Food industry (%)							
No. Companies	<1	<1	10.9	8	7.4	8.2	9.5
Subscribed capital Mio ECU	11.6	14	15.6	14	15.5	15.4	15.6

How important has FDI been to the agri-food industry? The table above shows that over the whole 6-year period about 2-3% of the total FDI was invested in agriculture (defined as primary production and mechanical services) and 14-15% in the food industry. Considering that agriculture has a 20% and the food industry a 14% share in GDP, these figures are rather low. The slow pace of privatisation and deregulation in the agri-food sector were the chief factors that held back FDI.

In agriculture, almost all FDI was registered in the mechanical services sub-sector. By July 1997, 14 companies with foreign investment exceeding 0.5 million US\$ were registered in agriculture, and 7 of these were providers of mechanical services. Uncertainties surrounding the ownership of the land administered by the State crop-producing farms led to their withdrawal from the privatisation process, and blocked FDI. The impetus given to the privatisation of the State livestock farms in 1997 is necessary to increase FDI in agriculture.

By July 1997, 72 companies in the food industry were registered as having more than 0.5 million US\$ subscribed foreign capital. The major sub-branches that attracted FDI were breweries and soft drinks.

1.4 Trade

1.4.1 Trade policy and trade agreements

During the 1980s a debt repayment policy was implemented by severely cutting imports and promoting exports. The population suffered a serious fall in living standards and agriculture was prevented from using imported inputs. By 1989, the external debt had been completely reimbursed but at the expense of investment and consumption.

Romania signed an EU Association Agreement in February 1993, joined the Council of Europe, received Most Favoured Nation (MFN) Status from the USA in October 1993 and was the first country to sign a Partnership for Peace Agreement with NATO in January 1994.

In July 1997 Romania became a member of the Central European Free Trade Agreement (CEFTA).

1.4.2 Trade balance

Total exports in 1996, expressed in ECU, amounted to 67% of the 1989 figure. Imports, on the other hand, were 8.5% higher than in 1989. The trade balance, which was positive in 1989, has been in deficit since then, amounting to 9.4% of GDP in 1996.

In 1990 and 1991 an embargo was imposed on food exports (Table 4).

Since 1989, the following events have had an adverse effect on Romanian exports:

- the collapse of the CMEA markets in general, and of the former Soviet Union market in particular;
- the reunification of Germany. The German Democratic Republic (GDR) was a traditional market for Romanian exports;
- the international embargo against Iraq, another traditional Romanian trade partner;
- the tightening of UN trade and transit sanctions against Serbia, which had been a major trading partner of Romania;
- low compliance with quality standards;
- weakened demand on West European markets;
- a decline in local production for export, caused by the overall problems of the economic transition;
- the over-valuation of the Lei during the first years of transition.

The main products exported in 1996 were textiles and textile products (21%), metal goods (16%), machines, electrical equipment, vehicles (14%), chemical products, rubber and plastics (11%).

Main imports in 1996 were mineral products (24%), machines, machinery and electrical equipment (21%), textiles and textile products (12%), and chemical products (9%).

The value of the exports carried out by private agents in 1996 represented 51% of the total. Imports by private agents amounted to 48% of the total value.

Outward processing is very important to the clothing and textiles industries.

Table 4: Trade balance FOB-CIF (1989 - 1996) Mio ECU

	Total exports	Total imports	Net balance
1989	9518	8298	1221
1990	4535	7828	-3293
1991	3443	4697	-1254
1992	3361	4822	-1461
1993	4178	5570	-1392
1994	5171	5976	-805
1995	6047	7858	-1810
1996	6367	9006	-2638
1997	7698	9942	-2244

1.4.3 Trade by region

Romania has trade relations with countries throughout the world, but its main trading partners are in Europe.

The EU was already important to Romania before 1989, as a general and agricultural trading partner. In the 1980s, the EU took 20-30% of Romania's total exports, but accounted for only 10-20% of all Romanian imports. After 1989, the EU became Romania's main trading partner (Table 5).

Table 5: Breakdown of regional trade (average 95-96)

	Exports	Imports
Total	100	100
EU	51.2	49.7
USA	2.4	4.8
Other OECD	5.7	4.3
CECs	3.9	5.6
NIS and Baltic States	6.4	16
Others	30.4	19.6

In 1996, the main destinations for Romanian exports were Germany (17.9%), Italy (16.6%) and, far behind, France (5.5%), Turkey (5.0%), the Netherlands (4.2%) and China (3.0%). In the same year, Romanian imports came mainly from Germany (17.1%), Italy (15.6%), Russia (12.6%) and, far behind, France (5.0%), USA (3.8%) and Egypt (3.8%).

1.4.4 Trade with the EU and the EU Association Agreement

The trade balance between Romania and the European Union is in the EU's favour, although Romania has benefited from the Generalised System of Preferences (GSP) in its relationship with the EU since 1975. A specific trade Agreement with the EU was signed on 1 February 1993; the Interim Agreement entered in force in May 1993 and the Association Agreement came into full effect in February 1995. Since that date, trade between Romania and the EU has been liberalised, with steel and agricultural products representing special cases. For agriculture the most important provisions are import quotas, with reduced levies and preferential tariff rates.

In general, EU concessions were based on trade in the previous 3 years. In the case of Romania, the two sides agreed that 1990 and 1991 were not significant, in view of the embargo on food exports during those years, so 1987-1989 was taken as the basis. These years were not very representative of Romanian export capabilities, because trade was highly distorted by internal policies (Table 6).

Table 6: Trade balance with EU (Mio ECU)

	Exports	% total exports	Imports	% total imports	Net balance
1991	1272	37	1343	29	-71
1992	1182	35	1991	41	-808
1993	1728	41	2523	45	-796
1994	2493	48	2881	48	-388
1995	3274	54	3965	50	-690
1996	3598	57	4714	52	-1116

The real impact of the Agreement must not be exaggerated. On the one hand, the preferential quotas given to Romania have not been fully taken up; on the other, the global process of liberalisation, the substantial over-valuation of the Lei and the limited availability of foreign currency have been more relevant than the Agreement. Nevertheless, it is seen as an important

step towards membership of an enlarged EU. This is a major political and economic goal.

1.5 Privatisation

In July 1990 the Romanian Parliament adopted Law 15/1990, which provided for the transformation of all State-owned enterprises into either joint-stock or limited companies, called "commercial companies" (CC), or "regie autonome", which would remain under State control.

To carry out the privatisation programme, the Law stipulated the creation of two independent "Funds":

- The State Ownership Fund (SOF), holding 70% of the total shares of more than 6,300 CCs. A public institution under Parliamentary control, its original objective was to privatise between 10-15% of its portfolio each year, so that it could disappear in about 7 years;
- Five Private Ownership Funds (POF), holding 30% of the shares of the CCs allocated to them. The shareholders of the POF are the 15.54 million Romanian citizens, who each received a booklet with 5 Certificates of Ownership, one for each POF. The distribution process was completed by the end of 1992.

In addition, a National Agency for Privatisation (NAP) was created, to be the government body responsible for the co-ordination, guidance and control of the privatisation process. As privatisation has progressed, the NAP appears to have lost power, and the SOF has become the dominant agency.

By March 1995 863 CCs had been sold, most of them purchased by management buy-outs or employee groups. "Small" privatised enterprises have on average 167 employees; by West European standards they would not be considered as "small enterprises".

In March 1995, the Romanian Chamber of Deputies passed a Mass Privatisation Programme (MPP) and

the country's first post-communist Bankruptcy Law. These formed part of a "package" of regulations required by the IMF in return for granting loans to Romania.

The MPP was to sell off about 3,000 CCs, around half of those earmarked for privatisation. 60% of the shares (in exceptional cases, the figure could even reach 80%) would be offered free to citizens on the basis of individual options, in exchange for the old property voucher booklets. Each Romanian citizen aged 18 or over (as at the end of 1995) would receive, in the 60 days after the Law came into effect, a nominative coupon. Citizens who had become shareholders previously, in CCs that had already been privatised, did not receive this document.

The remaining 40% would be sold to Romanian or foreign companies and individuals through bids. If no applicants were registered, the shares that were left would remain the property of the State Ownership Fund.

Critics of the Programme argued that it would result in too wide a dispersal of ownership. IMF and World Bank officials welcomed it, but said that it was too complicated and too difficult to implement.

After Law 55/1995 came into effect, the privatisation process was accelerated, mainly through public auctions, organised throughout the country.

In the first part of 1997, privatisation of the commercial companies whose main shareholder was the State was speeded up by changes in the legal framework, and the renewed commitment of the government. However, legal and political uncertainty in the second half of 1997 and in early 1998 led to a marked slow-down in privatisation, drawing criticism from the international financial institutions.

The framework allows for several methods to be used: public offers for selling or buying, buying of the shares by the employees of the company to be privatised, purchase of the shares by associations of

employees and managers, selling by direct negotiation, emission of convertible bonds, conversion of debts into shares, leasing.

The privatisation of pig and poultry farms and other commercial companies was accelerated by selling through auction or negotiation the shares and assets owned by the State Property Fund. Part of the land owned by these commercial companies will be restored to its former owners or their heirs.

Sixteen commercial companies, active in different fields, and all making heavy losses, have been earmarked for privatisation and a process of reorganisation started. This will result either in their being privatised or closed down.

Between the start of the privatisation process in December 1992 and the end of 1996, 2,842 companies were privatised, representing nearly 860 000 employees and a capital sold of nearly 4,150 billion Lei. Three-quarters were "small" companies. 209 of the companies were agricultural, with 27 000 employees and a capital sold of 140 billion Lei (Tables 7 & 8).

Table 7: Companies privatised

	Number	Share capital corresponding to the sold stock (billion Lei)	Total number of employees (1000)
Small	2149	959	244
Medium	604	1882	404
Large	89	1304	209
TOTAL	2842	4145	857

Note: The size of the commercial company is determined according to the social capital registered:
 - small, until 2,5 billion Lei
 - medium, between 2,5 and 18 billion Lei
 - large, over 18 billion Lei

Table 8: State of privatisation of agri-food sector (31.08.1997)

Type of firm	Number	Privatised
Commercial agricultural companies	490	-
Pig and poultry commercial companies	107	18
Comcereal	41	-
Agricultural service companies (incl. Agromeccs)	1682	1014
Food processing companies (incl. Beverage and Tobacco)	534	350

It should be emphasised that the precise meaning of a “privatised” enterprise is unclear, because statistics tell nothing about ownership and management configurations. Many, if not most, of those listed as “privatised” remained under the control of the privatisation agencies, had various insider and bank holdings, and other devices which prevented the emergence of truly independent management and ownership. The existence of these informal arrangements, as well as the lack of transparency in the procedures for foreign investments, has deterred potential investment. Privatisation and foreign direct investment were also discouraged by price regulation and intervention, disbursement of credits and subsidies, and insecurity in the land laws and local regulations.

2.

Agriculture and rural society

2.1 Agriculture in the Romanian economy

2.1.1 Importance of agriculture

Since the beginning of the transition, agriculture has declined less than the other sectors of the economy and its contribution to GDP has increased. Extraordinarily, and an exception¹ among the CECs, agriculture now also provides more employment than at the start of the period. There are various reasons for this development. The general raising of the retirement age by five years had a mechanical impact, in that it increased the number of older people in the labour force. More generally, the absence of alternative employment opportunities for rural youth and agriculture's role as a social buffer in a deteriorating employment situation led to an increase in agricultural employment. In particular, workers of rural origin (or who were already living in rural areas) made a voluntary return to agriculture on a full- or part-time basis, following the redistribution of land. The overall phenomenon was probably supported up till 1996 by subsidised credit available for investment in

agriculture, for farmers to buy tractors and livestock (Table 9).

The Household Labour Survey carried out in September 1996 showed the importance of part-time employment within the agricultural labour force: more than 40% of those employed work less than full time (40 hours per week).

The proportion of total household expenditure spent on food remains very high, in 1997 averaging 58.6% of total household expenditure (against 18.2% for EU-15 in 1995 and 36.6% in Greece). It has been estimated that rural families produce about 80% of the food they consume. However, this figure gives some grounds for questioning the accuracy of rural income measurements and whether they take sufficient account of on-farm consumption and direct sales.

The high percentage of household expenditure spent on food explains why controlling food prices was for some years central to the government's strategy for fighting inflation (Table 10).

Table 9: Importance of agriculture

		1991	1992	1993	1994	1995	1996	1997 (e)
share agric. & forestry	% value added	18.3	18.6	20.6	19.4	20.5	19.1	20.4
agriculture	% change	0.8	-13.3	10.2	0.2	4.5	-3.3	3.1
industry	% change	-22.8	-21.9	1.3	3.3	9.4	8.3	-8.4
services	% change	-0.3	-1.1				2.9	-10.0
share ag. Employment	% total empl.	28.9	32.1	35.2	35.6	33.6	37.3	39.7
share of food industry	% GDP	5.6	5.6	6.6	5.7	5.6	5.8	
share of food industry	% employment	2.4	2.4	2.3	2.4	2.4	2.3	
share agri-food/exports	%	6.7	7.2	7.4	7.4	7.3	8.8	6.8
share agri-food/imports	%	13.9	17.1	16.6	11.4	10.8	7.6	6
inflation	% change	170.2	210.4	256.1	136.8	32.3	38.8	151.0
agricult. producer price	% change	207	258	247	98	22	71	

¹ With Poland

Table 10: Structure of total expenditure per type of household in 1996

	Total	Employees	Employers	Farmers	Unemployed	Pensioners
Food and beverages	57.5	56.4	48.1	57.3	65.5	58.5
Clothing and footwear	9.1	11.3	11.8	7.3	7.4	6.9
Housing and durable goods	19.6	15.7	12.8	26	15.8	23.8
Medicines and medical care	1.8	1.5	1.3	0.7	1	2.5
Transport and communication	5.2	6.3	12.4	5.3	3.7	3.5
Culture and education	3	4.1	8.2	1.2	2.7	1.9
Other personal expenditure	3.8	4.7	5.4	2.2	3.9	2.9

Table 11: Structure of Agricultural Output

		1990	1991	1992	1993	1994	1995	1996
GAO (1989 = 100)	volume index	97.1	97.8	84.8	93.5	93.7	97.8	99.6
o.w. crop output	volume index	92.8	96.8	82.5	94.5	94.8	99.9	100.1
o.w. animal output	volume index	102.2	98.3	87.9	91.7	91.6	94.3	95.9
GAO	% change	-2.9	0.8	-13.3	10.2	0.2	4.5	1.8
o.w. crop output	% change	-7.2	4.3	-14.8	14.5	0.3	5.4	1.9
o.w. animal output	% change	2.2	-3.8	-10.6	4.3	-0.1	3	1.7
share of								
crop output	% total	53.0	65.9	58.0	62.9	60.8	59.6	59.8
animal output	% total	47.0	34.1	42.0	37.1	39.2	40.4	40.2

In 1996, transfers to agriculture from the public sector represented 4% of Romania's GDP. Of this total, about half were direct budget transfers (mainly explicit interest subsidies and premia). Quasi-fiscal transfers, carried out primarily through directed credits issued by the NBR and channelled through Banca Agricola to state agricultural enterprises, amounted to a further 2% of GDP. The expansion of directed credit was a particularly negative development, which undermined monetary policy and contributed significantly to inflation.

On the other hand, agriculture suffered the negative impact of an overvalued Lei and inflation. The overvalued Lei reduced the availability of foreign exchange for importing necessary agricultural inputs and was an obstacle to agricultural exports. Inflation led to extremely high lending rates, which impeded seasonal and longer-term investment.

2.1.2 Structure of agricultural output

Gross Agricultural Output (GAO) was stable during the '90s, except for 1992, when there was a -13% fall.

The share of crops in GAO increased from 54 % in 1989 to 60 % in 1996, due to a substantial decline in the livestock population (Table 11).

ROMANIA

Agricultural statistics

Main rivers and waterways

major town
(> 250000 inhabitants)

Estimate or forecast

* Share in GAO

Share of crops

Share of livestock

SOURCE: Attribute data: EC DGII and DGVI/A1
Geographic data: EUROSTAT-GISCO

CARTOGRAPHY: EC-GISVI -06/98



SLOVAK REPUBLIC

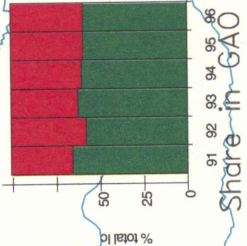
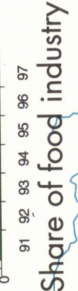
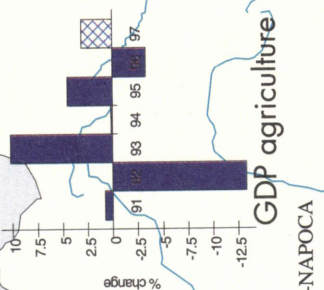
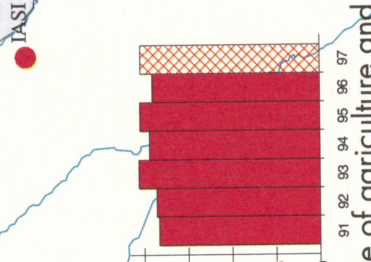
HUNGARY

UKRAINE

MOLDOVA

BULGARIA

YUGOSLAVIA



TIMISOARA

CRAIOVA

BUCURESTI

BRASOV

GALATI

IASI

CONSTANTA

2.2 Land use

Slightly smaller than the United Kingdom, Romania has a wide diversity of natural resources and a high agricultural potential. More than a quarter of the country is covered by woods and forests (Table 12).

Of the 14.8 million ha of agricultural land, 3.1 million are irrigable. Recent studies have estimated that of the 1.3 million ha that could be irrigated efficiently, only 0.8 million ha currently are. This is mainly the result of the deterioration of irrigation systems during the first years of transition, compounded by organisational problems deriving from the new pattern of land distribution.

The introduction of a market economy and the implementation of the Land Law were followed by structural changes in the use of land. Construction accelerated both within and outside residential areas, especially along roads and watercourses.

Communal land, owned by the local administration, was returned to use as common grazing. During the first half of the '90s arable areas fell by 115,000 ha in favour of permanent pasture.

Orchards belonging to the former agricultural production co-operatives (often too large even for the management system then used) were partly destroyed by the land's new owners. Small landowners planted vineyards on little plots, mainly around residential areas, with a view to satisfying their own consumption needs. The number of orchards fell by 15%, while vineyards increased slightly.

Table 12: Land use (1996)

	000 HA	% Total Area		
Total area	23839	100		
<i>of which</i>				
built-up land	1023	4.3		
inland water and other	1337	5.6		
forest	6690	28.0		
Util. Ag. Area	14789	62.0	000 HA	% UAA
<i>Of which</i>			Arable land	9339
			perm. crops	560
			Perm. Pasture	4890
				33.0

According to the Institute of Pedology and Agri-chemistry's classification, 72.5% of Romania's agricultural area is of medium or poor quality.

2.3 Farm structure and land ownership

2.3.1 Structure of land ownership

Until 1989, the 411 State Agricultural Units and 3776 Agricultural Production Co-operatives (CAP) dominated the farm sector. Private producers were small farmers, mainly in the mountain areas, and households producing on small plots (about 0.45 ha). There were more private producers in the livestock sector than in the crop sector, but an unknown proportion of animals were fed with feed taken illegally from the Co-operatives (Table 13).

The CAPs were broken up between 1990 and 1991 (in some cases involving the demolition of buildings or destruction of irrigation systems, vineyards or orchards). The main structures which have now replaced them are:

Table 13: Production structures in 1989 (%)

	Area	Average size	Bovine herd	Pig herd	Sheep herd	Poultry herd
	%	ha	%	%	%	%
State Farms	29	5001	18	50	18	48
Collective Farms (CAP)	59	2374	48	22	34	14
Private Producers	12	0.5	34	28	48	38

- State farms which have been converted into **commercial companies** and which have a relatively high degree of autonomy, even if they have in practice to follow the guidelines set out by the Ministry for Agriculture and Food (MAF). Excluded from the redistribution of land, they were among the last to be privatised.
- **Farmers associations** with legal status, consisting of a group of individuals who own property rights on the parcels of land operated by the association and who are normally allowed to keep small parcels of land for their own private use. Farmers associations employ some of their members, as well as workers who are not members. They are allowed to rent land. They frequently have their origin in old CAPs. Specialist co-operative technicians and managers, who lost their jobs due to the de-collectivisation, have been instrumental in convincing local farmers to contribute capital or land to the associations.
- **Family associations** without legal status. These seem to be transitory alternatives to formal associations or individual farms. They in any case qualify to benefit from state support, through the voucher scheme, whereby each family member receives vouchers for the agricultural land they own (see § 3.2.3).
- **Individual farms.** In addition to the small mountain farmers, who were never associated, these are new owners who have decided to cultivate independently. Some are extremely dynamic but, in many places, individual farms correspond to small plots of land cultivated either by old people or, in the evening and weekends, by individuals whose main job is outside agriculture (Table 14).

Farmers associations, family associations and individual farmers together make up the private sector. Between 1991 and 1996 the sector's weight slowly increased, from 79% up to 87% of Gross Agricultural Output. Notable changes were a decline in the importance of sunflowers, down by 7% to 69% of total crop output, and a near doubling of pig and poultry production, to 58% and 63%, respectively, of total animal output.

2.3.2 Land privatisation

The private sector is now predominant. At the end of June 1997, 490 commercial companies remained in the hands of the State. These represent only 12% of the agricultural area, or about 1.8 million ha. The government's intention is to privatise or liquidate all the companies by July 1998, leaving only 800,000 ha in public ownership.

The fragmentation of land ownership is presently a major issue. Privatisation has been based on the principles of land restitution (which has reproduced the historical pattern of holdings) and the creation of as broad a base as possible of landowners. This has resulted in there now being 5 million landowners, half of whom own 2 ha or less.

The average farm size has fallen to slightly less than 2 hectares of arable land and 3 hectares in total (versus 16.4 ha in EUR-15). Farms are, moreover, divided into 4 or 5 separate parcels (one extreme example of fragmentation is that of an individual who owns 7 ha divided in 52 parcels). The pattern of small holdings applies equally to the livestock sector: the privatisation of most dairy cow production has resulted in an average herd size of a little over two.

Private land ownership was re-established for former owners and their heirs, and freshly established for those who had worked in the co-operatives during the three years prior to 1989, up to a limit of 10 ha per family. Under present legislation there are restrictions on the amount of land that can be individually owned.

Table 14: Production Structure in 1997

	Area (000 ha)	%	Number of farms	Average size (ha)
Commercial Companies*	1792	12	490	3657
Farmers Associations	1748	11.8	3875	451
Family Associations	1245	8.4	12089	103
Individual Farmers	8674	58.6	3715396	2.33
Other institutional	1330	9	n.a.	n.a.
TOTAL	14789	100		

* Former State Farms

Under Law 169 of 1997, a family may not own more than 200 ha of agricultural land. This doubles the limit of 100 ha laid down by Law 18 of 1991.

Law 54 of 1998, promulgated by the President and published in the Official Journal in March 1998², allows agricultural land to be sold. A family may purchase up to 200 ha, but aliens, legal and natural persons are not allowed to buy land. Pre-emption rights apply for co-owners, neighbours and tenants, who must declare their right to the local town hall within 45 days of the publication of the sale offer. The owner, however, has the right to sell the land for the best price, irrespective of pre-emption rights.

Amendments to Law 16 of 1996 on land leasing, embodied in the recently published Law 65 of 1998, aim to further improve leasing arrangements. The minimum length of contract is no longer stipulated, but the lessee is required to have a formal training in agriculture. Aliens, legal and natural persons are excluded from leasing land. The most controversial aspect of the draft Law, concerning sub-leasing, was rejected by Parliament. The Law also provides for the contract to be terminated in the event of death, or for it to be ceded to the lessee's successor, in the event of retirement.

About 70% of farmers have a definitive "Titlu de Proprietate". The rest still have only a "temporary property certificate" which is generally not accepted as security. As many farmers are not eligible for loans because their assets are insufficient, the absence of a cadaster makes matters still worse.

At present there is no policy explicitly directed at mitigating the effects of fragmentation. The only incentives were provided under Law 18/1991, which gave priority to newly-created associations in the allocation of the assets owned by the former co-operatives. The priority apparently given to associations in the granting of subsidies was more the result of associa-

tion managers having better access than family farmers to public information and administration.

In reality, the structure of production is less fragmented than the structure of ownership. As an active rental market exists, farmer associations (and to some extent family associations and commercial companies too) are larger than the maximum allowed by the legal limit on individual land ownership.

The poor state of local roads, together with the dearth of a marketing infrastructure, give a de facto competitive advantage to the former State farms and collective farm units, most of which are better located than the new individual farms. However, problems of mismanagement or, allegedly, corruption have plagued commercial companies still owned by the State.

2.4 Agricultural production and consumption

Between 62% and 70% of Romania's arable area is planted to cereals, especially wheat and maize. Statistics to 1997/98 show that these crops have increased their share, to the detriment of industrial crops, dry pulses, potatoes and vegetables.

Fodder crops and permanent pasture increased in importance in the first years of privatisation. Under the Land Reform Law, private farmers could lose their right to it if they failed to cultivate their land. The response of some farmers, in the first years of transition, was to place their new farms under crops which needed minimum cultivation and management (Table 15).

² The Law enters into force three months after publication in the OJ.

Table 15: Agricultural land use (000 ha)

	1989	1990	1991	1992	1993	1994	1995	1996	1997(e)
Arable Area	9458	9450	9423	9357	9342	9338	9337	9339	9339
of which:									
Cereals	5978	5664	6028	5758	6383	6553	6439	5834	6316
Rice	49	40	22	16	12	5	6	9	-
Sugar beet	256	163	202	180	97	130	133	136	129
Oilseeds	1072	655	643	810	703	664	807	1012	871
Potatoes	351	290	235	219	249	249	244	257	255
Dry Pulse	311	130	81	69	66	67	63	67	67
Vegetables	253	216	195	223	219	204	214	217	208
Tobacco	34	17	10	7	9	10	10	10	10
Fodder	1149	1962*	1552	1442	1305	1241	1202	1223	-
Permanent crops									
Orchards	318	313	311	305	296	289	278	271	-
Vineyards	278	277	286	299	304	298	292	289	-
Permanent pasture	4705	4728	4778	4830	4852	4872	4890	4890	4890
Agricultural land	14759	14769	14798	14790	14793	14798	14797	14789	14789
Wooded area	6678	6685	6680	6682	6681	6680	6680	6690	6690

* Increase of maize silage due to weather conditions (561,000 ha against less than 100,000 ha normally)

Table 16: Main cereals production

WHEAT		1989	1990	1991	1992	1993	1994	1995	1996	1997
area	000 ha	2319	2253	2154	1461	2282	2412	2281	1782	2377
yield	t/ha	3.38	3.24	2.54	2.19	2.33	2.54	3.36	1.76	2.79
production	000 t	7846	7289	5473	3206	5314	6135	7667	3144	6643
MAIZE		1989	1990	1991	1992	1993	1994	1995	1996	1997
area	000 ha	2733	2467	2575	3336	3066	2983	3109	3277	3037
yield	t/ha	2.47	2.76	4.08	2.05	2.61	3.13	3.19	2.93	3.69
production	000 t	6762	6810	10497	6828	7988	9343	9923	9608	11200
BARLEY		1989	1990	1991	1992	1993	1994	1995	1996	1997
area	000 ha	768	749	1018	628	637	785	582	515	626
yield	t/ha	4.47	3.58	2.90	2.67	2.44	2.72	3.12	2.15	2.95
production	000 t	3436	2680	2951	1678	1553	2134	1816	1108	1845

2.4.1 Arable Crops

- Cereals

Covering 6 mio ha or about 68% of the total arable land, cereals are by far the most important of Romania's crops. Between 40% and 60% of the cereals area is maize, wheat between 25% and 40% and the rest mainly barley. The area under maize increased by 23% between 1990 and 1997, reaching more than

3 mio ha and 3.3 mio ha in 1998 (first estimates). Since 1995 barley areas seem to be decreasing slightly, compared with their importance in the early '90s. Both feed and food maize plantings are of the low yield, traditional varieties which are attractive to farmers because no seeds need to be purchased. Maize has the further advantage that it can be harvested manually, unlike wheat; it is also easier than wheat to store on-farm (Table 16).

Table 17: Cereals supply balance

		1989	1990	1991	1992	1993	1994	1995	1996	1997
area	000 ha	5978	5664	6028	5758	6383	6553	6439	5834	6316
yield	t/ha	3.06	3.02	3.20	2.13	2.42	2.77	3.08	2.43	3.18
production	000 t	18309	17107	19275	12250	15457	18169	19859	14177	20058
imports	000 t	36	1146	1761	1653	2604	526	261	146	118
stock change	000 t	-398	-150	-2550	4500	-750	-400	-1407	3600	
exports	000 t	296	0	123	9	7	9	850	1740	340
available	000 t	17651	18103	18363	18394	17304	18286	17863	16183	
utilization										
feed	000 t	9394	9550	10205	10548	10341	10720	10371	10292	
seed	000 t	877	933	731	943	997	981	989	686	
other uses	000 t	2857	3218	3225	2705	2172	2778	2711	1410	
human	000 t	4523	4402	4202	4198	3794	3807	3792	3795	
kg/capita	kg	196	191	181	182	166	167	167	168	
self-sufficiency	%	104	94	105	67	89	99	111	88	

Following the break-up of the large-scale holdings in the early years of transition (and severe droughts in 1992 and 1993), cereals production was supported by measures which aimed to make available low interest-rate credit and selected seeds and fertilisers.

However, yields were negatively affected by:

- a fall in the use of inputs, due to the expansion of the private sector (which could not afford to buy them);
- a reduction in the area irrigated, due to the general deterioration of the irrigation systems;
- rising input costs;
- the failure of the up- and down-stream sectors to give sufficient advice to farmers.

Production has become more dependent on weather conditions. Even if Romanian yields are currently low, potential for producing cereals is high. An increase in yields will depend mainly on irrigation systems being repaired and improved and an increase in the use of inputs.

Despite a sharp decline in consumption, from 1990 to 1994 imports were necessary to cover domestic demand. In 1995, for the first time since 1989, more cereals were exported than imported, and in 1996 the

trade surplus in cereals was 1.6 million tonnes (Table 17).

The cereals supply balance has to be viewed with caution, mainly because:

- it is not clear to what extent production figures take account of harvest losses (traditionally, production is estimated "on field", and in the past losses of between 10% and 50% have been reported; waste has now decreased but production estimates are still likely to be biased upwards);
- the humidity content seems not to be homogeneous (the fall in production in 1992 is also the result of a drier harvested crop);
- there is a virtual absence of satisfactory storage facilities at farm level.

As illustrated by the map in Annex 1, the main producing regions are situated on the southern and eastern borders.

- Sugar beet

Until 1989, sugar beet areas were maintained at over 250,000 ha as, under the planned economy, the large agricultural producers - mainly CAPs - were compelled to produce this crop. After privatisation, it was not so attractive for small producers, due mainly to

Table 18: Sugar supply balance

		1989	1990	1991	1992	1993	1994	1995	1996	1997(e)
sugarbeet										
area	000 ha	256	163	202	180	97	130	133	136	129
yield	t/ha	26.4	20.1	23.3	16.1	18.3	25.2	20.8	20.9	21.1
production	000 t	6771	3278	4703	2897	1776	3273	2764	2848	2726
sugar										
production	000 t	556	467	379	273	184	207	218	237	
yield	t/ha	2.2	2.9	1.9	1.5	1.9	1.6	1.6	1.7	
yield	% sugar	8.2	14.2	8.1	9.4	10.4	6.3	7.9	8.3	
imports	000 t	245	324	251	313	234	231	265	452	215
stock change	000 t	8	-127	-27	-5	111	82	70	-134	
exports	000 t	174	4	0	0	5	0	1	2	1
utilization	000 t	635	660	603	581	524	520	552	553	559
kg/capita	kg	27.5	28.6	26.0	25.1	22.9	22.8	24.3	24.5	24.8
selfsufficiency	%	88	71	63	47	35	40	39	43	

Table 19: Oilseeds supply balance

		1989	1990	1991	1992	1993	1994	1995	1996	1997
area	000 ha	968	600	596	784	667	649	790	1012	849
yield	t/ha	1.01	1.18	1.34	1.15	1.19	1.33	1.32	1.20	1.05
production	000 t	979	710	801	903	794	865	1046	1212	891
imports	000 t	5	513	297	154	82	75	64	2	26
stocks change	000 t	42	100	-70	-49	100	-23	-60	0	
exports	000 t	2	1	1	1	19	6	9	22	41
available	000 t	1024	1322	1027	1007	957	911	1041	1192	
utilization										
o.w. seed	000 t	35	22	32	17	15	18	19	18	18
o.w. processing	000 t	976	1286	980	973	926	878	1003	1152	
o.w. other uses	000 t	13	14	14	17	16	16	19	22	
selfsufficiency	%	96	54	78	90	83	95	100	102	

Table 20: Sunflower, rapeseed and soyabean production

Sunflower seed										
area	000 ha	434	395	477	615	588	583	715	917	779
yield	t/ha	1.51	1.41	1.28	1.26	1.18	1.31	1.30	1.20	1.10
production	000 t	656	556	612	774	696	764	933	1096	858
Rapeseed										
area	000 ha	20	13	9	2	2	0	0	2	7
yield	t/ha	0.90	0.85	1.00	0.78	0.93	0.97	1.17	1.10	
production	000 t	18	11	9	1	1	0	0	2	
Soyabeans										
area	000 ha	512	190	108	166	75	65	73	80	63
yield	t/ha	0.59	0.74	1.66	0.76	1.27	1.54	1.48	1.41	
production	000 t	304	141	179	126	95	100	108	113	

shortcomings in relations between the producers and the sugar industry. The constraints of sugar production (know-how and inputs/credits: weeding, insecticides, fertilisers, harvesting and transport) provide other possible reasons (Table 18).

The limited recovery over the last few years seems to have been prompted by private farmers reacting to a specific support programme for this crop, making soft loans and inputs available. Imports from Moldova, favoured by a free trade agreement, and Ukraine have also contributed to disrupting the traditional pattern of sugar production.

The sugar deficit is covered by imports of white and raw sugar which is processed in Romania, where there is sufficient local refining capacity. In the autumn of 1997 only 18 of the 33 sugar refineries were operational. The remaining fifteen were idle for technical reasons or because they had insufficient finance to pay farmers for deliveries of the harvest.

– Oilseeds

Oilseeds mainly serve as raw material for the oil factories, which have a large processing and refining capacity. After regressing somewhat at the beginning of the transition period, the total oilseeds area started to extend. Soya used to be cultivated by state farms and agricultural co-operatives and is now mainly

grown by commercial companies, as it is a less attractive crop for small producers (Table 19).

An improvement in the relationship between independent farmers and the oil factories (definition of purchasing prices, oil content adjusted to the quantity of delivered seeds, industrial residue, etc.) is, however, leading to sunflowers being increasingly cultivated by small producers.

Sunflower yields are higher than in non-irrigated areas in Spain (1 t/ha), but rape seed and soyabean yields are very low by European Union standards (see in Annex 1 map on regional breakdown of total oilseed area) (Table 20).

Oilseeds exports are rather marginal: the largest quantity exported in any year since 1990 was 33,000 t in 1996. However, Romania is a regular exporter of sunflower. It is estimated that about 50,000 t will be exported in 1997/98.

– Potatoes

From 1990 to 1997, potato areas and production were consistently lower than in 1989. More than 90% are produced by private farmers for on-farm consumption, for fattening pigs (increasing year by year) and for sale on the local market. No major trade is recorded (Table 21).

Table 21: Potato supply balance

		1989	1990	1991	1992	1993	1994	1995	1996	1997
area	000 ha	351	290	235	219	249	249	244	257	255
yield	t/ha	12.58	11.00	7.97	11.90	14.90	11.84	12.36	13.98	12.53
production	000 t	4420	3186	1873	2602	3709	2947	3020	3591	3196
imports	000 t	117	281	48	283	79	3	17	31	13
stocks change	000 t	-700	0	700	200	-200	200	0	0	
exports	000 t	1	0	4	0	3	15	5	2	4
available	000 t	3836	3466	2616	3085	3585	3134	3031	3620	
utilization										
o.w. feed	000 t	779	625	344	271	464	232	58	519	
o.w. seed	000 t	720	940	870	1000	993	996	977	1009	1000
o.w. other uses	000 t	677	523	281	407	425	381	381	292	
o.w. human	000 t	1660	1379	1122	1407	1703	1524	1616	1801	
kg/capita	kg	72	60	48	61	74	67	71	80	
selfsufficiency	%	115	92	72	84	103	94	100	99	

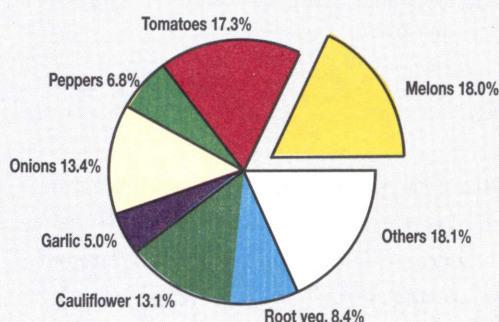
2.4.2 Permanent crops and horticulture

Less than 4% of Romania's UAA (560,000 ha) is given over to permanent crops, mainly grapes for wine, fruit and vegetables. Production is geared primarily to local markets, although own-consumption is high, and exports of wine to the EU are important amongst agri-food exports.

– Vegetables

The main vegetables produced in Romania are tomatoes, cauliflowers and cabbages, onions, garlic, green peppers and root vegetables. In 1996 almost 80% of vegetables were produced by the private sector, mainly for own-consumption (see in Annex I map on regional breakdown of total vegetable area) (Graph 1).

Graph 1: Vegetable area (1995-96)



No increase in vegetable production or cultivated areas is observable over recent years. In 1996 production was 17% lower than in 1989 and the area cul-

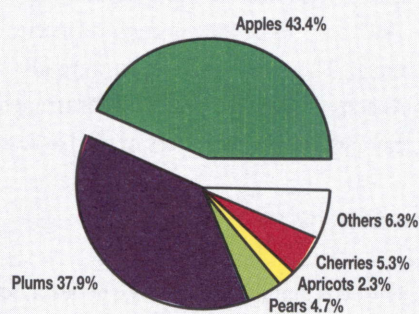
tivated, at about 210 thousand hectares, was 14% lower. This downward trend continued in 1997.

Because of the increasing importance of small scale and subsistence farming, production data (as for fruit) must be viewed with particular care (Table 22).

– Fruit

Since 1989, fruit areas have been stable. Principle fruits are apples and plums, with some production of red fruits. As scattered trees and bushes are included in official data³, there is some uncertainty about their accuracy (Graph 2).

Graph 2: Fruit production (1996-97)



An analysis of fruit production trends shows:

- big variations from year to year for all species although with differing intensity;
- an increase in the private sector's share from 50% in 1989 to 75% in 1996;

Table 22: Vegetable supply balance

		1989	1990	1991	1992	1993	1994	1995	1996	1997
area	000 ha	253	216	195	223	219	204	214	217	208
production	000 t	3727	2358	2214	2632	2872	2569	2871	2728	2427
imports	000 t	NA	290	58	284	85	31	65	68	
exports	000 t	NA	11	22	21	34	51	33	25	
utilization	000 t	NA	2637	2250	2895	2923	2549	2903	2771	
kg/capita	kg	NA	114	97	125	128	112	128	123	
selfsufficiency	%	NA	89	98	91	98	101	99	98	

³ But table grapes are not included in Fruit data.

Table 23: Fruit supply balance (*)

		1989	1990	1991	1992	1993	1994	1995	1996	1997
area	000 ha	240	231	233	230	233	229	239	223	219
production	000 t	1580	1453	1165	1167	2166	977	914	1632	1416
imports	000 t	40	115	160	155	123	175	208	112	
stocks change		-70	0	100	0	-383	383	21		
exports	000 t	148	43	93	126	95	98	92	127	
utilization	000 t	1402	1525	1332	1196	1811	1436	1050	1616	
o.w. other uses	000 t	153	145	240	139	348	350	12		
o.w. human	000 t	1249	1380	1092	1057	1463	1086	1038	868	920
kg/capita	kg	54.1	59.7	47.1	45.8	63.9	47.6	45.7	38.4	40.8
selfsufficiency	%	113	95	87	98	120	68	87	101	

(*) without grapes

NB: Total production comprises fruit tree production (plantations and individual), fruit bushes and strawberry plantations. Area, however, includes only fruit plantations.

Table 24: Wine supply balance

		1989	1990	1991	1992	1993	1994	1995	1996	1997
Vineyards										
area	000 ha	213	224	225	235	245	247	249	242	255
o.w. hybrid	000 ha	51	63	66	74	86	97	103	110	114
yield	t/ha	4.3	4.3	3.8	3.9	5.5	4.2	5.3	5.9	4.6
production	000 t	915	954	849	905	1339	1033	1314	1431	1170
o.w. hybrid	000 t	220	245	210	270	428	447	472	542	484
grapes for wine	000 t	725	734	716	721	895	832	893	981	
wine										
production	000 hl	4632	4705	5008	4707	5839	5370	5500	5800	
yield	hl/ha	21.7	21.0	22.3	20.0	23.8	21.7	22.1	24.0	
imports	000 hl	0	250	220	250	326	43	149	57	
stocks	000 hl	2000	0	0	0	0	0	0	0	
exports	000 hl	569	165	167	179	220	373	317	485	
utilization	000 hl	6063	4790	5061	4778	5945	5040	5332	5372	
l/capita	l	26.2	20.7	21.8	20.7	26.0	22.1	23.5	23.8	
selfsufficiency	%	76	98	99	99	98	107	103	108	

– a strong regional specialisation determined by pedo-climatic conditions (see map in Annex 1) (Table 23).

– Wine

Romania is a traditional producer of wine, with an average level of production close to that of Portugal or Germany and a low average yield, close to Spain's. It currently ranks eighth among the world's wine producers (see in Annex I map on regional breakdown of total vineyard area).

In 1998, the area planted to wine grapes was 255,000 ha, 20% more than in 1989. The increase was in hybrid vines: between 1989 and 1997 the area planted with hybrids doubled.

With the implementation of the Land Law, areas planted with grafted and native vines, which had belonged to the agricultural co-operatives, were returned to their previous owners. Some of these vineyards are now cultivated individually or by farmers associations. Others were cleared, so that the area given over to grafted and native vines diminished between 1989-1997.

Romania is a net exporter of wine. Imports are mainly of bulk wine coming from Argentina, while exports are primarily to Germany, the U.S.A. and the United Kingdom.

Total grape production varies between 850,000 t and 1,400,000 t per year (table 24).

2.4.3 Livestock

Since privatisation and the break-up of the co-operative sector, organised animal production is split between 3 types of holding:

- commercial companies with a preponderance of state capital, mainly industrial complexes for pig breeding, holding about 42% of the pig herd and 37% of the poultry population. This type of holding will also be privatised as part of the reform process.
- commercial companies with private capital, which have greatly reduced their livestock and at present own only a small percentage of the total herd.
- millions of individual private households, which have few technical facilities for developing animal breeding according to modern technologies, but at the end of 1997 owned 92% of the total cattle herd, 59% of all pigs and 95% of the total sheep and goat herds. Most are subsistence level units that produce mainly for own consumption.

In contrast to the crop sector, where areas remained relatively stable or increased, the livestock sector experienced a substantial fall in herd sizes, which now seems to have slowed down but not stopped. The principal reasons for the decline were:

- the dissolution of the co-operatives and the unsuitability (or destruction) of their buildings or installations;
- the inefficiency of the remaining industrial complexes;
- the severe financial difficulties of the commercial companies;

- for many important units (former co-operatives), the loss of part of their agricultural area following land privatisation;
- a decrease in pig and poultry stocks due to difficulties in feedstuff supplies, mainly proteins and additives;
- lack of profitability in livestock production, linked to the rising price of energy and fuel, fodder and labour (Table 25).

Privatisation has increased the demand for horses, mainly as a traction force for transport purposes, but also for carrying out agricultural work.

Romania was traditionally an important exporter of live animals and of food products. Exports of animal products peaked between 1980 and 1987. The large volume of exports was not based on marketing the surplus that remained after satisfying domestic demand, but was one of the means the old government used to repay external debts. A ban on food exports was put in place in 1990 to satisfy public demand. Since the ban was lifted, trade is slowly becoming more balanced.

– Milk

Milk production is obtained from cows, buffalo cows, sheep and goats.

Sheep and goat milk production is at nearly 5 million tonnes. Cow and buffalo cow milk has been increasing for the last few years, despite the stability of the herd. This indicates a strong increase in the yield per cow.

The table below shows the evolution of cow and buffalo cow milk production since 1990. Calves' milk consumption (about 0.825 million t.) is not included in the production figures (Table 26).

Per capita milk disappearance has increased continuously since 1990. A net trade import that reached a peak of 67 000 t in 1993, and which at its lowest was

Table 25: Evolution of livestock

		1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
cattle	000	6416	6291	5381	4355	3683	3597	3481	3496	3236	3284
o.w. milk cows	000	1704	1954	1898	1782	1783	1779	1788	1772	1769	
pigs	000	14351	11671	12003	10954	9852	9262	7758	7960	7093	7133
poultry	000	127561	113968	121379	106032	87725	76532	70157	80524	78478	78500
sheep & goats	000	17288	16452	15067	14833	12884	12275	11462	11086	10317	9647
horses	000	702	663	670	749	721	751	784	806	816	835

Table 26: Cow milk supply balance

		1989	1990	1991	1992	1993	1994	1995	1996	1997
fluid milk										
herd	000	1704	1954	1898	1782	1783	1779	1788	1772	1769
yield	kg/cow	1950	1744	1907	1944	2058	2414	2598	2639	2897
fluid milk prod.	000 t	3323	3408	3620	3464	3670	4295	4645	4676	5126
imports	000 t	11	149	68	60	85	43	42	55	
stock change	000 t	96	-163	63	92	0	0	0	0	
exports	000 t	68	7	9	27	18	26	25	22	
available	000 t	3362	3387	3742	3589	3737	4312	4661	4709	
utilization										
o.w. feed	000 t	442	501	835	629	188	712	789	683	
o.w. waste	000 t	74	76	80	76	79	91	98	99	
o.w. human	000 t	2846	2811	2827	2884	3470	3508	3774	3927	
kg/capita	kg	123	122	122	125	152	154	166	174	
selfsufficiency	%	99	101	97	97	98	100	100	99	

17000 t in 1994 and 1995, supplemented domestic production.

The very small scale of dairy farms and the extremely small size of herds are holding back the development of the dairy sector: sanitary questions and supply collection are probably the most important problems.

- Beef & Veal

The fall in the size of herds observed since 1989, the economic crisis and the removal of consumer subsidies all affected domestic disappearance. The increase during the first years of transition was followed by a decline from 1991 onwards: per capita beef meat disappearance is more or less stable at around 10 kg.

In 1994, 85% of the beef herd was owned by the private sector. This high level of private activity explains the slight recovery in production in 1997, when it returned to nearly 200,000t. The average weight of slaughtered animal, at around 140-170 kg cw, is quite low. Romania remained nearly self-sufficient over the whole period (Table 27).

- Pigmeat

Pork, the main meat consumed in Romania, was also affected by the livestock decline. The pig herd was cut by 46% between 1989 and 1995, when a recovery started. Per capita consumption fell by 18% during this period. Production by the former state farms was extremely important (as for poultry) and strongly affected the economy of the sector. (See in Annex 1 map on regional breakdown of total pig meat production) (Table 28).

Table 27: Beef supply balance

		1989	1990	1991	1992	1993	1994	1995	1996	1997
cattle	000	6416	6291	5381	4355	3683	3597	3481	3496	3236
total slaughters	000	1400	2159	2299	1720	1597	1573	1487	1326	1562
average weight	kg	157	147	138	145	158	164	153	173	149
production	000 t	220	317	317	250	252	258	227	229	233
imports	000 t	70	73	13	12	7	13	21	9	
exports	000 t	42	2	13	17	19	14	7	4	
utilization	000 t	248	388	317	245	240	257	241	234	
o.w. food	000 t	234	369	301	231	228	244	233	226	
kg/capita	kg	10.1	16.0	13.0	10.0	9.9	10.7	10.3	10.0	
selfsufficiency	%	89	82	100	102	105	100	94	98	

Table 28: Pigmeat supply balance

		1989	1990	1991	1992	1993	1994	1995	1996	1997
pig numbers	000	14351	11671	12003	10954	9852	9262	7758	7960	7093
total slaughters	000	10000	9313	9820	8862	11856	11857	7906	8086	8021
average weight	kg	80	85	85	89	64	65	83	84	86
production	000 t	798	788	834	789	761	775	656	679	693
imports	000 t	0	66	12.1	13	2	5	16	5	
exports	000 t	34	0	39	45	63	88	38	35	
utilization	000 t	764	854	807	758	700	692	634	649	
o.w. food	000 t	750	812	766	721	665	659	607	621	
kg/capita	kg	32.5	35.2	33.0	31.2	29.0	28.9	26.7	27.5	
selfsufficiency	%	104	92	103	104	109	112	103	105	

- Poultry

Poultry production and consumption are also lower now than in 1989. But as breeding is not difficult, private ownership (72% of the total) has started to grow rapidly, compensating to some extent the decline in commercial company flocks. Per capita consumption and production reached a turning point in 1995. (See in Annex I map on regional breakdown of total poultry meat production) (Table 29).

- Sheep and goat meat

Sheep and goat meat production, mainly in the private sector (91% in 1994) was relatively stable up till 1993. In 1994 an apparent decline in both production and consumption started. Production is mainly for own-consumption or sold at Easter, when market prices are relatively high (Table 30).

- Total meat

In 1997 total meat production was 300 000 t lower than the 1989-1991 average. Since 1990 per capita consumption has gradually decreased by 25%, to 54.5kg/head, far below the EU average (90 kg/head) and even Greece, which has the lowest per capita consumption in the region (76.6 kg/head). Since 1989, Romania has remained nearly self-sufficient in meat (Table 31).

2.4.4 Forests and wood

According to 1992 figures, 28% of Romania is wooded. Of these 6.7 million ha, 60% are in the Carpathian mountains and 30% in the foothills. The composition of the forests is varied, with 31% coniferous and 69% broad-leaved trees. Their general condition is

Table 29: Poultry supply balance

		1989	1990	1991	1992	1993	1994	1995	1996	1997
poultry numbers	000	127561	113968	121379	106032	87725	76532	70157	80524	78478
total slaughters	000	300000	374975	322733	328633	267942	220100	229975	250911	217980
average weight	kg	1.13	1.03	1.03	0.90	1.12	1.18	1.20	1.17	1.19
production	000 t	339	386	332	295	301	260	277	293	259
imports	000 t	1	43	32	27	37	38	26	4	
exports	000 t	8	0	1	1	3	5	1	1	
utilization	000 t	332	430	363	322	335	293	302	295	
kg/capita	kg	14.4	18.6	15.6	13.9	14.6	12.9	13.3	13.1	
selfsufficiency	%	102	90	91	92	90	89	92	99	

Table 30: Sheep & Goats supply balance

		1989	1990	1991	1992	1993	1994	1995	1996	1997
animal numbers	000	17288	16452	15067	14833	12884	12275	11462	11086	10317
total slaughters	000	9600	9123	8149	9508	8792	7705	7489	7442	7812
average weight	kg	10.07	11.89	11.54	10.47	10.41	10.45	8.00	8.00	8.19
production	000 t	97	109	94	100	92	81	60	60	64
imports	000 t	1	0	0	0	0	0	0	0	0
exports	000 t	9	0	0	1	2	1	1	0	0
utilization	000 t	88	108	94	98	90	80	59	59	64
kg/capita	kg	3.8	4.7	4.0	4.3	3.9	3.5	2.6	2.6	2.8
selfsufficiency	%	110	100	100	101	102	101	101	100	100

Table 31: Total meat supply balance

		1989	1990	1991	1992	1993	1994	1995	1996	1997
production	000 t	1454	1600	1577	1434	1405	1374	1220	1261	1249
imports	000 t	72	182	57	53	46	56	62	17	
exports	000 t	93	2	54	64	87	108	46	41	
utilization	000 t	1432	1780	1580	1423	1364	1322	1236	1238	
kg/capita	kg	62.0	77.0	68.1	61.6	59.6	58.0	54.5	54.8	
o.w. beef	kg	10.1	16.0	13.0	10.0	9.9	10.7	10.3	10.0	
o.w. pigmeat	kg	32.5	35.2	33.0	31.2	29.0	28.9	26.7	27.5	
o.w. poultrymeat	kg	14.4	18.6	15.6	13.9	14.6	12.9	13.3	13.1	
o.w. sheep & goats	kg	3.8	4.7	4.0	4.3	3.9	3.5	2.6	2.6	
selfsufficiency	%	101	90	100	101	103	104	99	102	

said to be good, except in or near industrialised areas. At Copsa Mica, Baia Mare and Zlatna, the damage is particularly severe.

The average production of wood has declined since the beginning of the '80s, to 14 million cubic meters in 1995 (Table 32).

Wooded areas suffered in the past from intensive use and deforestation and are now suffering in some regions from "parcelling" (fragmentation). At the beginning of 1995, all the 323,000 ha of forests to be privatised (5% of the country's overall forest area) were distributed to private owners. The maximum forest area per owner is 30 ha. This low limit makes hus-

Table 32: Timber production

	1989	1990	1991	1992	1993	1994	1995
Mio m ³	19.3	16.6	15.4	14.4	13.6	12.9	13.8

bandry and the profitability of private forestry enterprises very precarious.

The current Forestry Code has been in force since 1962. Romania's Senate is debating a new one, which takes privately-owned forest areas into account. Responsibility for their management and protection will reside with their owners. In exchange the National Forest Corporation, which manages the public forests (i.e. more than 95% of all wooded areas) will have the obligation to guard against illegal cutting, abusive clearing, theft, poaching and to protect them against fire and pollution.

In recent times, Romania has been one of the world's leading exporters of wooden furniture and, despite the decline in wood production, since 1989 this has continued to be one of Romania's most important exports.

The liberalisation as from 1 January 1998 of the export regime for wood, coupled with the liberalisation in November 1997 of the domestic price of wood for cutting, is reported to have led to a two- to three-fold increase in the price of the wood used by the furniture industry. This, has provoked a protest campaign in the media by the interest groups affected. They claim that by triggering a 30% increase in the price of domestic furniture, it would become uncompetitive on the international market. Up till now the industry has exported 70% of its output, generating an annual revenue of 500 million US\$.

2.5 Agricultural Trade

2.5.1 Agricultural Trade Balance

Throughout the second half of the nineteenth century and the inter-war years, grain exports dominated the Romanian economy. At the outbreak of the First World War, Romania was the world's fourth largest cereals exporter and the fifth largest exporter of wheat. The country's heavy dependence on grain exports made it particularly vulnerable when agricultural trade collapsed during the Depression, when agricultural protection subsequently increased in traditional markets and intense competition arose from the United States, Canada and Australia. A radical land reform in 1918 led to a major switch from wheat to maize.

Agricultural trade continued to have an important role after the Second World War. The main changes were an increase of trade with the Soviet Union and a reduction in the importance of cereals.

The 1989 revolution caused a dramatic change in the agricultural trade balance. The government adopted export bans and export quotas for agricultural products and increased food imports to limit the decline in living standards, particularly of the urban population.

In 1996, agricultural trade accounted for 8% of Romania's total trade and 4% of the total trade deficit (Table 33).

The increase in exports between 1993 and 1996 was largely due to cereals, which leapt from 3.2 to 256 mio ECU. While exports of foodstuffs, beverages and tobacco also increased substantially so too did imports, which rose from 341 to 477 mio ECU. The

Table 33: Agricultural trade balance (Mio ECU)

	1989	1990	1991	1992	1993	1994	1995	1996
IMPORTS (CIF)	333	880	622	748	804	531	660	666
% of total imports	4	11.2	13.2	15.5	14.4	8.9	8.4	7.4
Exports (FOB)	479	64	199	220	280	335	407	558
% of total exports	5.0	1.4	5.8	6.5	6.7	6.5	6.7	8.8
BALANCE	146	-816	-423	-528	-524	-196	-253	-108
% of total trade balance	12	24.8	33.7	36.1	37.6	24.3	14	4.1

Table 34: Breakdown of agricultural trade by main groups of products

	EXPORTS (FOB)				IMPORTS (CIF)				BALANCE			
	1993	1994	1995	1996	1993	1994	1995	1996	1993	1994	1995	1996
Live animals and animal products	138	174	130	122	58	83	98	58	80	101	32	64
Crops	49	54	160	295	405	118	118	131	-356	-64	42	164
- cereals	3	6	108	226	323	42	8	13	-320	-36	100	213
Oils and fats	53	40	62	55					53	40	62	55
Foodstuffs, beverages and tobacco	40	57	55	86	341	330	444	477	-301	-273	-389	-391
Total	280	335	407	558	804	531	660	666	-524	-196	-253	-108

reverse was true of cereals: imports dropped from 323 to 13 mio ECU.

Table 34 gives a breakdown of agricultural trade by four broad categories, for the period 1993-96.

Since 1993 the agricultural trade balance has always been positive for animal products and oils and fats. The trade balance in foodstuffs has been negative every year since 1993, and this group of products is mainly responsible for the overall agri-food deficit. The improvement in the agricultural trade balance is almost exclusively due to cereals, which returned to positive in 1995.

2.5.2 Agricultural trade by Region

The EU is Romania's main trading partner, both for imports and exports. However, a small year by year increase in trade with the other CECs, with Moldova and Russia is apparent, at least on the import side (Table 34a).

Table 34a: Breakdown trade by region (Average 1995/96)

	Exports	Imports
EU	55%	51%
USA	2%	4%
Other OECD	6%	6%
CECs	3%	4%
NIS	6%	16%
Others	28%	19%

2.5.3 Agricultural trade with the European Union

The agricultural trade balance between Romania and the European Union is favourable to the latter. The EU mainly exports cereals, dairy products, fats and oils. Romania's main exports are cereals, oils and fats, meat, beverages, fruit and vegetables. The agricultural trade deficit with the EU represents 34% of Romania's overall agricultural trade deficit (Table 35).

Table 35: Agricultural trade balance with EU (Mio ECU)

	1989	1990	1991	1992	1993	1994	1995	1996
Exports	103	41	76	78	82	104	121	127
Imports	82	267	243	324	318	180	250	261
Balance	21	-226	-167	-246	-236	-76	-129	-134

Table 36: Demographic indicators 1994-1996 (per 1000)

	Total			Urban			Rural		
	1994	1995	1996	1994	1995	1996	1994	1995	1996
Birth rate	10.9	10.4	10.2	9.3	8.9	8.8	12.7	12.3	12
Death rate	11.7	12	12.7	8.8	9.1	9.5	15.1	15.4	16.5
Marriage rate	6.8	6.8	6.7	6.7	6.8	6.9	6.9	6.8	6.4
Divorce rate	1.7	1.5	1.6	2.4	2.1	2.1	1	0.9	0.9
Infant death rate*	23.9	21.2	22.3	20.1	18.2	18.5	27.2	23.9	25.6

* Deaths under 1 year per 1,000 live births

2.6 Rural society in Romania

Maps illustrating various aspects of the rural economy are given in Annex 1.

The death rate is much higher in rural than in urban areas of Romania. The different age structure - 15.4% of the rural population is over 65 compared with only 8% in urban areas - is one reason, but labour conditions, education levels and access to health care are also important factors. In 1993, almost 90% of beds were in urban hospitals and only 21.5% of Romania's doctors practised in rural areas (Table 36).

The basis of the rural economy is agriculture and there is virtually no other economic activity. This lack of diversification is detrimental to the rural economy and to society as a whole and impairs the sound development of the agricultural sector: there is a strong incentive for young and educated people to migrate from rural areas when the opportunity arises.

Romanian rural households fall into two groups. The largest group works solely in agriculture: 70% are in this situation. The remaining 30% have agriculture as their main occupation, but at least one adult in the household has either a second job (in trade, transport or a craft) or is not active (usually receiving pension

benefits). The farming population is not young: in two-thirds of the households the average age of the adults is over 50, and in one-third over 65. Production, demographic and employment patterns impact on the income structure of the rural household. The income represented by own-consumption makes up 55% of the total. Money income is mainly from the sale of agricultural produce (40%), the remainder from wages, entrepreneurial activities and social benefits.

Rural-urban migration has been highly selective. The watershed has traditionally been entry into secondary education, as rural areas are also disadvantaged in this respect. Those who manage to pass secondary education entrance exams typically move to and remain in urban areas. Staying in the village has often been the consequence of a failure to advance beyond primary education.

Since 1991, however, there has been a moderate increase in the rate of migration from town to country, accompanied by a reduction in the flow the other way. There is a big difference, however, between the percentage rates of these migratory trends (Table 37).

The current employment situation is forcing the agricultural sector to assume the role of buffer, which is resulting in widespread and increasing (hidden) under-employment. The increase in the supply of rural

labour shows large regional variations, with peri-urban areas being the most affected. As this is unlikely to be a temporary phenomenon, it must be given due weight in the formulation of any strategy for the development of agriculture.

Clearly, in the 5,000-7,000 villages earmarked to be phased out under Ceausescu's regime, all new investments (public and private) were prohibited and public services reduced to virtually nothing. As a consequence, these villages often suffered heavy depopulation, even though few were actually physically destroyed.

The privatisation of agriculture and the overall transition of the economy towards a market economy is influencing rural communities according to their characteristics:

- the peri-urban communities, which are the most affected by declining industrial incomes. Their permanent population is not increasing, but there is a rise in the population of weekend farmers returning from nearby cities to maintain inherited plots, and the newly unemployed, seeking an income base in private agriculture.
- the formerly collectivised agricultural communities, whose participation in industrial wage labour is limited, and which have experienced a general rise in living standards and agriculture-based incomes. These communities are the most likely for the development of agricultural associations.
- the non-collectivised hill communities, which have long been engaged in private production. Their distinct advantages include fewer tensions associated with land restitution, longer experience of small-scale agricultural production and more complete and widespread inventories of agricultural implements.

Table 37: Internal migratory flows

	Total	Urban to rural	Urban to urban	Rural to urban	Rural to rural
1992	100	24.5	13.7	39.2	22.8
1993	100	25.4	14.6	35.0	25.0
1994	100	18.4	25.6	30.5	25.5
1995	100	20.8	26.1	25.1	28.0

2.7 Agriculture and the Environment

In Romania, environmental protection remains low on the political agenda. Pollution is severe but localised: in 1990 there were about 14 areas of severe local pollution and environmental degradation. Typically, these are the areas in which major industry is located. In the North West, Baia Mare is the most notorious, with emissions and waste from copper and lead smelting. At Zlatna, the pollution is caused by aluminium smelters and at Ploiesti and Pitesti, by refining and petro-chemical complexes.

- Air

The principal pollutants are SO₂, particulate, NO_x and carbon monoxide, with unacceptable emissions of such toxins as chlorine, lead, phenols, ammonia and benzene.

In 1990, the principal emitters were:

- Energy sources and power: 1.3 mio t SO₂ (85% of the total SO₂ emissions), 0.35 mio t NO_x (40% of the total NO_x emissions), 0.24 mio t particulate matter (36% of the total);
- Steelworks: 67,000 t SO₂ (5%), 44,000 t NO_x (5%), 75,000 t particulate matter (11%), and 464,000 t lead (93%);
- Manufacturing: 10,000 t SO₂ (1%), 44,000 t NO_x (5%), 36,000 t particulate matter (5%) and 10,000 t lead (2%);
- Refineries and petro-chemicals: 69,000 t SO₂ (5%), 9,000 t NO_x (1%), 12,000 t particulate matter (2%), 21,000 lead (4%);
- Cement, transport and others.

The environmental protection agencies, at the level of each county (judet), periodically measure the concentration in the air of polluted substances in 73 localities. Concentrations over the maximum acceptable standards have been detected mainly in industrial areas.

– Water

Water pollution in Romania is a serious problem. Romanian rivers are being polluted by wastewater discharge estimated at about 10 bio m³ per year. Of this quantity, only 10% is adequately treated, 60% is partially treated and 30% is discharged without any treatment. The quality of inland waters and the Black Sea shore is under supervision along 21.400 km.

Measurements carried out in 1995 showed that, according to Romanian quality standards⁴, more than half the rivers fell into category I, i.e. suitable for supplying drinking water. 22% of waters, however, were found to require a high degree of treatment or were even unfit for most uses.

Amongst the rivers, the Ialomita River was category IV for 52% of its length, the Olt 43% and the Siret 31%. The Prahova and its tributaries had at least 37 significant sources of pollution in its basin, mainly industrial waste, agricultural run-off, animal waste and municipal waste water. Extreme water pollution was generally found to be a local phenomenon, concentrated in stretches of river downstream from industries and larger municipalities.

About 46.8 % of the population depends for its drinking water on ground water, which is more and more threatened by pollution. In some areas, it is heavily polluted by nitrates, pesticides, heavy metals and other toxic substances.

Almost 7 mio t of polluting substances are discharged into the country's rivers annually, representing an

effective and potential risk to crops and causing soil pollution over large areas, since much of the 3.1 mio ha of irrigated land draws water from these rivers. It is known that for about 200,000 ha of this land, the quality of the water source was unsuitable.

The problem of high nitrate concentrations is particularly serious in irrigated areas along the Danube River (Mehendinti, Dolj, Calarasi, Constanta, Tulcea) and in Botosani Judet. Extreme concentrations reaching 1,500 mg/l (maximum acceptable standard: 45 mg/l) were detected in Cernica. The main sources of this nitrate pollution were agricultural run-off and livestock waste.

The 1995 report gives an indication of the entirety of the environmental problems affecting rural and agricultural areas:

- frequent drought on 3.9 mio ha,
- periodical excess of water in soil on 0.9 mio ha,
- soil erosion due to water on 4.1 mio ha,
- landslides on 0.7 mio ha,
- soil erosion due to wind on 0.4 mio ha,
- salinization on 0.6 mio ha,
- soil compaction due to inappropriate working on 6.5 mio ha,
- soil compaction due to natural causes on 2.1 mio ha,
- crusting on 2.3 mio ha,
- low and very low humus content on 5.3 mio ha,
- serious acidity on 2.4 mio ha,
- low and very low content of available phosphorus on 4.4 mio ha,
- low and very low content of nitrogen on 3.3 mio ha,
- chemical pollution due to different socio-economic activities on 0.9 mio ha,
- oil pollution and salt water on 0.05 mio ha.

⁴ Category I: suitable for drinking water supply with minor treatment; category II: requiring some treatment and mainly used by industry; category III: requiring a high degree of treatment; category IV: unfit for human consumption and most uses.

– Natural areas

Romania is rich in beautiful landscapes and biodiversity. Initial steps have been taken towards preserving these, and protected areas now represent 4.8% of Romania's territory. These include:

- three biosphere Reserves (of which the Danube Delta is by far the largest and best known) with an area of 591 200 ha
- 12 National Parks: 396 800 ha
- 44 Scientific Reserves: 95 900 ha
- 382 Reserves for preserving nature
- 135 natural monuments.

Natural aquatic systems in Romania are endangered by a combination of pollution and over-fishing.

2.8 Up- and downstream industries

2.8.1 The "integrators" and "agromecs"

Until September 1997, the input distribution system was similar to that which existed before 1989. To benefit from subsidies, producers had to sign contracts with the "economic agents qualified by the State" ("integrators") mainly Romcereal and Semrom. In 1995, these bought about 82% of all domestically-marketed wheat. In return, farmers had access to subsidised credits for inputs and mechanisation services.

Integrators collected information about demand and passed it on to the factories and supplying companies. The Ministry for Agriculture (MAF) participated actively in fixing maximum prices for inputs. Integrators were also credit intermediaries and distribution agents. Their role as an additional source of credit during emergency periods was positive.

It was realised, however, that their presence was an obstacle to the development of an input distribution system in the private sector and that they strengthened the competitive advantage of commercial companies and former collective farms.

In 1995/96, Romcereal was split into 44 commercial companies and one National Agency for Agricultural Products (ANPA). This agency kept the role of Romcereal, with one third of the stocking capacity (3.5 mio t), the remaining two-thirds (6.9 mio t) being given to the 44 companies. The World Bank urged the government to split the ANPA into 29 companies (called Comcereal), and this was done by May 1997. These companies are to be privatised by mid 1998. The World Bank advised that an inter-professional organisation be set up, composed of farmers, storage companies and users.

Secondary integrators supplied inputs and services through their linkage with a primary integrator.

Agromecs supply mechanisation services to farmers, mainly as sub-contractors to Romcereal and to Romcereal's clients. They also used to act as distributors of seeds, fertilisers and fuel to farmers who requested it. Some Agromecs also became dealers in tractors and farm machinery. Mechanisation seems to be the least affected of all production inputs, although the unit costs of machinery services and fuels have increased much more rapidly than all other input prices since 1989.

Almost all Agromecs were put on the list of the State Ownership Fund (SOF) for privatisation. In February 1995 only 86 had been privatised, in effect "sold" to managers and workers with highly subsidised credits. These Agromecs are allowed to lease land. Most were split into smaller units in order to speed up the privatisation process. At the end of 1996 there were 335 privately-owned and 1158 State-owned Agromecs. It is expected that they will all have been privatised by mid-1998.

In some regions, a private segment has recently emerged in the market, selling services (mostly involving small machinery) at discounts that can reach 10 or 20% of the Agromecs' fees. In other regions, competition is avoided by a price agreement between the Agromecs and the commercial companies.

The seed trade was a State monopoly managed by two companies, Semrom and Unisem, which now have to be privatised. Foreign companies are already active in this market.

2.8.2 Machinery

Romania used to have a large domestic capacity for manufacturing nearly all its farm machinery, which it also exported. One large tractor plant at Brasov produces 95% of the nation's tractors. A factory in Bucharest produces all Romania's combine-harvesters. In addition to 2 other small tractor plants, there are 30 machinery enterprises and a number of small companies. Each specialises in manufacturing a narrow range of implements, machinery and livestock equipment.

Present constraints on the agricultural machinery industry are causing problems related to the quantity and quality of the machines produced. 90 % of the tractors produced were 65 Horse Power or more, which made them unsuitable for the newly created small and medium farms, and domestically produced combine harvesters are said to require some 100% of their initial purchase price to be spent on spares and repairs within 3 years.

Since the mid-1980s, the plants have suffered from a lack of investment in new machine tools and processes. This was due largely to continual government manipulation of selling prices, to a level below the cost of production. Problems were also heightened by a chronic lack of foreign exchange for the import of

special steels, alloys and specialised components, seasonal energy shortages, excessive vertical integration resulting in large inefficient factories, and large outstanding debts.

Between 1993 and 1997, sales of agricultural machines and tools fell from 45,000 to 15,000. In 1997, the number of machines which normally should have been acquired was about 20,000 tractors, 150 combines, 2000 ploughs and 3000 sowing machines. The agricultural machines and tools now in use are old: out of the 162,000 tractors 87,500 are more than eight years old.

2.8.3 Fertilisers

Fertiliser consumption has declined dramatically since 1989. The main users of chemical fertilisers at that time were agricultural co-operatives (63%) and state farms (25%). Following the break-up of the agricultural co-operatives, consumption fell by more than half. The private sector did not use chemical fertilisers, due to their cost, but they represent the main users of organic fertilisers, with a market share of 80%, mainly for vegetable production (Table 38).

Commercial companies and farmers associations, which normally have contracts with integrators, have been able to maintain a certain level of input consumption. The average commercial company's fertiliser use only fell to about 70% of historical levels, whereas total consumption in 1996 represented only 38% of the 1989 figure.

Table 38: Consumption of fertilizers (1000t, active substance)

	1989	1990	1991	1992	1993	1994	1995	1996
Total Chemical								
Fertilizers	1159	1103	464	422	538	479	470	435
Nitrogen	666	656	275	258	346	313	306	268
Phosphates	329	313	145	133	165	149	149	153
Potash	164	134	44	31	27	17	15	14
Manure	41603	24791	16910	15792	17125	16945	17423	

Romania has a large fertiliser industry, built up mainly during the 1960s and 1970s to serve both domestic and export markets. It is characterised by old technology, high energy consumption and, in the case of sulphuric and nitric acid production, by serious pollution levels.

Total production capacity is over 10 mio t of product, but from 1985 to 1988 actual production averaged 3.3 mio t per year of nutrient, equivalent to some 8.2 mio t of product. Production fell to 2,8 mio t in 1989 and 1,2 mio t in 1994 (equivalent to 3.0 mio t of product).

By 1997, all the fertiliser companies had been privatised. The industry, however, is monopolised by three companies, controlled by the Bucharest Columna Bank, which account for 88% of the total production.

The use of organic fertilisers for improving soil fertility has never been high. Livestock production was concentrated in big industrial complexes and the collection, storage and utilisation of manure posed problems which could not be solved. And because of the way work was organized there was no pressure to find solutions.

The drop in domestic demand forced producers to look towards foreign markets, and in 1996 about half of the 1.1 mio t produced was exported. However, falling prices on the world market and a sharp increase in production costs and the price of raw materials also reduced the competitiveness of the Romanian chemicals industry on export markets.

By the end of 1997, chemical fertiliser production by almost all of Romania's manufacturers had ground to a halt, as a result of these serious difficulties on the domestic and export markets. A lack of purchasing power and an acute shortage of finance were behind the drastic cut in production, together with the radical restructuring of many companies in the sector.

2.8.4 Plant protection products

The decline in the use of fertilisers was paralleled by a fall in the use of pesticides and herbicides, with similar sharp differences in consumption rates between farms. Pesticides are supplied to farmers by about 6 major companies and several minor producers, from factories that produce and formulate non-proprietary chemicals, developed in foreign countries. Some basic products have been developed in Romania.

Total consumption fell from 71,500t in 1989 to 17,400t in 1996. This decrease affected all types of pesticides, but was most pronounced for insecticides (in 1996 nine times less were used than in 1989). The low application of pesticides has had a negative influence on the state of vegetation and, finally, on yields.

For maize, sunflowers and soya, the main crops for which weed control is necessary, weeding was done mechanically or manually. For the other crops, mainly cereals, the limited use of pesticides affected the total quantity and the quality of output.

Moreover, pesticide production decreased from 33,000 t in 1989 to 15,000 t in 1996, leading to a need for imports. By 1997, almost all the pesticide companies had been privatised and foreign companies were active on the market.

2.8.5 Animal feed

The animal feed industry is concentrated on 67 large commercial companies, State-owned feed mills located near grain storage facilities and other processors. Total capacity for animal feed production is estimated at 6.4 mio t, while current demand is estimated to have fallen to less than 4 mio t. Feed quality is low, mainly due to the poor quality of grains and a shortage of protein from local sources.

The efficiency of livestock farms, and particularly pig and poultry farms, is very low: it is estimated that the conversion rate is about 7, compared to a bench-

mark of only 3 (the conversion rate is the quantity of feed per unit of carcass weight produced).

Some local private mills exist in the countryside, mainly former co-operative mills.

2.8.6 Agri-food industry

22% of all Romania's companies are engaged in the food industry. In 1996 the sector accounted for 5.8% of Romania's GDP and 8.8% of all exports. Including beverages and tobacco, the food industry accounts for 17% of the total industrial output and 9% of all industrial employment.

Investments in the agri-food industry, which increased by 139% between 1993 and 1996, account for 20% of all investment in industry. The sector is made up mainly of SMEs, and most of the companies were until recently still state-owned. Low productivity, over-capacity and a lack of adaptation to demand are its principal weaknesses.

Romania's food industries were established 20-30 years ago. Major production facilities were built in each county on the basis of political decisions rather than real need, with capacities based on theoretical input supply and output demand. They were originally equipped with technology that was already out of date and there has been little subsequent investment in plant renewal or upgrading. They are high in their demand for energy and labour and, by international standards, their products are of a relatively low quality. Due to their poor location relative to the supply of raw materials, some are currently over-supplied

while others are under-supplied. In these circumstances it is not surprising that the rate of waste is high.

Until 1990, the food industry was centred on 365 State enterprises. After 1990, through restructuring and a reorganisation of the sector, 431 commercial companies and an autonomous unit for tobacco processing were established.

Table 39 presents a brief profile of 4 important branches: meat, dairy, edible oils and sugar.

The dairy industry clearly illustrates the legacy of centrally planned investment in the food industry. Dairies were set up in every county in Romania, with an average of just over 1 in each (although most have several plants and numerous collection centres).

More than 3 meat-processing plants, on average, are to be found in each county. Sugar factories are located in 24 counties and edible oil mills in 11. The oil mills averaged 370 employees per enterprise, followed by sugar with 351, dairies with 321 and meat plants with an average of 151 employees each.

By the end of 1997, 350 out of 534 companies in the food industry had been privatised. Sugar and edible oil companies are already almost 100% privatised, as are mills and bakeries.

When trade was liberalised after 1990 food imports rose steadily, while exports to the former USSR declined sharply; by 1995, imports were three times higher than exports. At present, food accounts for only 4% of total exports, but for 7% of all imports.

Table 39: Food industry

	Number of firms	Counties with firms	Output* 1991	Output* 1992	Output* 1996	Employees 1992
Meat	132	41	825	579	600	19,957
Fresh milk	48	41	391	363	352	11,118
Oil mills	14	11	236	217	240	5,182
Sugar	36	24	326	300	228	12,629

*Output: for milk, million liters; for all others, thousand tonnes

Only a small number of enterprises are engaged in exporting, most concentrate on the domestic market.

Higher prices and reduced incomes have led to a sharp drop in domestic consumption, while local industry has lost out to imports. Lack of finance, irregular supplies, outdated equipment and poor packaging make Romanian companies less competitive on the home market. The sector suffers from over-capacity and many companies have serious over-manning problems. Major markets in the former USSR have been lost and most producers cannot meet the standards required by West European markets. There are over 5000 joint ventures with foreign companies but, with investment totalling \$ 400 million, most are small-scale operations.

2.8.7 Distribution

Distribution channels for agricultural products have yet to be developed. Wholesale markets are practically non-existent and retail activity still depends largely on the old system of State shops, although some new retail outlets are emerging.

In Bucharest, a new fruit and vegetable wholesale market opened the first of its four halls in December 1997. Set up with German funding and know-how, this market is seen as a step towards creating an efficient fruit and vegetable sector, in conformity with EU standards.

In many villages and urban areas, however, farmers sell their products directly, sometimes renting stalls from the municipality.

The poor development of distribution channels is confirmed by the high level of own-consumption. For the average Romanian family, this represents 29% of their total consumption, a figure not limited to farming households. The land reform created 5 million land-owners, 40% of whom live in urban areas. Many receive payment in kind for renting out their land. And family ties between town and country bring a steady

flow of agricultural produce from the rural household, perhaps in return for financial help or extra labour at planting and harvest time.

Within farming households, own-consumption rises to 55% of all consumption, while in the average employee's household it amounts to 20%; for pensioners, the figure is 38%.

The absence of adequate infrastructure and of commercial structures presents an obstacle to the development of Romania's export potential. Thus, the very high cereals crop of 1997/98 was difficult to export. Exporters complained about the additional cost represented by the non-concentration of supply at producer level. On this occasion the government reacted by introducing a special measure to support exports of 1 million tonnes of maize with a refund of about 17 ECU/t.

2.8.8 Agricultural credit

Up to December 1989, the Romanian financial system was geared exclusively to the implementation of the central plan. The flow of funds was controlled by the administration, and the government absorbed risks, leaving no real role for commercial banking functions. Banks consequently maintained little or no capital, and there was no government supervision of financial institutions. The four main institutions were the National Bank of Romania (NBR), the Romanian Bank for Foreign Trade, the Investment Bank and the Bank for Agriculture and the Food Industry (now Banca Agricola-BA).

The reform of the Romanian banking system was initiated early in the process of transformation to a market economy: entry to the banking system was liberalised early in 1990 and the NBR was granted a significant degree of independence from political interference and given a mandate to pursue price and exchange rate stability.

Until very recently, agriculture and the food industry were unable to attract the private banks and the BA remained dominant in agricultural credit (95% of the market in 1994). Banca Agricola has more than 350 branches all over the country and is the biggest retail bank. It has been restructured recently at a high cost to the State budget and is going to be privatised.

Other institutions include a network of co-operative banks that make small loans to farmers and villages, and are becoming more active in lending to agriculture. Bancoop, a co-operative established by the consumer and credit movements in 1990, is the largest of them. Bank Post has also increased its activity in rural areas, both mobilising rural deposits and making loans.

The International Bank for Reconstruction and Development (IBRD) and the European Bank for Reconstruction and Development (EBRD) have made loans available, through Banca Agricola, for private sector export oriented agricultural projects.

In August 1994, a Rural Credit Guarantee Fund was established by the four main rural commercial banks and the Romanian government, to help meet the Romanian borrower's chronic lack of security for bank loans, rendered acute by the absence of a cadaster.

In the past, subsidised credit was provided to agriculture through the BA in the form of refinancing credits to cover seasonal borrowing requirements. These credits were allocated to State-owned enterprises that indulged in widespread defaulting: non-repayment of debts in agriculture amounted to 30% compared to 10% in industry. This discouraged the creation of alternative financing mechanisms for private farmers and the agri-food industry.

In February 1997 the government set up a Special Agricultural Fund of 550 billion Lei to finance agricultural inputs at a low interest rate for the spring campaign. About 475 billion Lei were disbursed through seven banks (the BA had 50%). The money

was lent to the banks at an interest rate of 60% with a margin for the bank of 20%. The borrower's interest rate was then 80%, while the commercial interest rate was 160%. The participating banks assumed the credit risk and there was no involvement of the National Bank.

In autumn 1997 a revolving fund of 500 billion Lei was created to finance purchases of wheat. Participating banks receive credit from the fund at an interest rate of 30% and millers and bakers pay an interest rate of 40% to the banks.

150 billion Lei were earmarked in the State budget to subsidise wheat storage costs.

A coupon scheme financed with 1400 billion Lei from the State budget for Agriculture was introduced for the 1997 autumn campaign (see §3.2.3).

3. Agricultural and rural policies

3.1 Introduction

After a delay of several months, the Chamber of Representatives approved an ASAL agreement (Agricultural Sector Adjustment Loan) with the World Bank in the summer of 1997. Under this, the Romanian government will receive 350 million US\$ in three annual disbursements, to carry out structural reforms in agriculture.

The delay was caused by the parliamentary opposition's refusal to accept the agreement. The former communist party, in particular, condemned it as anti-national and harmful to the future of agriculture, claiming it would destroy the agricultural economy and particularly the livestock sector. In a bid to accelerate reform, several conditions are attached to the credit, including:

- the liberalisation of food and agricultural prices (already implemented);
- the liquidation or privatisation of unprofitable State companies;
- a reduction in the number of subsidies;
- the creation of a land market.

3.2 Agricultural policy

3.2.1 Market policy

Under the Ceaucescu regime, State farms and PACs had to sell their whole output to State enterprises, the "integrators", at a low fixed price. During the first years of transition, the Romanian government sought to preserve a system which obliged farmers to sell their produce cheaply through the heavily-regulated State distribution network, as part of its strategy to maintain a social consensus and reduce inflationistic tensions.

The pricing system has since undergone a gradual process of liberalisation.

In early 1990 the formal State monopolies for buying agricultural commodities and supplying inputs were quickly abolished. Producer and consumer prices on local markets were liberalized, resulting in rapid real term increases.

To protect consumers, price controls on essential food items were introduced later in 1990 within the State distribution network. In agreement with the Ministry of Finance, the Ministry of Agriculture and Food fixed guaranteed minimum prices for wheat, barley, maize, oats, rice, potatoes, sugarbeet, soyabeans, sunflowers, milk, eggs, pig- and poultry-meat, until October 1993.

These prices only applied to purchases made by the integrators and to direct acquisitions by State processors and often included a subsidy paid from the State budget. When produce was acquired by an integrator (e.g. wheat by Romcereal) and resold to a State agri-industry (e.g. State mills) the subsidy was deducted from the price charged to the processor.

During the same period, price controls were also implemented right along the State agri-food industry chain for bread, milk, eggs, sunflower oil, sugar, pig- and poultry-meat. Procurement, wholesale and retail prices (as well as profit margins) were managed by the administration.

In November 1993, Law N° 83/1993 introduced a further step towards liberalization. The Government was limited to setting "guaranteed minimum prices" on 1 March each year for products "of national importance", at a level corresponding to 80% of the previous year's average world market price. The Law covered a wide range of arable products (grains, oilseeds, vegetables, sugarbeet, potatoes etc.) and milk, pig-meat and poultrymeat. In 1995, however, only wheat,

milk, pigmeat and poultrymeat were seen as products “of national importance” and placed under the system. The “guaranteed minimum price” was, in practice, the price offered to producers by official or officially-mandated State agencies.

Controls over prices and margins continued to be applied along the different stages of the food chain (storage, processing, wholesale and retail).

Combined with the restrictive system for allocating production subsidies, this resulted in a dual pricing system for the four products concerned. Prices for all other agricultural products on the Romanian market could be considered as liberalized.

At the beginning of March 1997, the Ministry of Agriculture moved towards the elimination of all price and margin controls at all levels of the marketing chain for pigs/pigmeat, poultry/poultrymeat, milk/dairy products, and wheat/flour/bread. Law N° 21/1996 on competition enabled Government Decision N° 133 of 21 April 1997, which abrogated the minimum guaranteed prices. Thus, prices for all agricultural products may now be considered completely liberalized.

3.2.2 Production subsidies

Direct production subsidies used to represent the largest part of the agricultural budget. In practice, normally only farmers selling to State agencies, and thus at lower prices than on the open market, benefited from them. Farmers selling on the free market had a limited access to production subsidies.

Arable crops

Production subsidies on arable crops are now mainly in the form either of directly-supplied inputs (fertilizers, pesticides) or inputs supplied at subsidized prices (certified seeds), in return for which the producer is committed to supplying all or part of his output to a State agency.

The range of aids differs from one crop to another:

- Wheat producers benefit from the whole range of subsidies, including marketing loans at the time of sowing, provided they commit themselves to supplying their production to a State agency.
- Corn producers benefit from the same treatment, except for marketing loans.
- Other arable crop producers have access only to some of the input subsidies.

Conditions for production subsidies not linked with some commitment to supply the State agencies are not really clear; where the availability of inputs is limited (e.g. certified seeds) it seems that private farmers do not always have access to them.

Animal production

Dairy, beef and poultry producers could choose to sell their produce on the free market, or to supply State agencies at the procurement price set by Law 83/1993 (abrogated in March 1997). In the latter case, they received a direct payment equal to nearly one third of the selling price.

In response to the sharp fall in livestock in the early '90s, Law 83/1993 introduced direct aids for breeding and keeping cattle, which seem to have stopped the decline.

For other products, direct aids are limited and seem to be restricted to the purchase of selected animals from State breeding farms.

3.2.3 Non-specific aids

These aids represent only a small part of the agriculture budget. The most widespread seem to be aids for public irrigation systems, soil improvement and the fight against soil erosion. The Government is now preparing a legal framework to reorganize these types of intervention into:

- a law on seed obtention
- a law on interest rate subsidies for agriculture
- a law to set up a Rural Development Agency.

In 1997, in the wave of agricultural policy reshaping, a non-specific input subsidy scheme was launched, at a cost estimated at less than 180 mio ECU. Coupons, with a face value of about 16 ECU, were distributed to all private farmers on the basis of one coupon per hectare owned, with a minimum limit of 0.5 ha and a maximum of 6 ha. They could be used to pay for all kinds of inputs and mechanical work within a given period of time, or they could be traded. While it certainly involves some administrative costs, the scheme represents a concrete measure to help introduce farmers to the logic of a market economy. The coupon scheme is being continued in 1998.

3.2.4 Price development

Given the aim of Romania's price support policy, i.e. to simultaneously protect producers and consumers, and its progressive dismantling, it is interesting to look at the development of prices in Romania at producer and consumer level during the '90s. This is of particular importance in view of the elevated weight of food expenditure relative to household incomes⁵.

Table 40 presents the evolution of main product prices as a percentage of EU prices. This exercise raises some methodological questions and is rather delicate, due to the high rate of inflation in Romania, the non-comparability of products and price survey problems. In addition, the minimum guaranteed price system may not be considered as having an influence comparable to the EU support price system. In fact, the institutional prices set by the CAP are supposed to reflect the desirable market price, and therefore have a leading influence on production. In Romania, the "guaranteed minimum prices" were derived from the free world market and set at sufficiently attractive levels to ensure supplies to the State integrators. The

rise in MGP in nominal terms results from inflation in Romania and world grain prices.

Table 40: % of EU Producer Prices

Main Products	1993	1994	1995	1996	1997
Common Wheat	87%	72%	59%	85%	104%
Barley	74%	62%	51%		
Maize	91%	74%	47%		77%
Sugar beet	60%	49%			
Tomatoes	63%	71%			
Apples	43%	51%			61%
Cherries	16%	24%			
Beef (c.w.)	41%	42%	72%		
Pigs (c.w.)	119%	109%	113%	93%	111%
Poultry (c.w.)	65%	74%	86%	74%	90%
Cows' milk	76%	82%	85%	95%	93%

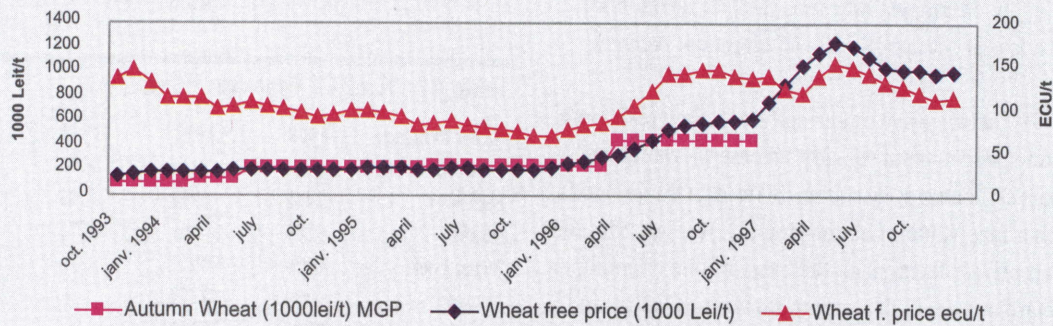
Cereals

Romanian grain prices have largely closed the gap with EU intervention prices. With the 1994/95 campaign Romania returned to being a net exporter and prices on the domestic free market - nearly 10% of the internal market - benefited from steady world prices. To maintain the State agencies' oligopoly, the government was forced to raise the MGP for wheat, to keep it in line with the free market price. Thus, the 1996 drought obliged the Romanian Government to set a farm price for the 1996/97 campaign (116 ECU/t). In the medium term, confirmation of Romania's net exporting position can be expected. Following the liberalization of cereals prices, Romanian prices will be driven by world price evolution, and only in the event of a poor harvest will they perhaps be set at levels above world prices.

In conclusion, the convergence of Romanian and EU prices is mainly the result of EU and world prices. If world prices decline, no tool is available to avoid a divergent evolution (Graph 3).

⁵ In 1997 food represented 58.4% of household expenditure, and 77.3% for the poorest quintile of the population.

Graph 3: Wheat price evolution



Milk

Since 1989, Romania has been a net importer of dairy products. Production by private farmers has steadily increased and now accounts for around 80% of milk marketed, while production by State farms has declined. Nearly 50% of production goes to State processors, which remain important. The State processors specialize in cheese production and in reconstituted liquid milk from imported dried milk, which are not subject to price and margin controls. The premium generally represented one third of the MGP, which allowed State processors to buy at a net price lower than on the free market. While State processors were apparently protected from direct competition, they were in fact unable to compete with the free market, on which prices were higher. This has up till now led to a stagnation of direct investments in dairies. With the '97 liberalization of milk prices, domestic prices will be driven only by competition

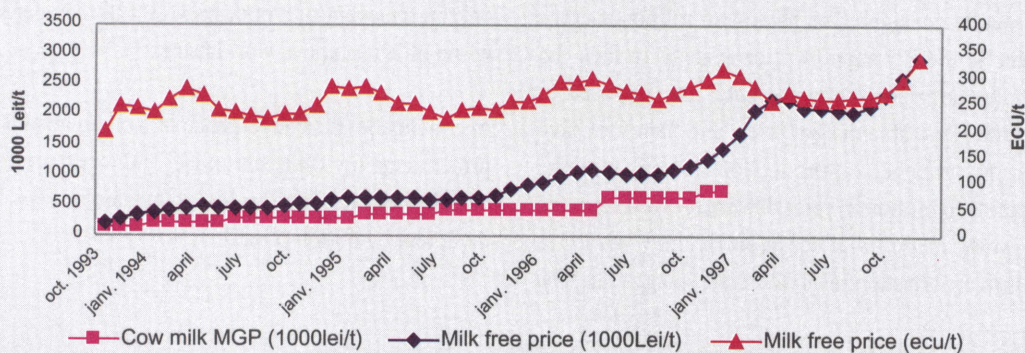
with reconstituted milk from EU milk powder. Some small increase could therefore occur in the coming years, but a significant gap with EU prices will remain (Graph 4).

Pigmeat

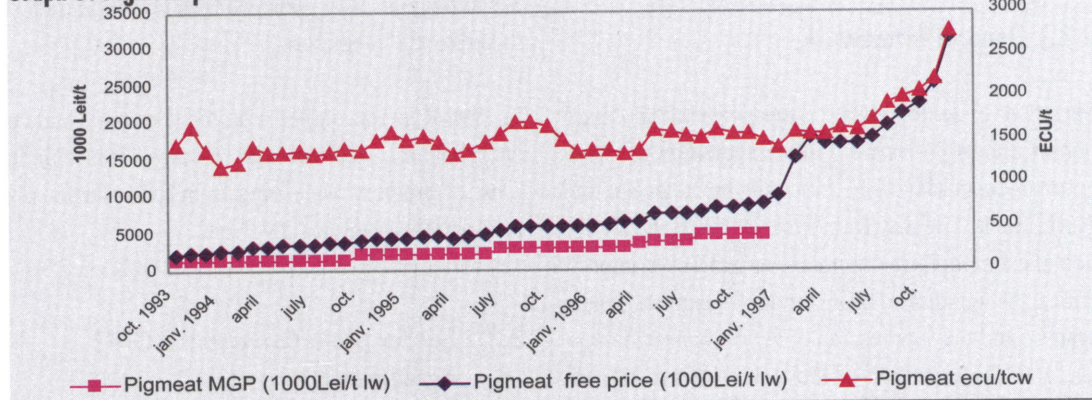
In the early '90s, nearly two-thirds of the marketed pigmeat production came from 49 specialized State-owned farms, many of which were vertically integrated (slaughtering, processing and retail stores). At the same time, private pig production was becoming increasingly important, and some estimates even show that by 1996 over 60% of all pigmeat was produced on small private farms, but mostly for own-consumption. The policy changes have not yet had a parallel impact on the marketing and processing sectors.

Since 1992 Romania has kept a net export position on its traditional markets (Poland, Moldava, Russia).

Graph 4: Milk price evolution



Graph 5: Pigmeat price evolution



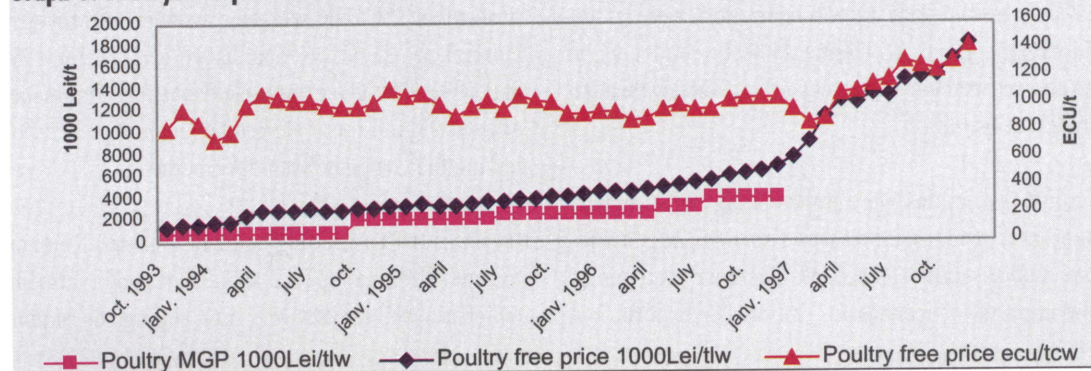
In national currency, the evolution of minimum guaranteed prices and free prices has been similar, but at a different pace. Expressed in ECU, prices have been relatively stable, like wheat prices. The relative proximity of pigmeat prices with those of the EU - 109% in 1994, 113% in 1995, 93% in 1996, 111% in 1997 - can mainly be explained by:

- a poor feed conversion ratio,
- the relative inefficiency of the pigmeat industry (small private farms, partially obsolete State farms, slaughterhouses and processing sector, low quality standards),
- from July 1995 to May 1997, the protectionist import trade regime (Graph 5).

Poultrymeat

In 1995, 90% of marketed poultrymeat production still came from State-owned complexes integrating breeding, slaughtering, processing and sometimes retail sales. Since 1991 Romania has stayed in a net deficit position, main sources of imports being the USA, Brazil, Hungary and the EU. After a sharp rise in 1994, prices expressed in ECU have been relatively stable, around 850/900 ECU for guaranteed prices and 950/1000 for free prices, slightly below EU levels. This may reflect the balance between the cereal price differential and the increasing pressure of internal demand. The full liberalization of agricultural prices in Romania, in the context of firm world prices, has already led to a greater convergence of EU and Romanian poultry prices. Given the potential of the production structure and the interest of transforming domestic grain production, internal demand pressures could be expected to lead to a strong increase in production (Graph 6).

Graph 6: Poultrymeat price evolution



3.3 Trade policy

3.3.1 General framework

Important trade liberalisation measures and a reduction in import duties were implemented by the new government in May 1997, following the advice of the World Bank. The new framework entailed the abolition of exemptions or temporary reductions in import duties, the withdrawal of any import or export licence system, and the suppression of export bans and quotas, with the exception of those which form part of international agreements signed by Romania.

The reduction in import duties already applied led to a weighted average duty of 27%, with a maximum of 60% for some products, including wheat and milk. Further reductions are to be applied gradually, leading to a weighted average duty of 22% and a maximum of 40%, except for some sensitive products whose maximum limit will be 45%.

On 1 December 1997, the Romanian government removed all tariffs on imports of pig-meat for a period of 60 days, in an attempt to halt the increase in pig-meat prices. The normal tariff now stands at 30% of the value for imports from CEFTA countries and at 60% for imports from other countries.

Prior to complete liberalisation, trade policy was dominated by special temporary measures of an administrative nature, consisting mainly of temporary reductions in customs duties and limitations or bans on exports. The purpose of these measures was to balance supply and demand on the internal market at the lowest possible price. Export restrictions were adopted with the aim of protecting domestic producers, in an attempt to achieve greater self-sufficiency through import substitution.

Export restrictions were imposed on wheat, maize, sunflower seeds and molasses, for which administrative authorisation was needed. There were no quotas for imports or licences for imports or exports, but

imports of several important agricultural commodities and inputs were managed by a few large traders, linked to the integrators.

In 1994 Romania signed a protocol on trade and cooperation in agriculture with Moldova. This includes a list of products benefiting from lower tariffs, and the possible quantities involved.

3.3.2 Border protection and the GATT agreement

Uniquely among the Central European countries, Romania opted for the status of developing country. This means in particular that:

- the implementation period is 10 years, from 1995 to 2004.
- Romania is not required to include in its total Aggregate Measure of Support (AMS) calculation, domestic support not exceeding 10 % of the total value of a basic product. According to the supporting tables Romania submitted, it had only green and/or support measures falling under the 10% de minimis rule during the reference period (1986-88). Therefore, Romanian agricultural support did not enter into the calculation of the AMS.

Important changes took place in Romanian trade policy after 1989. The State monopoly was formally abolished in February 1990, and significant steps were taken towards a more open trade regime. In particular import controls were removed and a tariff schedule introduced which provided a moderate level of protection. The trade-weighted average tariff for agricultural products was established at 10% for 1991 and 1992. The use of non-tariff barriers diminished after 1993 and these were dismantled in 1995, following the Uruguay Round Agreement.

Its status of "developing country" enabled Romania to benefit from a "special and differential treatment" which allowed it to set very high ceilings on binding

Table 41: Trade-weighted tariff average for agricultural products (%)

1991	1992	1993	1994	1995		1996	1997
				1st. Semester	2nd Semester		
12,9	9,7	21,7	24,5	25,1	75	80,4	27

Table 42: GATT and applied tariffs

		Base rate of Duty 1994	Bound rate of duty 2006	% of reduction	Applied tariffs Jan-April 1997	Applied tariffs May-Dec 1997	CEFTA Countries
Live bovine animals	Cows	300	270	10			0
Live swine	Pigs	300	270	10			0
Live poultry		20	15	25			0
Meat of Bovine animals	chilled	320	288	10	169	50	25
Meat of Bovine animals	frozen	350	315	10			
Meat of swine		370	333	10	236	60	25
Meat of poultry		160	96	40	140.8	60	28
Butter		250	200	20	235	60	60
Cheese		300	270	10	171	60	60
Potatoes		200	180	10	150	60	60
Cauliflowers		50	45	10			0
Other vegetables		75	38	50			0
Tomatoes		50	45	10	141	40	40
Grapes		250	200	20			0
Apples		250	200	20			0
Cherries		100	90	10			0
Wheat (durrum and soft)		300	240	20	65	25	25
Rye		300	240	20			
Barley		300	240	20	106	25	18
Maize		100	20	80	63	30	30
Rice		150	120	20	30	10	10
Soya bean		50	25	50	31	5	5
Rape		50	30	40			
Sunflower		200	160	20			
Sunflower oil		200	180	10	75	40	40
Rape oil		200	160	20			
Maize oil		100	85	15			
Sugar		200	180	10	135	50	50
Wine		350	315	10	144	100	100

tariffs for agricultural products. Of the CECs, Romania has the highest agricultural binding tariffs⁶ (Table 41).

Applied tariffs jumped from 21% in 1993 to nearly 80% in 1996, given the room for manoeuvre within the bound rates. This tariff increase affected trade

flows, reducing the agricultural trade deficit. Even if the GATT commitments are not an effective constraint, applied tariffs being largely below the bound rates, a downward movement was initiated in 1997. The arithmetic average of applied tariffs decreased to 27%, the highest tariff applied being 60% (Table 42).

⁶ Binding tariffs have to be reduced by at least 10% and by 24% on average over a ten year period. For developed countries the corresponding reductions are 20% and 36%.

Import tariff quotas apply to few products. In addition to those in table 43, they are: seed potatoes, chocolate, some pasta, ice-cream, beer, vermouth, undenatured ethyl alcohol and cigarettes.

Table 43: Main tariff quotas

	Initial quota 1995		Final quota 2004	
	Quantity	tariff rate	Quantity	tariff rate
Meat*	19,000	115	19,000	115
Milk powder	500	100	900	100
Cheese	1,600	110	2,600	110

* Meat and edible bovine and pig offal, fresh, chilled or refrigerated

Preferential access is given in a number of cases:

- through the Association Agreement, the EU benefits from specific conditions;
- through the CEFTA agreement, other CECs benefit from preferential treatment;
- through a protocol on trade and co-operation, Moldova benefits from a free regime for some agricultural products.

Export regime

Exports will benefit from support, which will be progressively reduced over 10 years to 76% in budget terms and 84% in subsidized volume terms, of the averages for the period 1986-1990. It should be emphasised that Romania presented its GATT commitments in "constant Lei 1986-88". The overall budget for export subsidies will fall from 2.8 bio Lei in 1995 to 2.2 bio Lei in 2004. Export commitments in budget outlay and volume can be summarized as follows (Table 44):

These commitments do not appear to raise real problems for Romanian cereals exports. In fact, domestic grain prices are below world market levels and present export subsidies seem to be more a support aimed at overcoming shortcomings in market organization and infrastructure. Export subsidies currently amount to 281 mio Lei (in 86-88 constant Lei).

3.3.3 The EU Association Agreement

The main use made of the agricultural provisions of the Agreement has been in two sectors, wine and sheep (live animals). Dairy products have also bene-

Table 44: Export commitments

Products (mio Lei)	1995		2000		2004	
	Outlay* (000 t)	Volume (mio Lei)	Outlay* (000 t)	Volume (mio Lei)	Outlay* (000 t)	Volume
Cereals	634.80	332.1	595.80	318.6	494.40	283.5
Oilseeds	1.27	3.2	1.19	3.09	1.00	2.75
Vegetable oil	248.10	97.9	232.80	93.9	193.20	83.6
Sugar	541.10	172.9	507.80	165.9	421.40	147.6
Butter	168.30	16.9	158.80	16.2	131.00	14.5
Cheese	29.00	13	27.20	12.5	22.60	11.1
Meat	499.90	161.2	469.20	154.6	389.30	137.6
Poultry	214.70	32.6	201.50	31.3	167.20	27.8
Live animals	116.10	19.6	109.00	18.8	90.40	16.7
Eggs	0.26	1.39	0.24	1.31	0.21	1.18
Wine	64.70	9.25	60.70	8.87	50.40	7.9
Fruits	140.30	155.6	131.70	149.3	109.20	132.8
Vegetables	171.50	130.4	161.00	125.1	133.50	111.3
Total	2,830.03				2,203.81	

* Constant Lei 1986-88

fited somewhat from the opportunities offered. Fuller use of the Agreement has been inhibited by two particular factors: the effect on exports of the agricultural restructuring process (e.g. fruit and vegetable sector), and non-compliance with EU required quality standards (e.g. very few slaughterhouses or dairies have received EU approval).

3.3.4 CEFTA

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

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

CEFTA encompasses trade in all merchandise. For industrial products all barriers will be abolished by the end of 2000. The initial agreement for agricultural and food products introduced a system of preferential quotas. Preferences were given on a bilateral basis for selected commodities, on which tariffs had to be decreased by 10% annually, until a 50% preference was reached. It was later decided to introduce the 50% tariff reduction at once, and in some cases an even higher reduction (of 70 %).

In December 1995 agreement was reached on the further gradual liberalisation of agri-food trade until, after more negotiations, complete liberalisation would

eventually be achieved. However, the original deadline of 1998 was postponed and, at the CEFTA summit meeting in Warsaw in December 1997, changes were finally agreed on the regrouping of products into different categories with differing degrees of liberalisation:

A listing: duty free and quota free commodities as from 1.4.1998 (breeding animals, horses, rabbits, durum wheat and oilseeds);

A1 listing: duty free and quota free commodities as from 1.1.2000 (from 1.4.1998 until 1.1.2000 still within quotas: sheep and goats, live and meat);

B listing: common preferential tariffs (poultry meat 28%, wheat 15%, barley 18%, flour 15%, pastry 20%, some fruit and vegetables 5 to 10%);

B1 listing: common preferential tariffs still within quotas till 1.1.2000 (cattle, pigs, poultry 10 to 15%, carcass beef and pig meat 25%, beef and pig meat cuts 20%, milk powder 37%, all canned meat 15-18%, hops 5%);

C and D listings with bilateral preferences between CEFTA members.

Sugar and certain dairy products remained outside the listing.

3.4 Veterinary and phyto-sanitary policy

3.4.1 Veterinary policy

Approximation of Romania's veterinary legislation to the EU's mainly concerns:

- trade in live animals, semen, ova and embryos,
- trade in animal products,
- control measures,
- marketing of animal products,
- measures covering more than one sector,

- imports from third countries of live animals and animal products,
- control and protection system,
- breeding stock and pure-bred animals,
- animal welfare⁷

The National Sanitary Veterinary Agency (NSVA) - a body of the Ministry of Agriculture and Food - is working on implementing the *acquis*. However, it seems that much work has to be done, particularly to regroup the EU veterinary *acquis* to enable its meaningful integration into the Romanian national *acquis*.

When Romania joins the EU, Border Inspection Posts (BIPs) will be retained only on the land borders with Moldova, Ukraine and Serbia, at the ports on or to the Black Sea and at the international airports. At present, the posts do not have the necessary infrastructure to carry out the physical inspection of consignments. The control of imports and transit is managed through a licence system by the NSVA. There is no computerised communication network.

The animal health situation concerning outbreaks of OIE-List A diseases is satisfactory. However, vaccination of domestic pigs is practised.

Surveillance and contingency plans have to be elaborated for the OIE-List A diseases. The application of EU animal welfare standards for the keeping of pigs, calves, laying hens and laboratory animals, as well as for the transport and slaughter of animals, is still pending the full implementation of corresponding national legislation.

Romania's food industry in processed animal products is making slow progress towards meeting the EU standards and requirements laid down by various directives. Investment is necessary to modernise the agri-food industry; at present, only 8 meat plants (poultry and game) and 19 dairy plants are approved under EU veterinary standards.

3.4.2 Phyto-sanitary policy

Approximation of Romania's phyto-sanitary legislation to the EU's is now underway. It concerns mainly:

- seeds and propagation material,
- plants and plant products,
- animal nutrition,
- plant protection products,
- pesticide residues,
- community plant variety rights,
- organic farming.

Harmonization has been largely achieved for pesticide residues, only partially for animal nutrition and not at all for plant protection products and organic farming .

Legislation on seed and propagation materials is on its way. Equivalence has been recognized for many varieties, but certification services will have to be strengthened.

Legislation on plant protection products has already been implemented. For pesticide residues, the plant health regime and plant variety rights, some of the necessary legislation has been prepared but remains to be adopted and implemented.

Particularly important with regard to the inspection and control arrangements for protecting the EU external border are the implementation and enforcement of health requirements to EU standards. A special effort will have to be made by the Romanian authorities (with the support of Phare and EU experts) in upgrading the main border crossings, which will eventually become EU external borders.

⁷ For more details White Paper, Preparation of the Associated countries of Central and Eastern Europe for integration into the Internal Market of the Union, Chapter 5 "Veterinary, plant health and animal nutrition legislation", Commission of the European Communities, COM(95) 163 final/2, May 1995.

3.5 Structural policy

Most of the structural effort is oriented towards the land restructuring process (land privatisation, State enterprise privatisation and restructuring). Nevertheless, various structural measures have been set up and developed to support farm investment and the modernisation of holdings. Some fiscal measures have also been adopted in favour of agriculture.

3.5.1 The land market

The law prior to 1997 set an upper limit of 10 ha on the amount of land an individual farmer could own, and 100 ha on the size of holding or amount of land that any one family could lease. Recipients of returned land could not sell it for three years and non-returned land (i.e. owned by collective members who did not surrender land in the initial collectivisation) could not be sold for ten years. Selling (only at local level) or leasing of land had to be approved by the local commission and was subject to a series of rights of first refusal: co-owners, neighbouring owners, and the Rural Development Agency. Exchanges of land where one of the parties was a legal person required approval by the MAF or the Ministry of the Environment.

In November 1997 Law 169/1997 modified the Land Law (18/1991). Former land owners who had received a maximum of 10 ha could now ask for the return of the rest of the land they had owned, up to a maximum of 50 ha (for forest land a maximum of 30 ha). A new Law will regulate the restitution of the land for which a demand is lodged. However, this Law will encounter strong opposition, as most opposition parties and even the Democratic Party (until the end of January 1998 a member of the ruling coalition) do not want a fresh land privatisation process.

An important element of the Law passed in November 1997 is the lifting of restrictions until then imposed on the sale of land.

Parliamentary approval is still pending for a modification of the Law on Land Leasing (16/1994) proposed in an emergency procedure, which would liberalise leasing contracts.

The process of privatising the former State agricultural companies has not yet started, because of delays in passing the laws regulating the land's legal status.

All owners of arable land are required to maintain it under cultivation, subject to fines, and land can be expropriated after 2 years of non-cultivation. Many small-holders (mainly urban dwellers or elderly people) choose to lease their land. Lessees are commercial companies (ex-State farms), private agromecs and farmers associations but also individual farmers and family associations. Leasing arrangements range from all the work being done by the lessee, a system especially popular with urban owners, to the provision of certain services, those provided by farm machinery being the most common. Most contracts stipulate payment by share of output rather than cash. These arrangements give small farm owners access to the services and capital they need, as well as to the possibility of risk-sharing, while at the same time they are not committed to selling their crops to integrators.

The Romanian government is seeking to mitigate the effects of fragmentation by pressuring farmers to remain in or join some form of association, through a combination of incentives and penalties - such as access to the various State subsidies for credit, inputs and machinery services. The government is currently drafting a law to encourage the constitution of western-type co-operatives.

The land market lacks the institutional back-up of a land registration service. In fact, the creation of a cadaster covering the whole country is seen as a precondition for the development of an active land market and the government is working on this, with the help of international institutions.

3.5.2 Horizontal structural measures in favour of agricultural adjustment

With the objective of relaunching investment in agriculture, the set of policy measures adopted indirectly support this aim by providing training, information and knowledge. General measures target support for extension and market intelligence services and the setting up of commodity producers associations. Investment and modernisation support are presently limited to mountainous areas.

Within the agri-food industry, support is oriented to easing the transformation and restructuring of the former State agricultural enterprises. Efforts are therefore mainly concentrated on the privatisation and financial restructuring of industrial complexes, Romcereal and the 44 provincial Comcereal companies. In this context there are special tax provisions for State companies privatised through the MBO scheme (50% reduction) and for food-processing industries importing machinery (exemption from border tax).

3.6 Rural development policy

3.6.1 A general issue

Agriculture is central to Romania's rural economy and there is no specific body responsible for promoting rural development. However, the need for infrastructure and services in rural areas is leading to an increased interest in rural policy. The dramatic changes in the rural economy since 1989 have meant that policy-makers are now confronted with calls for a policy which embraces the economic, social and environmental aspects of rural development.

Romania perhaps presents a specific case compared with the other CECs, as agriculture's part in employment and GDP has increased since the transition. This is mostly the result of farm restructuring, based on the redistribution of land. And if redistribution has led to a high fragmentation of land ownership, with the negative effects mentioned on agricultural productivity,

it has also played a positive social role. Food security improved and the reliance of a greater number of people on agriculture contributed to keeping social tensions low.

Nevertheless, rural incomes are lower than urban incomes and the rural population is suffering from insufficient and inadequate infrastructure (communication networks, water supply) and services (education, health).

Even if at present there is no clear divide between regional and rural policy, and if priority during the first years of transition was given to restructuring agriculture and the land issue, a first attempt is now being made by Minister for Agriculture Gavrilescu: a General Directorate for Rural Development has been set up within the Agriculture Ministry. Favouring a harmonised approach to public interventions in favour of rural areas, the Directorate is aiming to draw up and implement development programmes for their multi-sectoral development. Particular attention is being paid to the provision of health and educational services, infrastructure for the inhabitants of rural areas, capital and credit resources.

Two classic measures for rural development have already been adopted concerning, first, support for small and medium enterprises and entrepreneurial skills and second, support for rural tourism infrastructure and services.

3.6.2 Specific rural policies as accompanying measures

Another major element of the rural development policy it is intended to pursue relates to less favoured areas.

Similar to the EU Less-Favoured Areas scheme, the Ministry of Agriculture has started implementing a policy for areas which suffer from natural handicaps but present a high nature value, in particular mountain areas and wet lands. Two emblematic pro-

grammes, aimed at supporting sustainable development, have already started, one in the region of the Apuseni mountains, the other in the Danube Delta. Impetus should be given to the mountain policy by the Directorate for Disadvantaged Areas of the Agriculture Ministry.

3.7 Environmental policy related to agriculture

Agri-environmental and nature protection policies are minor concerns and have a low political priority. Very little legislation has been adopted and budget expenditure targeted to environmental questions seems very low.

- Nevertheless, two types of measure can be identified. Territorial measures like the Danube Delta or the Apuseni mountains programmes have an explicitly environmental dimension. The aim is possibly to extend this model later to other mountainous areas and high nature value regions.
- Different horizontal measures are in place for restoring or maintaining soil quality. Other actions that could be cited include:
 - afforestation of degraded land or planting soil protection hedgerows,
 - soil conservation,
 - improvement of irrigation facilities,
 - agricultural methods compatible with the environment.

Some fiscal measures exist in favour of the environment (50% tax reduction on environmental investment) but the effectiveness of these measures is at present questionable.

4.

Mid term outlook

The aim of this part is to give the balance sheets of the most important Romanian agricultural products, including area, yield, production, domestic utilisation and trade up to the year 2003.

This exercise, by its very nature, is subject to many kinds of uncertainties: evolution of GDP, income distribution, consumer preferences, internal and world prices, structural evolution of agriculture, etc. A long list of factors influencing the variables that are going to be forecast could be drawn up, and every one of those factors would pose specific problems of measurement at present and of prediction for the future.

Bearing this in mind, the approach chosen is based rather on qualitative analysis and expert judgement. Therefore, the results presented here have to be interpreted carefully; they should be viewed as signs of a trend rather than as concrete values.

4.1 Overall economy

It is assumed that the political situation will be stable for the whole period up to 2003 and that the orientation along the lines of liberalisation, privatisation and macroeconomic stability will be pursued. This should lead to positive growth rates in GDP after the adjustment period of 1997 and probably 1998.

Internationally, it is assumed that the neighbouring countries will consolidate their reforms and experience sustained growth in their economies. For the rest of the world, the promising outlook forecast by the main forecasting institutes is retained here. In particular, this outlook implies increasing opportunities on world agricultural markets for exporting countries.

4.2 Agricultural policy scenario

It is assumed that agricultural policy will follow the lines of the document "Strategy of Romanian agricultural development for the short- and medium-term" elaborated for the Ministry of Agriculture and Food by a group of experts in 1997.

This document sets out the objectives that agricultural policy must pursue, and proposes instruments to achieve them. Both objectives and instruments have to be compatible with Romania's stated aim of becoming a member of the European Union, and therefore with the CAP. In this context, integration into the EU cannot be conceived without guaranteeing the competitiveness of Romanian agriculture.

4.2.1 Objectives

The strategic objective for the short- and medium-term is to increase the competitiveness of economic agents on both the internal and external markets. Market mechanisms are the foundation for creating the competitive environment.

Support policies should be aimed at the following more specific sub-objectives:

- creating and gradually increasing the number of competitive economic agents;
- ensuring food safety through the performance of the agri-food sector;
- creating and imposing a quality standards system in line with EU countries;
- creating and developing competitive markets for agricultural and agri-industrial products and for production factors;
- increasing and diversifying exports of agricultural products;

- increasing farmers' incomes in order to bring their level close to those of other social classes and to ensure a decent living standard.

Other objectives of a more horizontal character are:

- regional development, especially for the disadvantaged areas;
- fostering deficit activities;
- support of branch development for each food product;
- rejuvenating and fostering manpower in agriculture.

4.2.2 Institutions

The role of the institutions has to be adapted in order to achieve these objectives. A key element is the cadastral system which has to clarify, at national level, the ownership and the quality of all the land areas. Further functions of agricultural institutions should be:

- to provide goods, services and public information to economic agents;
- to draw up, develop and monitor agricultural strategy and policies;
- to prepare projects for agri-food quality standards (in accordance with Codex Alimentarius, FAO and OMS standards);
- to draw up lasting rural development policies.

4.2.3 Instruments

- Reform of economic incentives
 - stabilisation through public intervention within the limits of budgetary resources;
 - creation and development of specific markets, especially the land market and sectors where there are monopolies with State participation;
 - development of private or joint partnership structures (rural co-operation, associative struc-

tures, etc.) and consolidation of the professional organisations of farmers;

- creation of information infrastructures accessible to different levels of decision-making;
- liberalisation of trade, reduction of import taxes and increased export promotion.

- Reform of the policy providing financial support to farmers:

- Active policy of structural adjustment, through the privatisation/liquidation of the former State-owned agricultural enterprises and facilitating the concentration of capital in private agricultural units, with the central objective of supporting the development of competitive family farms and their associations.

4.3 Commodity projections

4.3.1 Land use

The expected distribution of land use results from the combined effect of physical constraints and the general assumptions already explained (the pace of restructuring Romanian agriculture). Therefore, only small changes are expected. Amongst arable crops, increasing specialization will lead to a reduction in some marginal types of production in favour of cereals and oilseeds (Table 45).

Table 45: Land use projection (000 ha)

	1996	2000	2003
Arable land	9,339	9,332	9,295
of which			
cereals	5,834	6,013	5,920
oilseeds	1012	991	1,100
other crops	2,493	2,328	2,275
Permanent crops	560	525	525
Permanent pastures	4890	4890	4890
TOTAL	14,789	14,747	14,710

4.3.2 Cereals

Main assumptions

- no major change in the distribution of cereals, possible seesaw movement of areas dedicated to wheat and maize;
- area: starting from the '96/'97 average, a decrease of 150,000 ha is applied over 6 years;
- yields: taking the '96-'97 average as the starting point, an increase of 0.1 t/ha/year will lead in 2003/04 to a yield of 3.30 t/ha; which is slightly above the '97 yield, which was exceptionally high;
- feed use increases following the development of livestock;
- other uses: human utilisation increases by nearly 10% to 179 kg per capita (134 kg in flour equivalent), seed constant at the '93-'97 average and waste linked to production;
- imports are strongly reduced in comparison with the beginning of the '90s, exports being the result of the calculation (Table 46-1).

Table 46-1: Cereals total

		1996	1997	2000	2003/04
area	000 ha	5834	6316	6013	5920
yield	t/ha	2.43	3.18	3.00	3.30
production	000 t	14177	20058	18056	19553
imports	000 t	146	118	150	50
exports	000 t	1740		1219	1811
available	000 t	16183		16988	17792
utilization					
o.w. feed	000 t	10292		9793	10393
o.w. seed	000 t	686		919	919
o.w. other uses	000 t	1410		2355	2355
o.w. human	000 t	3795		3920	4126
kg/capita	kg	168		175	179
selfsufficiency	%	88		106	110

The result is the stabilization of cereals production at the highest levels reached during the '90s. As the utilization ratio of feedstuff by livestock improves, feed will not exceed 10.5 mio t. Romania consolidates its net exporting position with exports at 1.8 mio t.

4.3.3 Oilseeds

Main assumptions

- area: starting from the '96 - '97 average a gradual increase of 170,000 ha over 5 years was applied, mainly sunflowers;
- yields: taking the '95 - '96 average as the starting point, an increase of 1% per year will lead to a yield increase of 1.33 t/ha in 2003, which remains around '94 and '95 yields;
- imports are stable at '94 - '96 level;
- seed use increases following the development of area;
- crushing increase is in line with production trend;
- exports are the result of the calculation (Table 46-2).

Table 46-2: Oilseeds

		1996	1997	2000	2003/04
area	000 ha	1012	849	991	1100
yield	t/ha	1,20	1,05	1,29	1,33
production	000 t	1212	890	1275	1458
imports	000 t	2	26	31	31
exports	000 t	22	41	28	99
available	000 t	1192		1278	1389
utilization					
o.w. seed	000 t	18		19	20
o.w. processing	000 t	1152		1240	1350
o.w. other uses	000 t	22		19	19
selfsufficiency	%	102		100	105

Production increases by nearly 200,000 t in response to growing internal demand and export opportunities, Romania consolidating its self-sufficiency.

4.3.4 Sugar

Main assumptions

SUGARBEET

- area: stabilisation at 130,000 ha in 2003;
- yields: starting from the '95-'97 average, then a gradual increase of between 0.5 and 0.9 t/ha/year, leading in 2003/04 to a yield of 24.5 t/ha, or more or less the same level as in 1994, which was the record yield of the decade;

SUGAR

- sugar content: taking the '95-'97 average as the starting point, then a gradual increase of between 0.6 % and 1 % per year, leading in 2003/04 to a sugar content of 12% and a sugar yield of 3.0 t/ha (EU-15 today 7.8);
- exports are practically non-existent and human consumption recovers;

- imports are the result of the calculation (Table 46-3).

Although sugar production in 2003/04 will reach 385 000 t, this will only lead to 60% self-sufficiency and Romania will still import about 250 000 t of refined sugar (mainly from Moldova) to meet its needs.

4.3.5 Wine

Main assumptions

- area: stabilisation in vineyard area;
- grape yields: slight increase to 6.0 t/ha in 2003/04;
- wine yields: slight increase from 24.0 hl/ha in 1996/97 to 25.0 hl/ha in 2003/04;
- imports: stabilized at 104,000 hl, mostly table wine;
- exports: the rate of increase of exports will be curbed;
- consumption slightly increases to 26 l/head following the upward trend of the last few years (Table 46-4).

Table 46-3: Sugar beet and sugar

		1996	1997	2000	2003/04
area	000 ha	136	129	132	130
yield	t/ha	20,9	21,1	22,1	24,5
production	000 t	2848	2726	2906	3179
sugar					
production	000 t	237		273	385
yield	t/ha	1,7		2,1	3,0
yield	% sugar	8,3		9,4	12,1
imports	000 t	452	215	311	252
exports	000 t	2	1	1	1
utilization	000 t	553	560	583	636
kg/capita	kg	24,5	24,8	26,0	28,5
selfsufficiency	%	43		47	61

Table 46-4: Wine

Vineyards		1996	1997	2000	2003/04
area	000 ha	242	255	255	255
yield	t/ha	5,9	4,6	5,5	6,0
production	000 t	1431	1170	1403	1530
grapes for wine	000 t	981	819	982	1071
wine					
production	000 hl	5800		6248	6375
yield	hl/ha	24,0		24,5	25,0
imports	000 hl	57		104	104
stocks	000 hl	0		99	101
exports	000 hl	485		540	580
utilization	000 hl	5372		5712	5798
l/capita	l	23,8		25,5	26,0
selfsufficiency	%	108		109	110

Wine production in 2003/04 is forecast at nearly 6.4 Mio hl, which is 0.6 Mio hl above domestic consumption, resulting in a 110 % self-sufficiency rate, more or less the same as today.

4.3.6 Livestock

Main assumptions

- cattle numbers: 1997 is the lowest point and in 1998 there is some recovery; the number of cattle will increase by 1%/year until 2003, still below the levels of the early '90s;
- cow numbers: taking as starting point the 1996-1997 average and then a decrease of 1% to 2% per year;
- pigs: starting point 1998, then a 1% to 2.5% increase per year;
- poultry: starting point 1998, then a 4% increase per year to take account of the opening of the CEFTA markets;
- sheep & goats: starting point 1998, then a 1 % to 2.5% increase per year until 2003 (Table 47-1).

Table 47-1: Livestock

		1996	1997	2000	2003
cattle	000	3236	3284	3350	3452
o.w. cows	000	1769		1701	1601
pigs	000	7093	7273	7419	7873
poultry	Mio	78478	78500	84906	95507
sheep & goats	000	10317	9647	9743	10340

4.3.7 Milk

Main assumptions

- milk yields will increase annually by 1.5 % in 1998 to 3% in 2003, and will reach 3.30 t/cow, resulting in a milk production of 5.3 Mio t;

- feed use will increase slightly (+1% per year) due to the intensification and specialisation process of dairy production;
- human consumption per capita will increase by 1.4%/year to 200 kg/capita in 2003;
- imports are stable at the '94-'96 level;
- exports are the result of the balance sheet (Table 47-2).

Table 47-2: Milk

fluid milk		1996	1997	2000	2003
cows	000	1772	1769	1701	1601
yield	kg/cow	2851		3040	3306
fluid milk prod.	000 t	5052		5170	5292
imports	000 t	55		46	46
exports	000 t	22		10	17
available	000 t	5085		5207	5321
utilization					
o.w. feed	000 t	683		743	765
o.w. waste	000 t	99		96	96
o.w. h.utilization	000 t	4303		4368	4460
kg/capita	kg	190		195	200
selfsufficiency	%	99		99	99

4.3.8 Beef/veal

Main assumptions

- total slaughters are based on historical ratio between cattle and slaughter numbers, with the increased importance of the suckler herd. This ratio has slightly increased (from 40 to 42%);
- average weight is lower than the EU average due to an apparently important veal production; this average weight increases over time to 180 kg in 2003;
- human consumption per capita is forecast to slightly increase;
- exports were kept nearly constant at the '96 level;

- imports are the result of the balance sheet (Table 47-3).

Table 47-3: Beef-veal

		1996	1997	2000	2003
cattle	000	3496	3236	3350	3452
total slaughters	000	1326	1562	1374	1450
average weight	kg	173	149	170	180
production	000 t	229	233	233	261
imports	000 t	9		28	22
exports	000 t	4		5	5
utilization	000 t	234		256	278
kg/capita	kg	10,0		11,0	12,0
selfsufficiency	%	98		91	94

Total beef production could reach 261 000 t; this is mainly the result of an increase in the average weight of animal slaughtered. Self-sufficiency will not improve.

4.3.9 Pigmeat

Pigmeat is the main product in the meat sector in terms of both production and consumption (overall and per capita).

Main assumptions

- the slaughter number is determined by the historical production cycle, 10 months, combined with an increase in total pig numbers (breeders/fatteners) against '98;
- average weight will increase to 87 kg, closing the gap with the present EU average (90 kg);
- a recovery in human consumption per capita, back to the '91 level (33 kg/head);
- exports were kept constant at 41,000 t;
- imports are the result of the balance sheet (Table 47-4).

Table 47-4: Pigmeat

		1996	1997	2000	2003
pig numbers	000	7960	7093	7419	7873
total slaughters	000	8086	8021	8161	8660
average weight	kg	84	86	86	87
production	000 t	679	693	702	753
imports	000 t	5		59	48
exports	000 t	35		41	41
utilization	000 t	649		719	761
kg/capita	kg	27,5		31,0	33,0
selfsufficiency	%	105		98	99

Pig production is expected to increase by more than 50 000 t in comparison with the '97 level. The pigmeat market will be nearly self-sufficient. The slight decrease in self-sufficiency is due to higher domestic consumption, but also to higher imports.

4.3.10 Poultrymeat

Main assumptions

- the slaughter number is determined by the historical production cycle, taking into account the development of turkey production;
- average weight will increase slightly from 1.19 kg in 1997 to 1.28 kg in 2003, again taking into account the shift towards turkey;
- human consumption per capita will continue its upward trend;
- imports are kept constant at the '93-'95 average, 34 000 t;
- exports are the result of the balance sheet (Table 47-5).

Table 47-5: Poultry

		1996	1997	2000	2003
poultry numbers	Mio	80524	78478	84906	95507
total slaughters	Mio	250911	217980	275943	310399
average weight	kg	1,17	1,19	1,25	1,28
production	000 t	293	259	345	397
imports	000 t	4		34	34
exports	000 t	1		9	30
utilization	000 t	295		370	401
kg/capita	kg	13,1		16,5	18,0
selfsufficiency	%	99		93	99

Poultrymeat production could reach 397 000 t in 2003, which is 35 % higher than the 1996 figure. The future development of the sector will be demand-driven. Consumption increase will be in line with production. Exports to CECs could reach a moderate level, Romania becoming self-sufficient.

4.3.11 Total meat

As a result of the beef, pig and poultrymeat projections and also taking sheep and goatmeat into account, total meat production will increase by more than 18 % between 1997 and 2003, utilisation increasing by a similar amount. Total meat utilisation per capita will reach 66 kg/head, to be compared with today's EU-15 average (90 kg/head) and the present figure for Greece (76 kg/head). As at present, pigmeat will represent half of this utilisation, and red meat less than a quarter of the per capita utilization.

Self-sufficiency, which is today around 102%, will remain stable (Table 47-6).

Table 47-6: Total meat

		1996	1997	2000	2003
production (*)	000 t	1261	1249	1350	1482
imports	000 t	17		120	104
exports	000 t	41		55	76
utilization	000 t	1238		1345	1440
kg/capita	kg	54,5		62	66
o.w. beef	kg	10,0		11	12
o.w. pigmeat	kg	27,5		31	33
o.w. poultrymeat	kg	13,1		17	18
o.w. sheep & goats	kg	2,8		3	3
selfsufficiency	%	102		100	103

(*) sheep and goatmeat production estimated at 70 000 t in 2000 and 2003

Annex 1: Regional maps

Regional GDP per capita (1995)

Share of agriculture in regional GDP (1994)

% of unemployment at regional level (1995)

Agricultural employment as % of total employment at regional level (1994)

Population density per km² (1994)

Rural population at regional level (1996)

Regional breakdown of total cereals area (1995)

Regional breakdown of total oilseed area (1995)

Regional breakdown of total vineyard area (1995)

Regional breakdown of total orchard area (1995)

Regional breakdown of total vegetable area (1995)

Regional breakdown of total cattle (1995)

Regional breakdown of total pig population (1995)

Regional breakdown of total poultry meat production (1995)

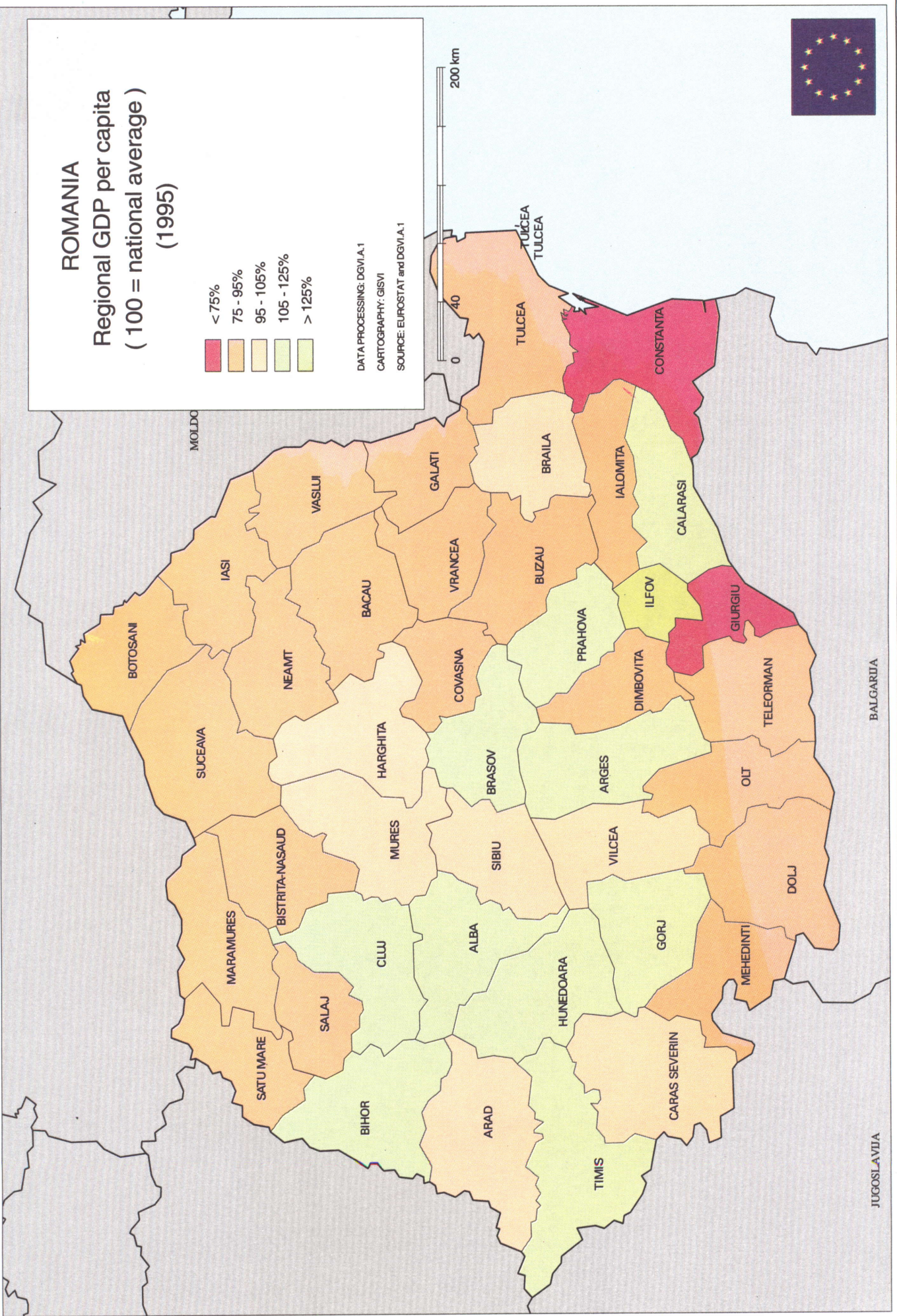


ROMANIA

Regional GDP per capita (100 = national average) (1995)

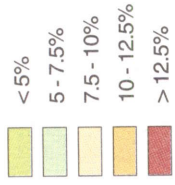


DATA PROCESSING: DGVI/A.1
CARTOGRAPHY: GISVI
SOURCE: EUROSTAT and DGVI/A.1

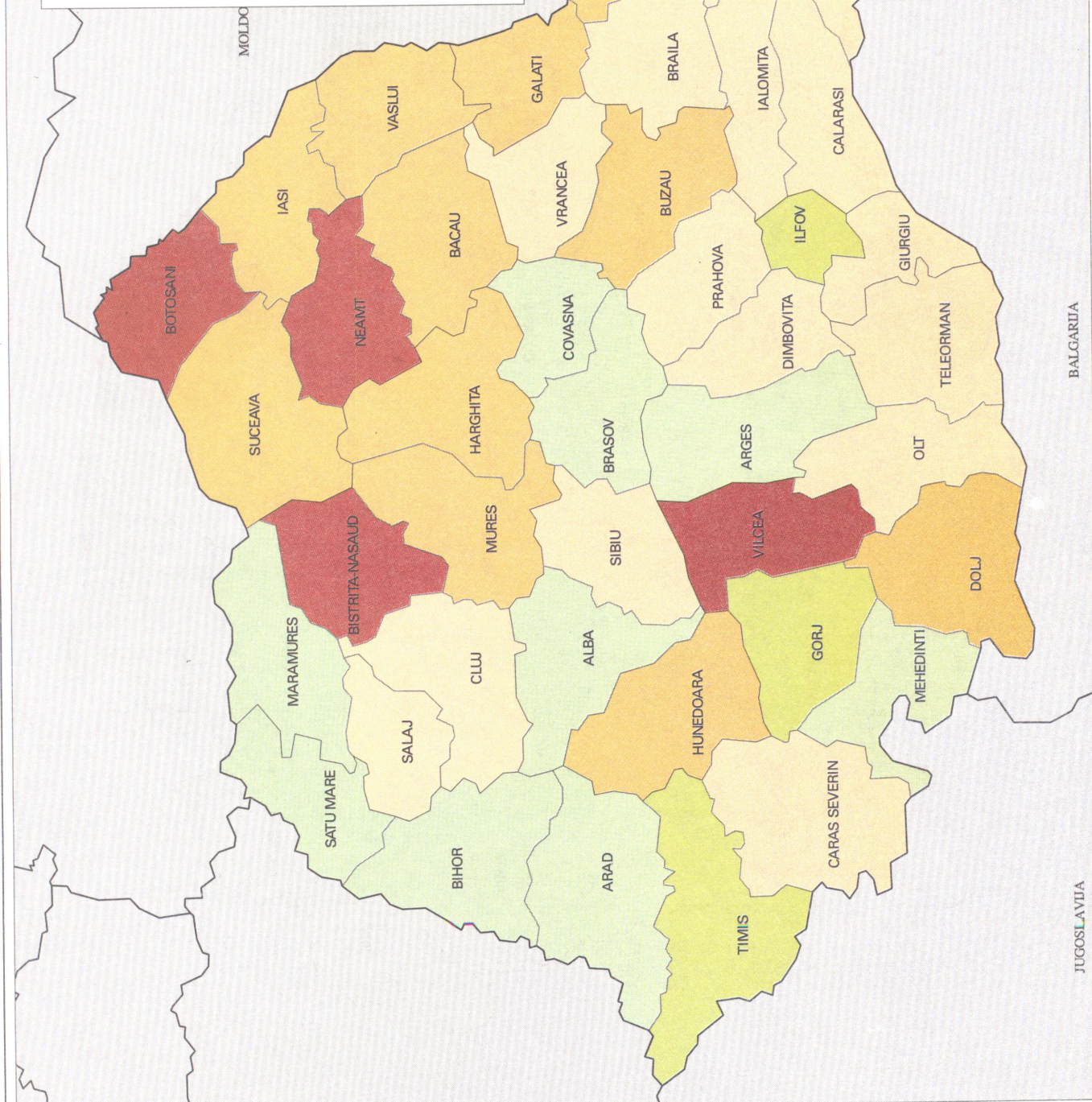




ROMANIA % of unemployment at regional level (1995)

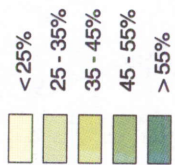


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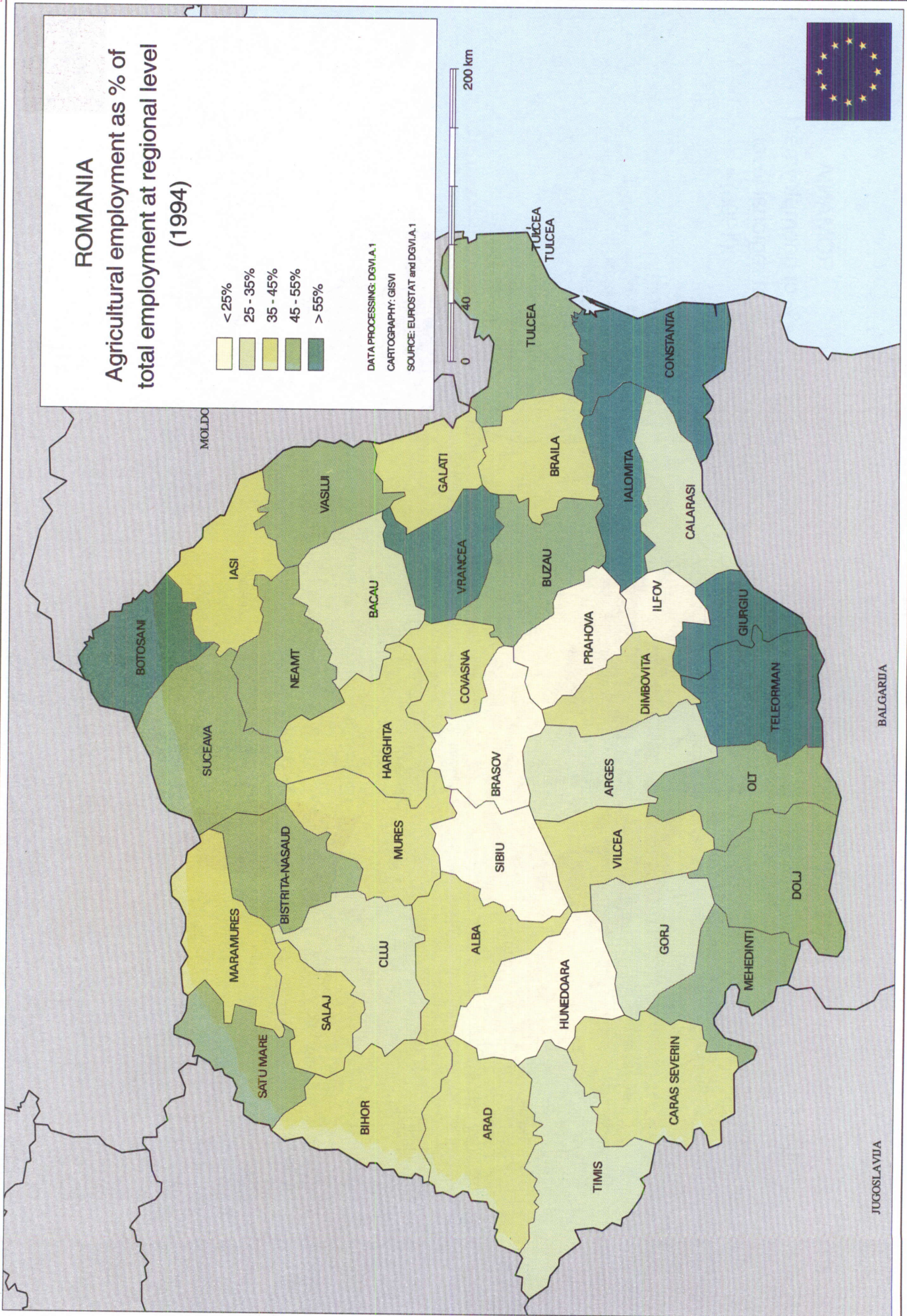


ROMANIA

Agricultural employment as % of total employment at regional level (1994)



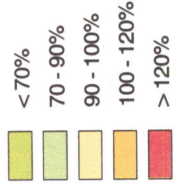
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CARTOGRAPHY: GISVI
SOURCE: EUROSTAT and DGVI.A.1



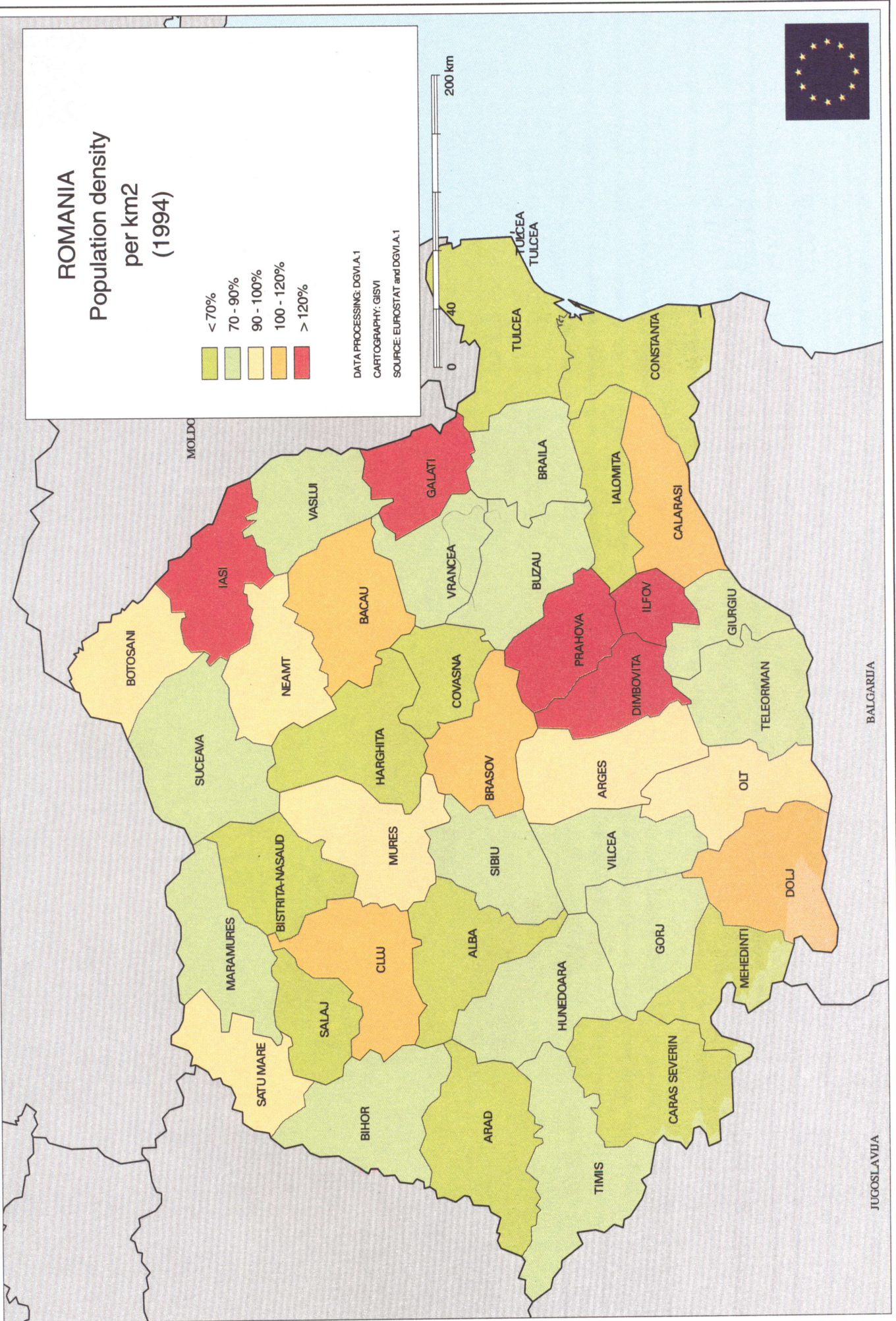


ROMANIA

Population density per km² (1994)



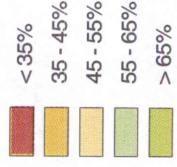
DATA PROCESSING: DGV.I.A.1
CARTOGRAPHY: GISVI
SOURCE: EUROSTAT and DGV.I.A.1



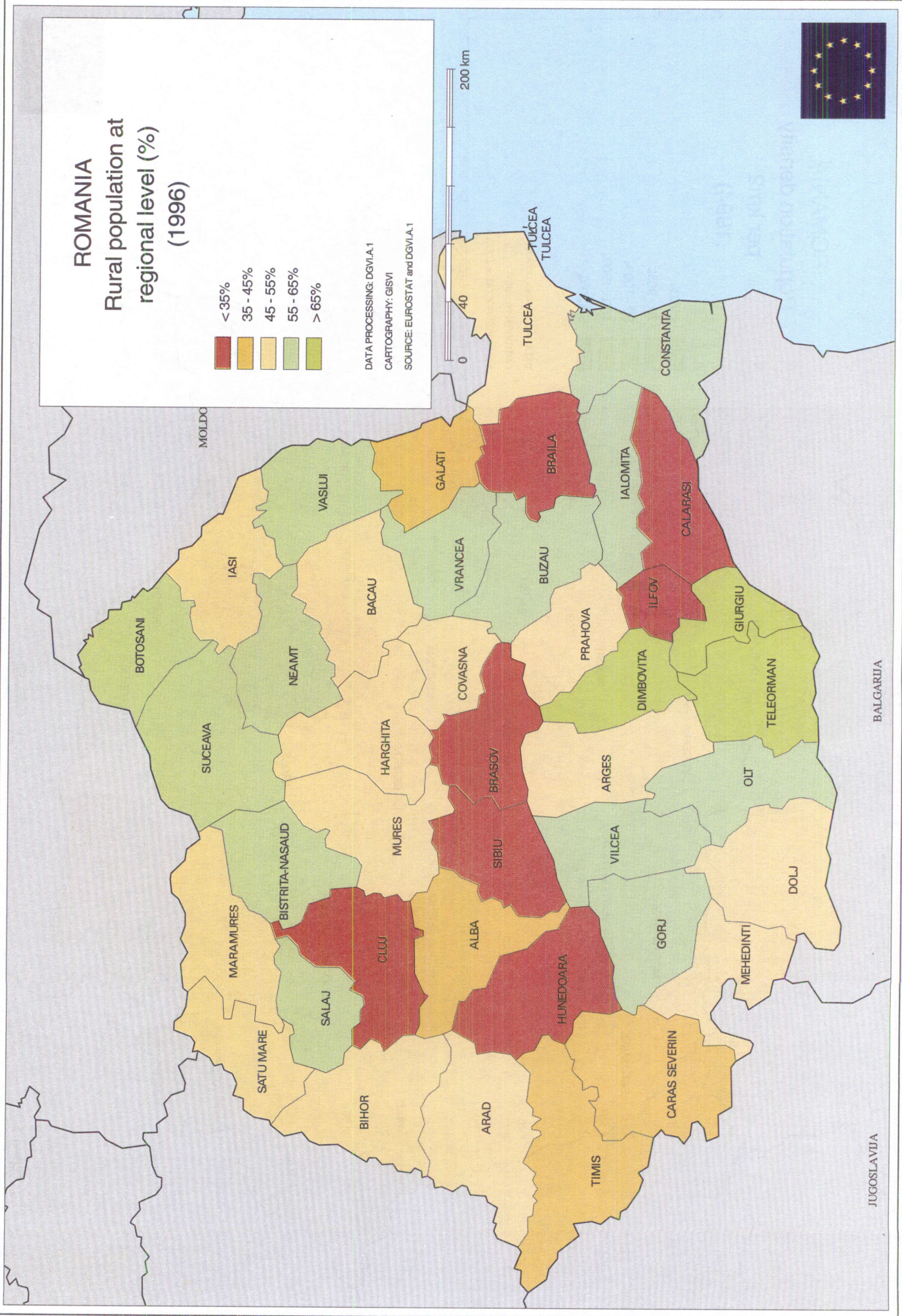


ROMANIA

Rural population at regional level (%) (1996)



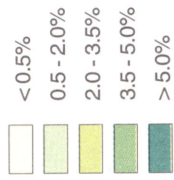
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SOURCE: EUROSTAT and DGVI.A.1



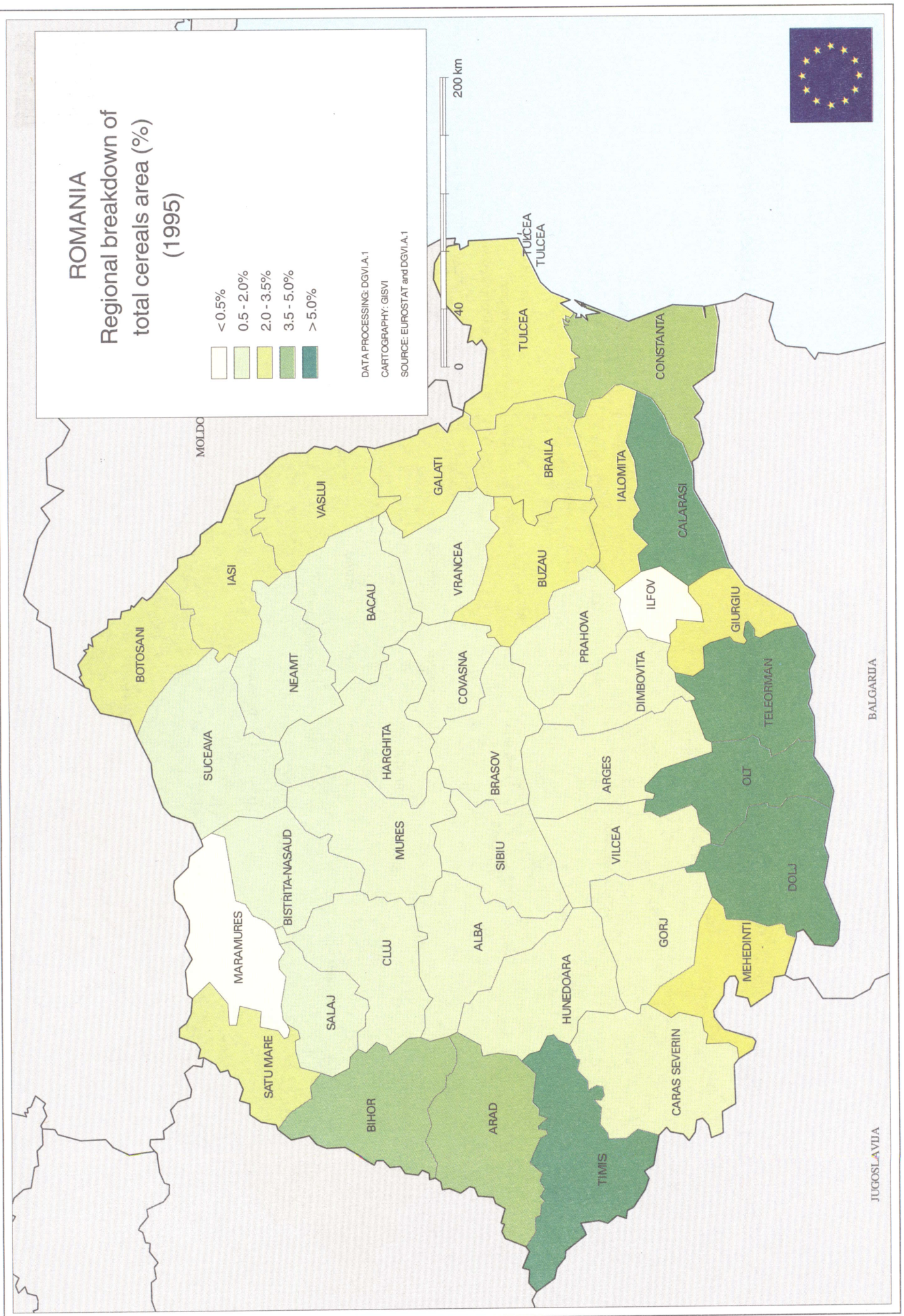


ROMANIA

Regional breakdown of total cereals area (%) (1995)

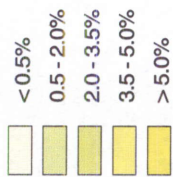


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CARTOGRAPHY: GISVI
SOURCE: EUROSTAT and DGVI/A.1



ROMANIA

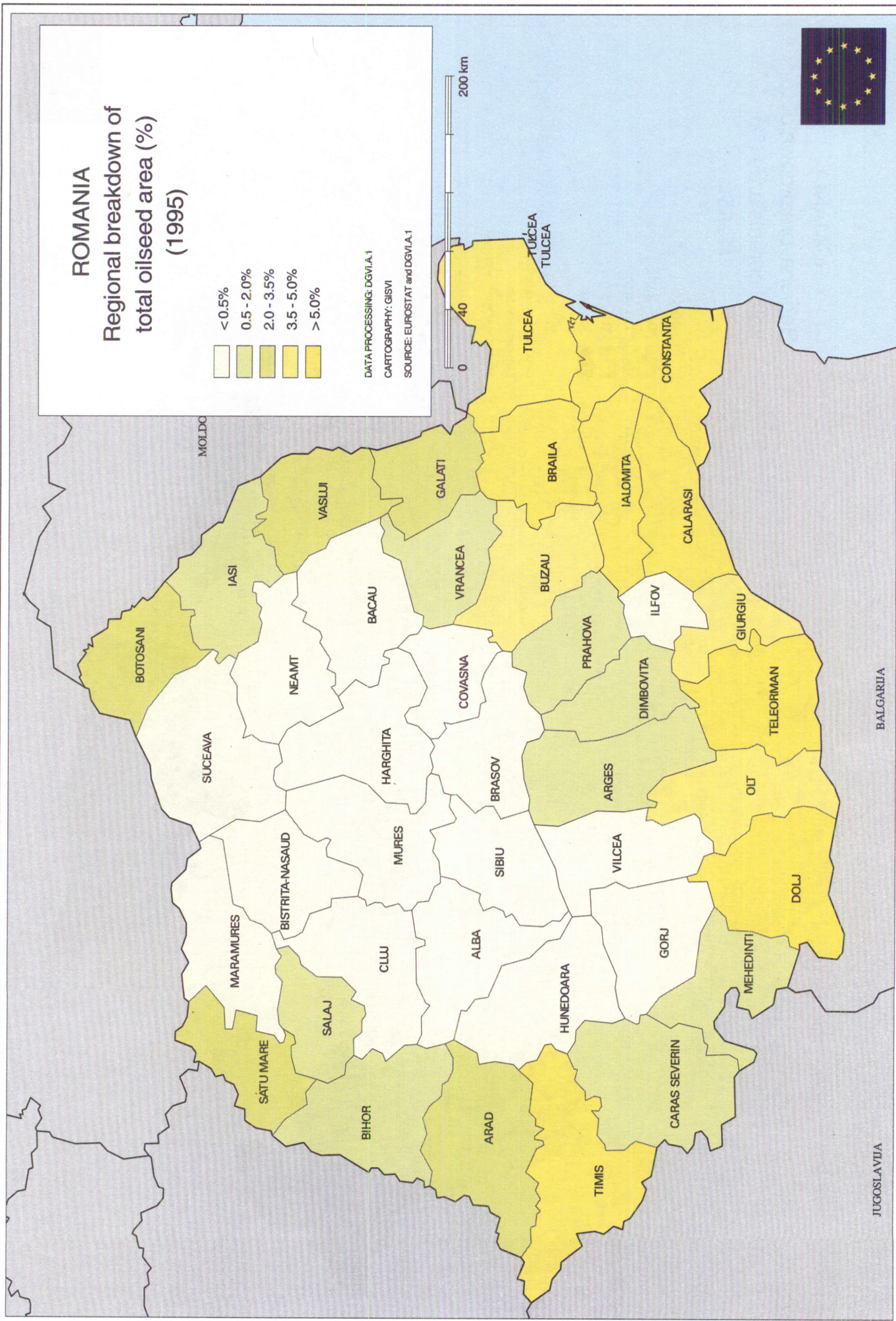
Regional breakdown of total oilseed area (%) (1995)



DATA PROCESSING: DGVI/A.1

CARTOGRAPHY: GISVI

SOURCE: EUROSTAT and DGVI/A.1



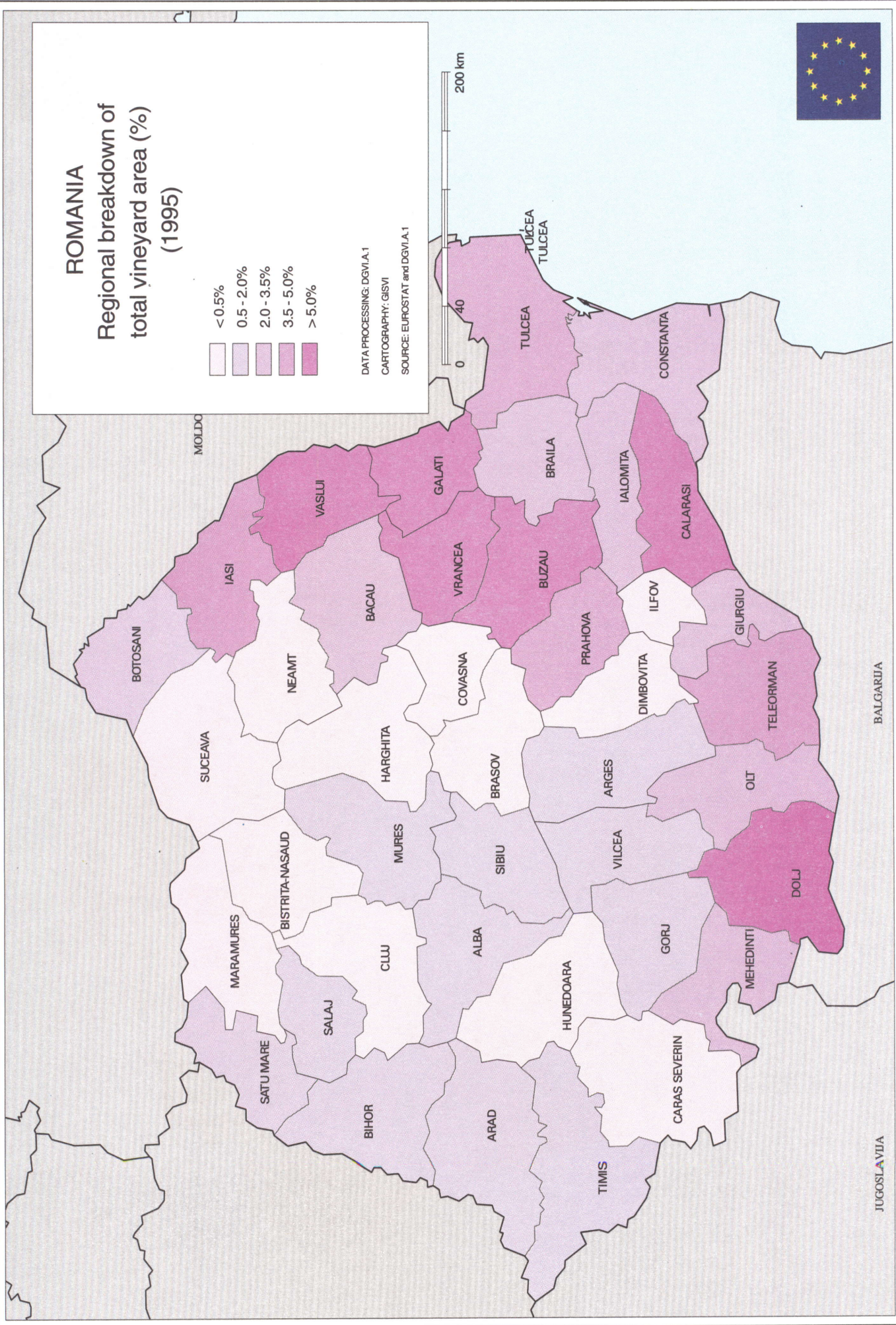
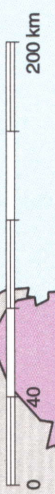


ROMANIA

Regional breakdown of total vineyard area (%) (1995)



DATA PROCESSING: DGVI/A.1
CARTOGRAPHY: GISVI
SOURCE: EUROSTAT and DGVI/A.1



ROMANIA

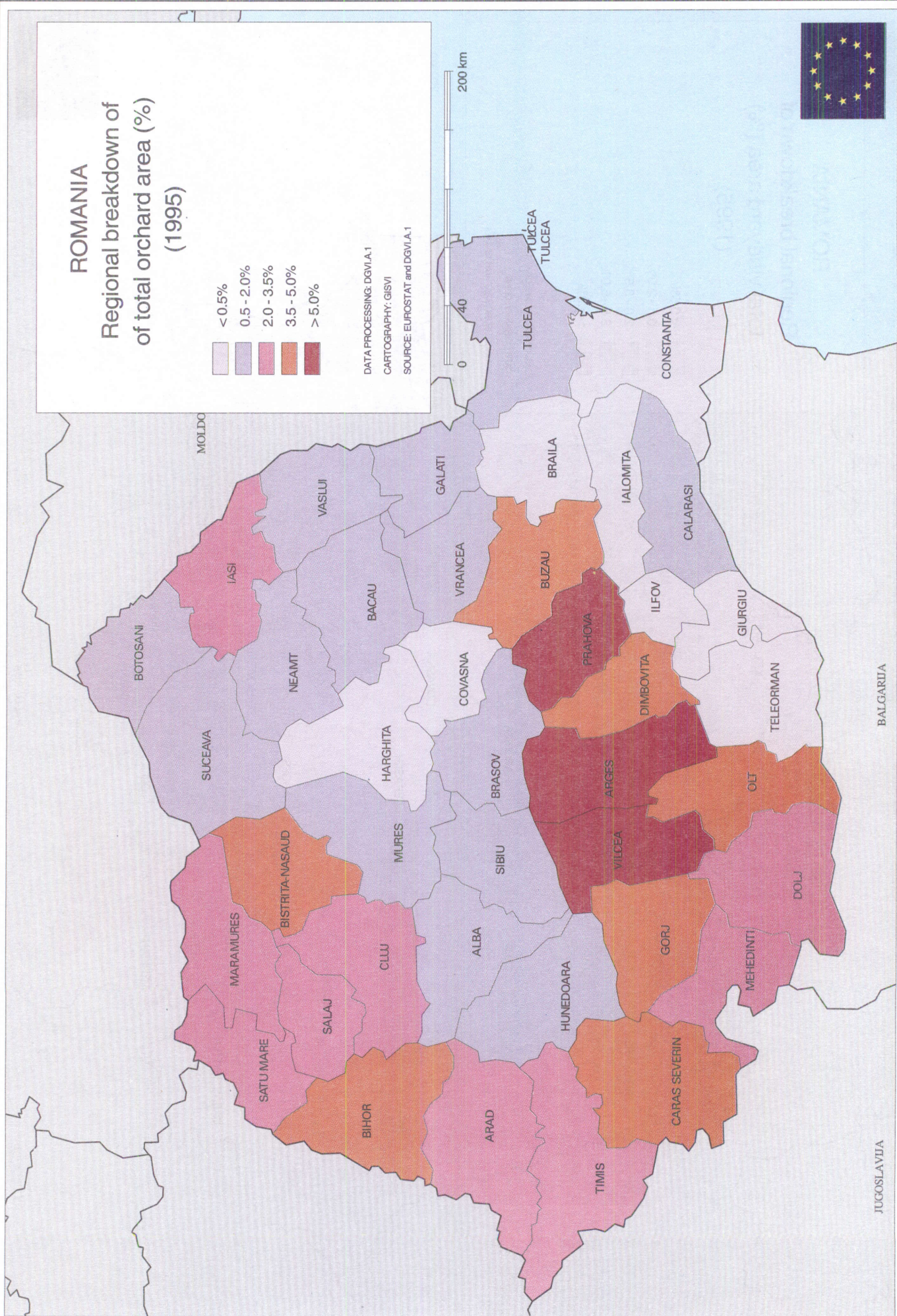
Regional breakdown of total orchard area (%) (1995)



DATA PROCESSING: DGVI/A.1

CARTOGRAPHY: GISVI

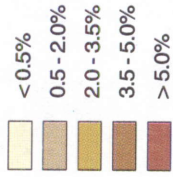
SOURCE: EUROSTAT and DGVI/A.1



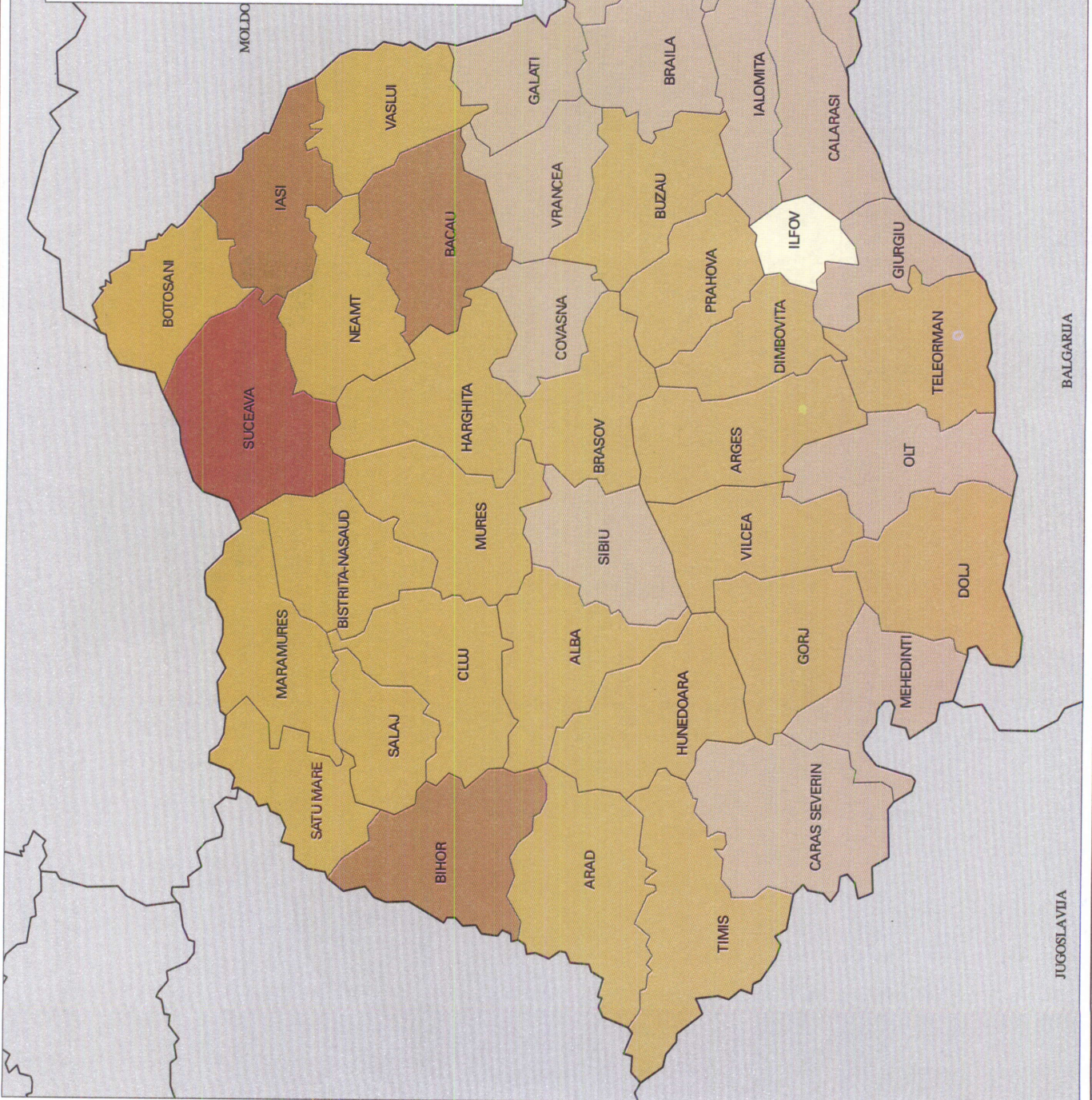


ROMANIA

Regional breakdown of total cattle (%) (1995)



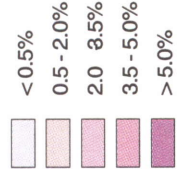
DATA PROCESSING: DSVI/A.1
CARTOGRAPHY: GISVI
SOURCE: EUROSTAT and DSVI/A.1



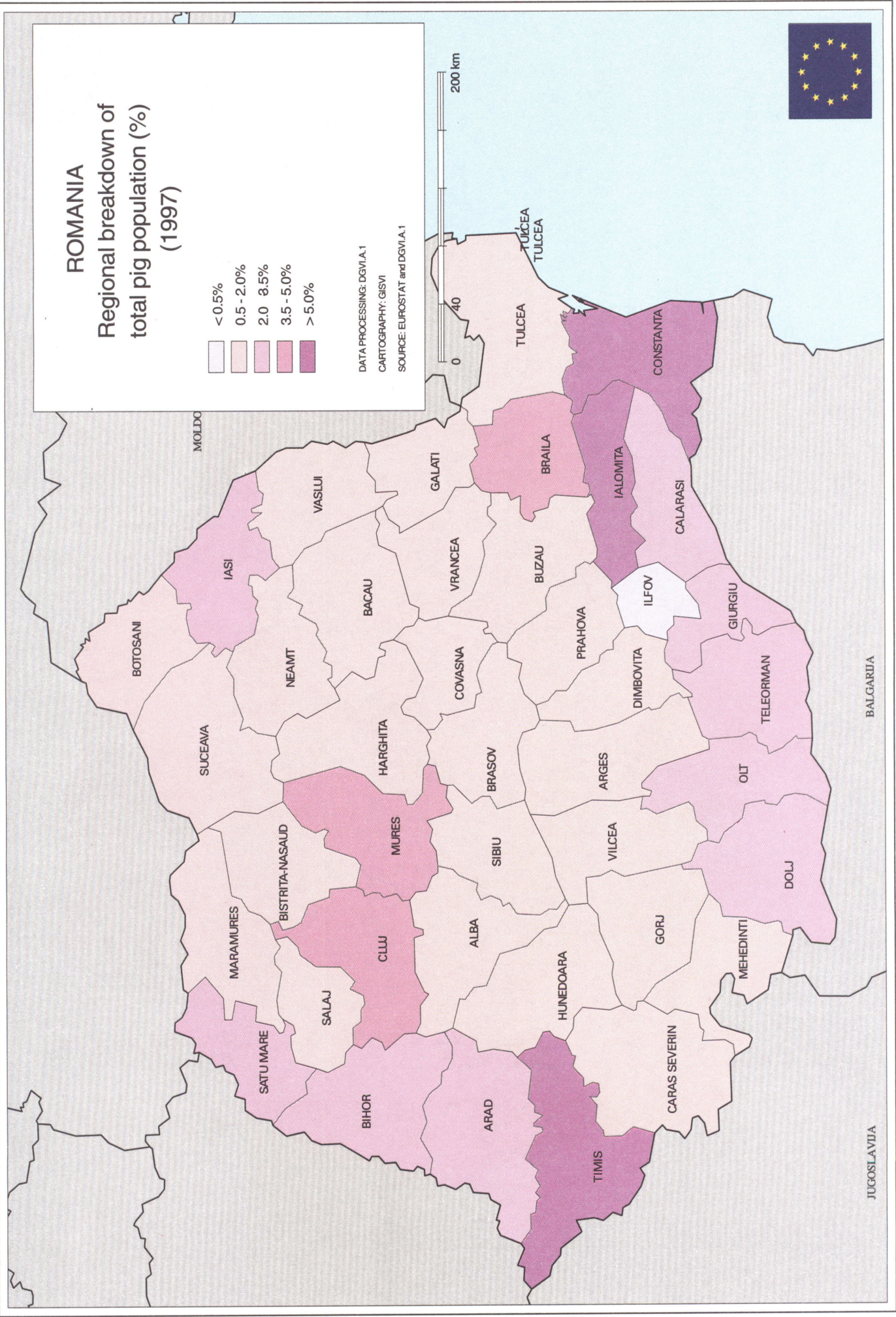


ROMANIA

Regional breakdown of total pig population (%) (1997)



DATA PROCESSING: DGV/IA.1
CARTOGRAPHY: GISVI
SOURCE: EUROSTAT and DGV/IA.1



BALGARIA

JUGOSLAVIA

MOLDO

Annex 2: Sources and Glossary

6.1 Main sources used

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6.2 Glossary & abbreviations

ANPA National Agency for Agricultural Products

BA Banca Agricola

CECs Central European Countries

CAPs Agricultural Production Co-operatives

CEFTA Central European Free Trade Agreement

CMEA Council for Mutual Economic Assistance

cw carcass weight

EBRD European Bank for Reconstruction and Development

EU European Union

FDI Foreign Direct Investment

IMF International Monetary Fund

GAO Gross Agricultural Output

GATT General Agreement on Tariffs and Trade

GDP Gross Domestic Product

LFA Less Favoured Area

MAF Ministry of Agriculture and Food

MBO Management Buy Out

MFN Most Favoured Nation

NBR National Bank of Romania

NIS Newly Independent States (of the former Soviet Union)

OECD Organisation for Economic Co-operation and Development

o.w. of which

POF Private Ownership Fund

PPP Purchasing Power Parity

QFD Quasi fiscal deficit

SMEs Small and Medium sized Enterprises

SOF State Ownership Fund

TAIEX Technical Assistance and Information Exchange Office

UAA Utilised Agricultural Area

WTO World Trade Organisation

Annex 3: Geography, demography and administration

Geography

Romania is situated in the south-eastern part of Europe, between 43°30 and 48°15'N and 20°15' and 29°41'E. The total area of the country is 238,391 square kilometres, about the same as the United Kingdom and a little over 7% of the EUR-12 area.

Its landscape is varied, with a mountainous arch containing the Eastern and Southern Carpathians, an extra- and intra-Carpathian hilly zone, with the Transylvanian plateau and large pasture areas in the Southern, Western and Eastern parts of the country. Hills and plateau cover about 37% of the country's total area and the mountains and plains about 30% each.

The climate is temperate continental with cold winters and dry summers. Annual average temperatures range between 8°C and 11.5°C, with large seasonal variations (between -38°C and +45°C). Annual average rainfall is:

- 350-400 mm on the Black Sea shore,
- 400-600 mm on the Danube Plain,
- 500-700 mm on the Western Plain,
- 00-800 mm in the hilly regions and
- 800-1,000 mm in the mountains.

The soil moisture deficit is relatively high, especially in the south, south-east and Moldavia. The dry period usually starts in mid-July and lasts until early or mid-September.

General infrastructure

Romania's transport and communications infrastructure is inadequate and outdated, and represents a major handicap to development.

Railways: The rail network at the end of 1995 had 11,376 km: 10,889 km normal and 427 km narrow railways; 7,923 km were single track and 2,966 km double track and only 3,866 km were electrified. Rolling stock at the end of 1995 comprised 4,370 locomotives, of which 1,060 were electric and 2,357 diesel. There were 141,867 goods vans and 6,666 wagons for passenger trains. Maintenance and replacement of old equipment needs urgent action: more than 25% of the locomotives in use have exceeded their expected service life.

Projects to upgrade track and improve border customs clearance are being implemented with EU assistance, as part of a longer-term project to improve rail connections between Frankfurt and the Black Sea port of Constanta.

Waterways total 1,690 km, of which the Danube has 1,075 km, the Danube-Black Sea canal (opened to traffic in 1984) 68 km and the Poarta Alba-Navodari canal 23 km. Romania has 3 seaports, 6 sea-river ports and 26 river ports. The Black Sea coastline is 234 km long.

Air transport: there are 5 international and 12 domestic airports.

Roads: Romania has one of the most limited road networks in Europe, with only 113 km of motorways. Of the 72,859 km of roads at the end of 1995, 17,608 were "modernised" and 20,397 km were lightly asphalted. Of the 14,683 km of national roads, including highways and European motorways, 13,283 km were "modernised".

4,325 km of the 58,176 km of country and communal roads were "modernised" and 19,210 km were lightly asphalted. About 60% of the country's bridges are technically inadequate.

Important projects to upgrade highways to international standards and to repair bridges are being financed by the World Bank, the European Bank for Reconstruction and Development (EBRD) and the European Investment Bank (EIB). The government announced plans to spend \$8bn on road projects by 2005.

The density of public roads per 100 km² is 30.6 km.

Demography

On December 31 1996, Romania's population was estimated at 22.6 million, or 6.1% of the EUR-15 population. From 1970 to 1990 the population grew by about 3 million but since 1990 has decreased by 600,000.

Ethnic groups

	Inhabitants (1000)	%
Romanians	20,409	89.5
Hungarians	1,625	7.1
Germans	119	0.5
Gypsies	401	1.8
Others (1)	256	1.1
Total	22,810	100

(1) Mainly Turks, Ukrainians, Serbs, Bulgarians, Armenians and Czechs

Source: Romanian Census 1992

The structure of the population by age group is:

- 20% under 15 years,
- 68% between 15 and 64,
- 12% over 64.

The urban population represents 55% of the total population, compared with 47% in 1989.

Average life expectancy (1993-1995) was:

	Total	Male	Female
Total	69.40	65.70	73.36
Urban	70.05	66.33	73.95
Rural	68.46	64.70	72.66

Between 1989-1996 the demographic trends were characterised by the following rates (per 1000 inhabitants):

	1989	1990	1991	1992	1993	1994	1995	1996
Children born								
alive	16.0	13.6	11.9	11.4	11.0	10.9	10.4	10.12
Death	10.7	10.6	10.9	11.6	11.6	11.7	12.0	12.7
Natural increase	5.3	3.0	1.0	-0.2	-0.6	-0.8	-1.6	-2.5

The rate of natural increase since 1992 has been negative due to the falling birth rate and the increase in the death rate. Infant mortality is decreasing, according to the yearly rates between 1989 and 1995, but it increased in 1996.

Infant mortality rate:

	1989	1990	1991	1992	1993	1994	1995	1996
	26.9	26.9	22.7	23.3	23.3	23.9	21.2	22.2

Between 1990 and 1995 emigration totalled 233,508, of which 52% were women. Main countries of destination were: Germany, Hungary, Austria, France, USA and Canada. During the same period 21,683 persons returned to Romania, of whom 75% were Romanian and 25% from other ethnic groups.

Administration

The country is divided into 41 counties plus the municipality of Bucharest. Of the counties:

- the 15 (37%) smallest had a resident population per county of less than 400,000 in 1996;
- 13 (32%) had a population of between 400,000 and 600,000;
- 11 counties (27%) had between 600,000 and 800,000 inhabitants and
- 2 (5%) had more than 800,000 inhabitants.

In Romania there are 260 towns:

- 151 towns (58 %) have less than 20,000 inhabitants each;
- 84 (32%) have between 20,000 and 100,000;
- 17 (7%) have between 100,000 and 300,000 and
- 7 towns (3%) have between 300,000 and 400,000.
- Bucharest, the capital, has 2 million inhabitants.

Administration is carried out by the local councils (county, town, city or village council). The executive at county level is the "prefectura". Its leader (the "prefect") is appointed by the government and plays an important role, in particular in relation to land reform. At town and village level, the executive is the local council, which is an elected body. However, each Ministry has its own executive and guiding bodies at local level.

At county level, the Ministry of Agriculture is represented by the General Division of Agriculture and Food and the Veterinary and Hygiene Control Offices.

The rural population in 1996 represented 45% of the total, distributed in 2,586 communes or 13,000 villages.

Annex 4:

Phare Assistance to agriculture

1992: "Support to the privatization process of agriculture and agri-food industry": 32.3 MECU

Important program that end up during during spring 1997 and made of 9 sub-programmes:

Guarantee Fund for rural credit	9 MECU
+ technical assistance for training bank employees	1 MECU
Land reform TA, training, equipment	
(Agricultural crop forecasting by satellite: TA and equipment)	3.1 MECU
Private sector development of markets & market information systems	4.1 MECU
Privatisation of agri-industries	2 MECU
Support services to private farmers (extension, mountain farming)	2.6 MECU
Business consultancy services for farmers/agri-business	3 MECU
Restructuring/privatisation of state services and sectoral businesses	4.5 MECU
Programme management/reserve	2.8 MECU

1993: "Land reform and land information system": 5 MECU

surveyor materials for surveyor and cartography computerization	3.7 MECU
Technical assistance and training	1.3 MECU

1995: "Agriculture and rural development": 10 MECU

This programme has been strongly re-orientated at spring '97 according to the new guidelines of the Minister of Agriculture. Among others could be mentioned:

Agriculture extension services:	1.5 MECU
Pilot farms for demonstration:	0.5 MECU
Flood assistance:	+/-3.5 MECU
EU alignment and policy reform	2 MECU

1997: "harmonisation of agri-food standards": 3.9 MECU

This last programme is presently starting and has two components:

– support to Agriculture Ministry	1.9 MECU
– technical assistance to agri-food enterprises	
2 MECU	

1998: Priorities

The following priorities have been identified for the '98 PHARE programme:

- veterinary and phytosanitary alignment (including border post improvements)
- preparation/ implementation of alignment strategies in other sectors.

Annex 5: The veterinary sector in Romania

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

1. Veterinary Education and Training Sector

- 1.1 Four state veterinary medicine faculties in Bucharest, Timisoara, Iasi and Cluj intake about 350 veterinary students per year. Veterinary training and qualification lasts six years (12 semesters). The number of graduates annually represent (0.0015% of the Romanian population, certainly sufficient to cover the future needs of the veterinary profession in Romania. Plans to open two more, privately operated, veterinary faculties should therefore be reviewed.
- 1.2 No veterinary faculty in Romania has as yet undergone an evaluation procedure with regard to the application of EU training schemes and teaching programmes.
- 1.3 Possibilities for postgraduate training are either by postgraduate studies at the faculties or by carrying out veterinary activities at the state veterinary laboratories or within the state veterinary service for 2 more years following graduation. There are also 3 to 6 month courses for state veterinary officials. TAIEX seminars and workshops as well as various Phare projects (e.g. Tempus, funded by Phare) supplement continuous professional development at present and these activities should continue, particularly on the implementation and application of the EU veterinary acquis.

2. The State Veterinary Sector

- 2.1 The central veterinary authority of Romania is the National Sanitary Veterinary Agency (NSVA), which is part of the Ministry of Agriculture and Food. At central level the agency has 3 divisions and directs 41 veterinary health divisions at divisional level, 425 veterinary inspection offices at district level, 16 state veterinary clinics and 2959 veterinary offices at community level. In general terms, the veterinary services are responsible for animal health and welfare and public health, including border controls.
- 2.2 Veterinary legislation is in the process of harmonisation. A systematic analysis of the Romanian veterinary acquis compared with the veterinary measures listed in the EU White Paper has been carried out. On the basis of this analysis, difficulties and problems in the existing Romanian acquis were identified. A legislative calendar was drawn up and conclusions reached on priorities, strategies and technical assistance. However, it seems that much work has to be done, in particular to group the EU veterinary acquis to aid in its easy and meaningful integration into the Romanian national acquis.
- 2.3 As mentioned above, the NSVA is the competent central veterinary authority for drafting, executing and enforcing legislation. The NSVA is headed by a sub secretary of State. The central laboratories, such as the Laboratory for Veterinary Diagnosis, the Laboratory for Food and Field Control and the Control Laboratory for Veterinary Diagnosis, all of them in Bucharest, also come under the NSVA's command.

2.4 At district level there are also 41 diagnostic laboratories, in particular concerned with animal health questions, and 41 food control laboratories; 32 of which have the same address. In addition, there are 6 laboratories for the control of residues. Before a decision is made on upgrading and expenditure in this context, a detailed analysis and full laboratory appraisal could help decide on the future existence of each of the laboratories. In total 22 Border Inspection Posts with 35 checkpoints are operated under the NVSA - District Veterinary Offices. Only some BIPs will remain following the accession of Romania and the neighbouring Associated Countries to the EU. These veterinary BIPs should be established on the land borders with Moldova, Ukraine and Serbia, at the ports on or to the Black Sea and at the international airports, if consignments of veterinary concern are introduced through these points of entry. Pending the outcome of the BIP appraisals, the estimated number of posts will probably not exceed 12 to 15.

The posts do not at present have the necessary infrastructure to carry out the physical inspection of consignments. This component of the veterinary checks is therefore carried out at destination inside the country or at quarantine stations in the case of imports of livestock. The control of imports and transit consignments of veterinary concern into or through Romania is managed through a licence system by the NVSA.

Altogether, the State Veterinary Service now employs 3500 veterinarians (state veterinary officials) while about 3700 private vets provide public services on behalf of the State.

A computerised communication network within the State Veterinary Service does not exist at present. However, the NVSA is interested in installing EU systems such as ADNS,

ANIMO, SHIFT and INFORVET as soon as possible.

2.5 The animal health situation concerning outbreaks of OIE-List A diseases is satisfactory. However, vaccination of domestic pigs against Classical Swine Fever (CSF) is practised. Furthermore, it seems that CSF is present in the wild boar population. In the cattle population, Bovine Tuberculosis is still a problem, whereas Bovine Brucellosis was eradicated in 1969. Enzootic Bovine Leucosis is currently the subject of a general action and testing programme. Other national control programmes exist specifically for Foot and Mouth disease (FMD), Swine Fever and Sheep and Goat Pox, Equine Infectious Anaemia, Anthrax and Rabies. Newcastle disease is controlled by vaccination. Surveillance and contingency plans have still to be elaborated for the OIE-List A diseases.

2.6 The application of EU animal welfare standards for the keeping of pigs, calves, laying hens and laboratory animals, as well as for the transport and slaughter of animals in Romania, is still pending the full implementation of corresponding national legislation.

2.7 In the area of public veterinary health, Romania's main aim is to concentrate on drafting and adopting new national legislation, which will take over EU rules. This is the case not only for meat, but for all other products of animal origin destined for human consumption. Also in this context, CP/HACCP concepts and zoonosis control plans will have to be developed. On the other hand, the Romanian residue monitoring and control plan has been worked out and approved by the EU.

3. The Private Veterinary Sector

- 3.1 As mentioned above, most private vets also carry out official duties. It has been stated that at present veterinarians in Romania have no difficulties finding employment. To carry out private veterinary activities, authorisation and a licence is needed. The licence is issued by the district administration, followed by an authorisation delivered by the state administration.
- 3.2 As a veterinary chamber does not exist, the Veterinary Association of Romania is the professional body which has now applied for observer membership of the Federation of Veterinarians of Europe (FVE).
- 3.3 A new law on private veterinary activities is due to enter into force, facilitating further progress in the privatisation of the veterinary profession. The outcome of this should be monitored quite closely because it could also have an effect on consumer protection and animal health and welfare.

4. Livestock Sector

- 4.1 At present, there is no general national animal identification or herd registration scheme. However, when animals are moved within the country or for export, they need a veterinary movement certificate and are identified.

The domestic herd comprises about 3.4 mio bovines, 8.3 mio pigs, 10.3 mio sheep/goats, 80 mio poultry and 810.000 equines.

- 4.2 A national animal health trust fund does not exist at present; support for the creation of one is definitely sought by Romania.

5. The Processing Industry under Veterinary Legislation

- 5.1 The annual production of milk (4 to 5 mio t), meat (1.1 mio t) and fish (59.000 t) have now stabilised following several years of decline after independence.
- 5.2 However, the privatisation of the former state operated enterprises is slow and foreign investments seem to be low. This results in outdated industries, which will require substantial investment for modernisation and upgrading to reach the EU hygiene and technical standards as laid down by the relevant directives on meat, milk, fish, eggs and all other products of animal origin or for use on animals. At present, only 8 meat enterprises (poultry and game) and 19 dairy plants have been approved as fulfilling EU standards.
- 5.3 With regard to their own obligations towards quality and product safety, the industries will have to apply CP/HACCP concepts as well as good manufacturing/good laboratory practices where appropriate.

6. Conclusion

Without any doubt, agriculture is very important for Romania's development and its becoming a member of the EU. The veterinary sector is heavily involved in this process. However, a comprehensive legislative framework still needs to be established, before application and enforcement can have a positive effect on the present situation. This has itself been influenced and impeded in recent years by instability of output and production, despite more recent improvements. Massive upgrading and funding of the infrastructure of both industry and administration (for application and enforcement purposes) are required, otherwise the free movement of agricultural goods can neither be achieved nor maintained.

European Commission

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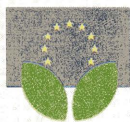
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