

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



## Romania







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

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

**ROMANIA**

This report has been prepared by DG VI in collaboration with Corina-Elena Cucoli and Cosmin Tomulescu (Council for Coordination and Economic Reform of Bucharest), Professor Marvin Jackson (Leuven Institute for Central and East European Studies), Professor Jean-Phillipe Plateau and Professor Alain de Crombrugghe (Centre de Recherche en Economie de Namur). Assistance was given by DG II and DG IA.

The manuscript has been prepared by Tomás García Azcárate, with the assistance of Emmanuel Jacquin. The authors accept full responsibility for any errors which could still remain in the text. The closing date for data collection was end of May 1995.

## TABLE OF CONTENTS

	<u>PAGES</u>
<b>0. <u>EXECUTIVE SUMMARY</u></b>	<b>VII</b>
<b>I. <u>GENERAL OVERVIEW</u></b>	<b>1</b>
I.1 Geography	1
I.2 General infrastructure	1
I.3 Demography	2
I.4 Administration	3
I.5 Historical background	4
<b>II. <u>The Romanian economic situation</u></b>	<b>6</b>
II.1 Macroeconomic data	6
II.2 Trade	8
II.3 Privatisation	11
<b>III. <u>Agriculture and forestry</u></b>	<b>13</b>
III.1 Agriculture in the overall economy	13
III.2 Land privatisation	15
III.3 Landuse	18
III.4 Irrigation	19
III.5 Environment	19
III.6 Rural standard of living	21
<b>IV. <u>Agricultural markets</u></b>	<b>24</b>
IV.1 Crop sector	24
IV.2 Livestock sector	29
IV.3 Forestry	33
<b>V. <u>Upstream and downstream industries</u></b>	<b>34</b>
V.1 Upstream	34
V.2 Downstream	37
V.3 Agribusiness privatisation	38
<b>VI. <u>Input and agricultural capital markets</u></b>	<b>40</b>
VI.1 Land market	40
VI.2 Banking system	40
<b>VII. <u>Production costs</u></b>	<b>42</b>
<b>VIII. <u>Systems of support and taxation</u></b>	<b>44</b>
VIII.1 Agricultural policy	44
VIII.2 Pricing system	45
VIII.3 Subsidies	46
VIII.4 Taxation	47
<b>IX. <u>Agricultural trade</u></b>	<b>48</b>

<b>X. <u>The GATT agreement</u></b>	51
X.1 Internal support	51
X.2 Exports	51
X.3 Imports	52
<b>XI. <u>Medium term scenarios</u></b>	53
XI.1 Constraints for the future	53
XI.2 Policy scenarios	54
XI.3 Land use	55
XI.4 Cereals	56
XI.5 Livestock	57
<b><u>Annex</u></b>	
-PHARE assistance to Romania's agriculture	61
-Utilisation of European Agreement quotas	63

**Ecu/USD**

	1989	1990	1991	1992	1993	1994	1995
1 US\$	0.908	0.785	0.807	0.770	0.854	0.880	0.800

## GLOSSARY

**AMS:** Aggregate Measure of Support  
**BA:** Banca Agricola  
**CAP:** Collective Agricultural Production (farm cooperatives)  
**CC:** Commercial Company  
**CIF:** Cost, Insurance and Freight  
**COMECON/CMEA:** Council for Mutual Economic Assistance  
**DP:** Democratic Party  
**e:** estimation  
**EC:** European Community  
**EFTA:** European Free Trade Agreement  
**EU:** European Union  
**EBRD:** European Bank for Reconstruction and Development  
**f:** forecast  
**FOB:** Free On Board  
**EIB:** European Investment Bank  
**GAP:** Gross Agricultural Product  
**GDP:** Gross Domestic Product  
**GDR:** German Democratic Republic  
**GSP:** Generalized System of Preferences  
**IBRD:** International Bank for Reconstruction and Development  
**IMF:** International Monetary Fund  
**MAF:** Ministry for Agriculture and Food  
**MBO:** Managment Buy Out  
**MPP:** Mass Privatisation Program  
**n.a.:** non available  
**NATO:** North Atlantic Treaty Organization  
**NAP:** National Agency for Privatization  
**NBR:** National Bank of Romania  
**NSF:** National Salvation Front  
**OECD:** Organisation for Economic Co-operation and Development  
**PECO:** Pays de l'Europe Centrale et Orientale  
**POF:** Private Ownership Fund  
**PSDR:** Party of Social Democracy of Romania  
**RA:** Régie Autonome  
**SOF:** State Ownership Fund  
**USA:** United States of America  
**VAT:** Value Added Tax

## FOREWORD

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

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

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

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

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

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

## About the data...

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

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

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

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

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

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

## EXECUTIVE SUMMARY

### General economy

After 4 years of decline, the Romanian economy registered growth in 1993 and 1994, further growth is expected in 1995 and 1996. The 1994 results can be explained by the improvement in agriculture and in processing industries linked to export activities. Inflation continues to be a major cause of concern, even if there has been also an improvement in 1994.

The unemployment rate increased to 10.9% in 1994. The upward movement in the level of unemployment is expected to continue in the coming years. The current economy is characterized by its inability to create employment for newcomers. These unemployment rates are quite high given the lack of radical restructuring of large parts of industry. **The agricultural sector is assuming the role of an employment buffer.**

Until March 1995, 863 commercial companies have been privatized, most of them by management buy out (MBO) and employee groups. In March 1995, the Romanian Chamber of Deputies passed a mass privatisation programme (MPP) and the country's first post-communist bankruptcy law. Those laws were part of a "package" of regulations requested by the IMF to grant loans to Romania. IMF and World Bank officials have welcomed this program but say that it is too complicated and will be difficult to implement.

### Agriculture

**Agriculture has declined less than the other sectors of the economy** and share of agriculture in the overall economy has increased at the beginning of the transition. The sharpest decrease occurred in 1992, especially for grains, as a result of drought, but also because of the transfer of land ownership to independent farmers, the lack of supply or poor utilization of inputs and the deterioration of the irrigation system.

After the dissolution of the agricultural production co-operatives during 1990-1991 (in some case involving demolition of buildings or destruction of irrigation systems, vineyards or orchards), Romanian government has sought 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 numerous state agricultural subsidies for credit, inputs and machinery services: **farmers associations** (with legal status consist 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. They are frequently descended from the old agricultural production cooperatives) and **family associations** (with no legal status). Ex-state farms have been converted into **commercial companies** and will be among the last to be privatised.

In 1994, private sector accounted for 83% of cereal grain production, 69% of sunflower production, 74% of sugar beet production, 94% of autumn potato production, 88% of vegetable production, 76% of grape production, 75% of fruit production. It held 88% of the cattle, 56% of the pigs and 91% of the sheep and goats.

### Environment and rural development

Irrigation is vital for a large part of Romanian agricultural land, particularly for the southern part of the country. Recent studies have estimated that only 1.3 mio ha can be irrigated efficiently; only 800.000 ha are currently irrigated. It was known that for about 200,000 ha of this land, the water source was unsuitable from the quality point of view.

According to the national quality monitoring system, in Romania about 12 million hectares of agricultural land (about 80% of the total agricultural area) were affected by one or more pollution phenomena and processes.

**As a result of past policies, the rural economy base is oriented singularly towards agriculture and there is a virtual absence of non agricultural economic activities.** This lack of diversification is detrimental to the rural economy and society as a whole and impairs sound development of the agricultural sector.

Over 90% of the country's area is used for agriculture or forestry, of which 47% is arable land and permanent crops (1992 data). About 70% of the arable land is planted with cereals, mainly corn and wheat. The other crops are of lesser importance in land use terms.

The crop sector seems to have reached the bottom of this trough and already recovered in 1994, whereas the livestock still lost ground in 1994. The proportion between the two sectors shifted from respectively 54/46 in 1989 to 60/40 in 1994.

### Crops and livestock

**Cereals** are the main crop, in particular wheat and maize: the production has begun to recover and was 18 mio t in 1994. Exports have contracted in the '90s. Among oilseeds, sunflower represents 90 %. Sugar production is still handicapped by structural problems. Potatoes, various fruits (apples, table grapes, plums) and vegetables (tomatoes, cabbage), as well as wine complete the picture of the crop production.

After privatization and the dissolution of the cooperative sector, organized animal production has been split into 2 different systems, on one side *commercial companies*, mainly in industrial complexes, on the other side millions of individual private households breeding a small number of animals, with poor technical facilities. Most of them are "subsistence" level units which produce mainly for their own consumption.

In the livestock sector, **pigmeat** dominates the supply and demand, but has been severely hit by the recession (reduction by 36 % of the animal numbers over 5 years); production of pigmeat was 740 000 t in 1994. Poultry and beef meats follow.

### Up- and downstream activities

Input utilisation has declined dramatically since 1989. Nevertheless, since 1993, a recovery can be perceived. The input distribution system is similar to the system that existed before 1989. Producers must make contracts for their production with the "economic agents qualified by the State" (**integrators**). *Integrators* are also credit intermediaries and distribution agents. Their positive role as an additional source of credit during the previous emergency period must be recognized.

It must be realized, on the other hand, that this role should not be permanent, that their presence delays and impedes the development of a permanent input distribution system in the private sector and strengthens the competitive advantage of **commercial companies** and former collective farms. Privatisation of the main *integrator*, *Romcereal*, is one of the key issues of the agricultural transition.

Secondary *integrators* supply inputs and services through their linkage with a primary "integrator". **Agromec** companies supply mechanization services to farmers, mainly as sub-contractors to *Romcereal* and to *Romcereal's* clients.

Romania's food industries were largely established 20-30 years ago. Major producing 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 which was 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, produce relatively poor quality products.

An increase in competition among suppliers and purchasers is a major pre-condition in the development of a modern and competitive agricultural industry. Privatisation is an important step on that way. A delay in such process may hamper the development of the Romanian agriculture.

### Agricultural trade

The 1989 revolution caused a dramatic change in the agricultural balance. The government adopted export bans and export quotas for agricultural products and increased food imports to limit the decrease of the living standards of the population and, in particular, of urban population. In 1994, agricultural trade accounted for only 8% of total Romanian trade, but the agricultural trade deficit represented 130% of total trade deficit.

The E.U. is by far the Romania's main partner, both for imports and exports(40%). Nevertheless, some increase can be observed year by year in the level of trade with the other PECO countries, with Moldavia and Russia. The E.U. exports mainly cereals, dairy products and fats and oils. Romania exports mainly cereals, oils and fats, meat, beverages and fruit and vegetables. The agricultural trade deficit with the E.U. represents 34% of the total agricultural deficit.

Romanian is the only country of the PECO members of GATT which has opted for the status of a developing country. This status allows Romanian to have comparatively more relaxed Uruguay Round commitments than the other PECOs. Romania did not specify any non-exempt domestic support during the reference period, expressed as an Aggregate Measure of Support (AMS). Therefore, as a developing country, Romania is only allowed to spend 10% of the value of output on non-exempt domestic support such as price support.

### Outlook for 2000

As for other CEECs, prospects have a very high degree of uncertainty. However, a scenario relying on **reasonably optimistic** assumptions has been built up. Under this scenario, the GDP growth would increase by 3 per year, a statu quo trend is expected in the privatization process and the agricultural sector will continue to assume the role of an **employment buffer**.

**Food security** will continue to be a major concern for the Romanian authorities. But little budget expenditure would be available to finance surpluses, in an overall context of budget discipline and huge investment needed in all the sectors of the economy and in the infrastructure.

The scenario is based on the development of small or medium farms which integrate crop and livestock productions and are labour intensive. They would be as self-sufficient as possible; oriented mainly to self-consumption, local markets or direct sales; not very efficient as far as feed-ratios is concerned and producing a wide range of products.

The main conclusion of this scenario are:

- a huge increase in cereal production and in the exportable surplus is not expected.
- a recovery in meat consumption, mainly for pork and poultry meat;
- no major difficulties are expected regarding to the consequences of the Uruguay Round agreement, even if internal market prices are higher than the world market

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

	Population (mio)	GDP (bio ECU)	GDP pc (ECU)	Total area (mio ha)		Agricultural area (% total)		Arable area (ha pc)		Agricultural production (% GDP)		Agricultural employment (% tot. empl.)		Rainfall (mm/year)
				(mio ha)	(% total)	(mio ha)	(ha pc)	(bio ECU)	(% GDP)	(000)	(% tot. empl.)			
Bulgaria	8.5	9.4	1110	11.1	6.2	55.9	4.0	0.47	1.131	12.0	694	21.2	550	
Czech. Rep.	10.3	26.7	2586	7.9	4.3	54.3	3.2	0.31	0.871	3.3	271	5.6	491	
Estonia	1.6	1.5	938	4.5	1.4	30.6	1.0	0.63	0.266	10.4	89	8.2	600	
Hungary	10.3	32.5	3150	9.3	6.1	65.8	4.7	0.46	2.068	6.4	392	10.1	600	
Latvia	2.6	2.2	850	6.5	2.5	39.2	1.7	0.65	0.232	10.6	229	18.4	680	
Lithuania	3.8	2.3	627	6.5	3.5	54.0	2.3	0.62	0.259	11.0	399	22.4	625	
Poland	38.5	73.4	1907	31.3	18.6	59.5	14.3	0.37	4.648	6.3	3661	25.5	550	
Romania	22.7	21.8	961	23.8	14.7	61.9	9.3	0.41	4.500	20.2	3537	35.2	635	
Slovakia	5.3	8.7	1643	4.9	2.4	49.0	1.5	0.28	0.512	5.8	178	8.4	611	
Slovenia	1.9	9.8	5018	2.0	0.9	42.7	0.2	0.13	0.250	4.9	90	10.7	1350	
CEEC-10	105.4	188.3	1786	107.7	60.6	56.2	42.3	0.40	14.7	7.8	9540	26.7		
EU-15	369.7	5905.1	15972	323.4	138.1	42.7	77.1	0.21	208.8	2.5	8190	5.7		

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

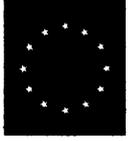
# Geopolitical Map of ROMANIA

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

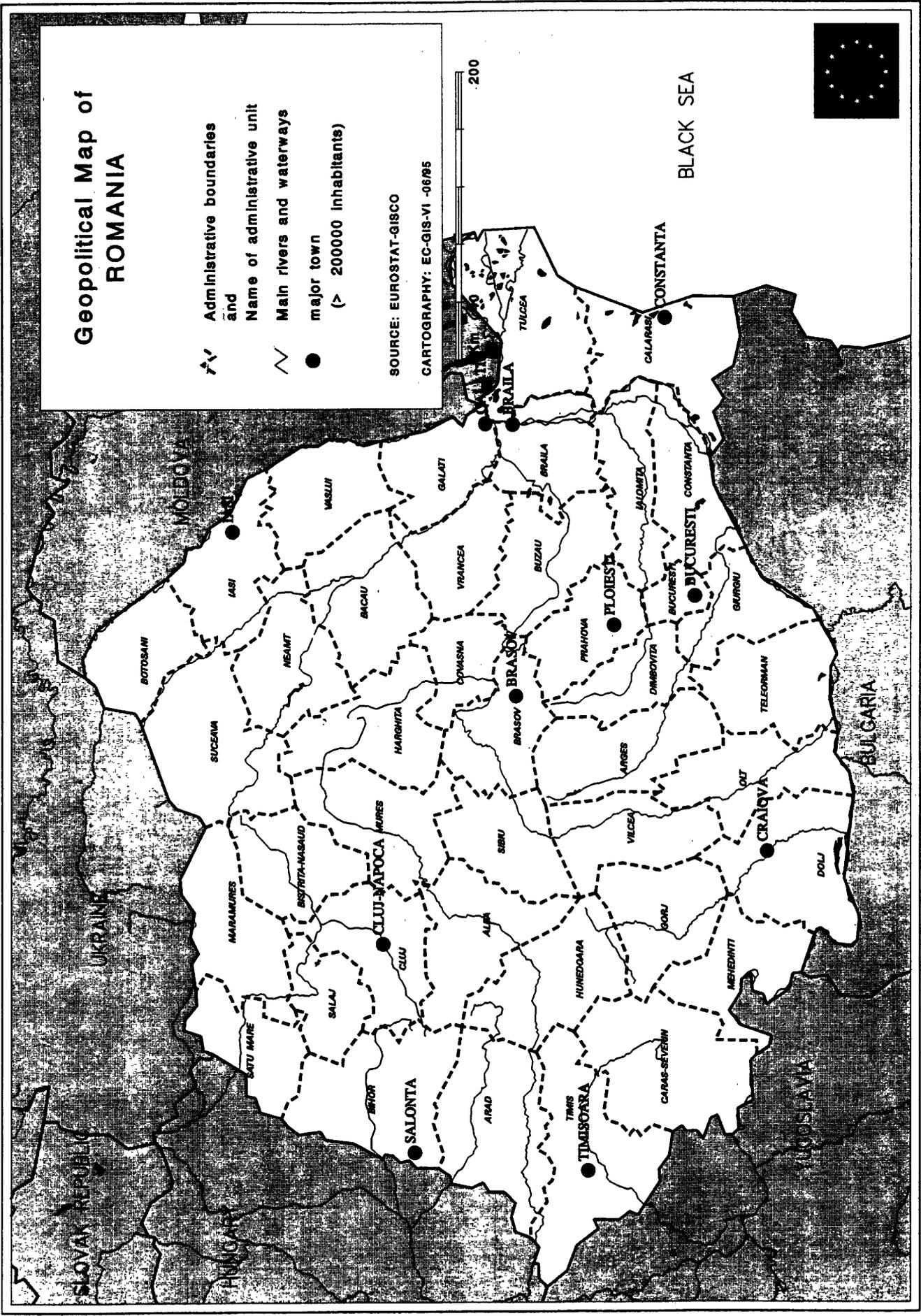
SOURCE: EUROSTAT-GISCO

CARTOGRAPHY: EC-GIS-VI -06/95

0 100 200



BLACK SEA



## **I. GENERAL OVERVIEW**

### **I.1 Geography**

Romania is situated in the south-eastern part of Europe, between 43°30 and 48°15' northern latitude and between 20°15' and 29°41' eastern longitude. The total area of the country is 238,391 square kilometre, similar to the area of the United Kingdom and a little bit more than 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 surfaces 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 cover about 30% each.

The climate is temperate continental with cold winters and dry summers. The annual average temperatures range between 8°C and 11.5°C, with large variations depending on seasons (between -38.5 and + 45°C). The annual average rainfalls are:

- 350-400 mm on the Black Sea shore,
- 400-600 mm on the Danubian Plain,
- 500-700 mm on the Western Plain,
- 600-800 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 drought period starts usually in mid-July and lasts until early or mid-September, mainly in the south and in the east of the country.

### **I.2 General infrastructure**

Romania's transport and communications infrastructure is inadequate and outdated even by Eastern European standards, and represents a major development bottleneck.

**Railways:** The rail network accounts for 22,367 km including 16,542 km of single track railway, 5,825 double track and 8,634 electrified railways. Maintenance is the main problem: 1994 needs were estimated at 550,000 Mio Lei (275 Mio Ecus) but only 260.3 were finally granted. 1995 needs are estimated at 700,000 Mio Lei. More than 25% of the locomotives in use have exceeded their expected service life.

**Waterways::** They account for 1,690 km in total, of this amount the Danube river represents 1,075 km, the Danube-Black Sea canal opened in 1984 to traffic 68 km and the Poarta Alba-Navodari canal 23 km. Romania has 35 ports including 3 seaports, 6 sea-river ports and 26 river ports, and 234 km of Black Sea coastline.

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

**Roads:** The road network accounts for 72,816 km of public roads, including 10,132 km of trunk roads and 4,508 km of European motorways. There has been no road construction during the past few years. As many as 60% of the country's bridges are technically inadequate. Public road transport deteriorated sharply during the 1980s.

The European Bank for Reconstruction and Development (EBRD), the World Bank and the European Investment Bank (EIB) have granted almost 17 Mio US\$ to Romania for public works.

### I.3 Demography

In 1994, Romania's population was estimated at 22.7 million, equivalent to 6.2% of the Eur-12 population or as much as the Benelux countries together. From 1970 to 1990, it increased by about 3 million but a decrease of 500,000 has been observed since 1990. Ceausescu adopted a strict "pro-natalist" policy under which abortion was forbidden and families were penalised for having fewer than four children, married women were subject to monthly medical examinations, and single people and childless couples were forced to pay additional taxes. The removal of the ban on abortion led to about 2 million abortions over the 2 years 1990 and 91, before a reduction to a number close to 500,000 in following years.

The fall in births, accentuated at the beginning of the current decade has stopped in the last 2 years. In 1993 and 1994, with 11 per thousand, it fell to 36% of 1989 birthrate. In the same period, the death rate had been 11.6 per thousand. Nevertheless, changes in crude birth and death rates are very sensitive to changes in the share of women of child-bearing ages and of the elderly in the population. They often give misleading indicators of demographic trends.

Romania continues to have high infant and maternal mortality rates, not only by European standards, but by those of many middle-income developing countries as well. In 1993, the infant mortality index was 23.3 per thousand births. The incidence of tuberculosis is the highest in Europe and average life expectancy in 1990 was 70 years, on a par with Hungary (1989) as the lowest in Europe.

In addition to that, the decrease in population is also linked to the emigration of national minorities. In 1993 for instance, emigrants of German origin represented 33% of all emigrants but only 0.5% of the population.

## Ethnic groups (1992)

	000 inhabitants	%
Romanians	20,409	89.5
Hungarians (1)	1,625	7.1
Germans	119	0.5
Gipsies	401	1.8
Others (2)	256	1.1
TOTAL	22,810	100.0

Source: Romanian economic outlook

(1) 2.0 mio according to hungarian sources

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

### I.4 Administration

From the administrative point of view, the territory of the country is organized into 41 counties, which are different in size, population and settlement number. Of those 41 counties:

- the 12 (29%) smallest have a resident population per county of less than 400,000 inhabitants;
- 15 (37%) have a population between 400,000 and 600,000 inhabitants;
- 11 counties (27%) between 600,000 and 800,000 inhabitants and
- 3 (7%) have more than 800,000 inhabitants.

The "village systematization" was a concentration of a dramatic example of the megalomania of Ceausescu's regime. This action, which affected approximately 10% of the rural population, led to a reduction in the number of villages and a concentration of their inhabitants into blocks of flats with urban-type facilities. The action was stopped at its commencement because of the democratic revolution.

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 inhabitants;
- 17 (7%) have between 100,000 and 300,000 inhabitants and
- 7 towns (3%) have between 300,000 and 400,000 inhabitants.
- 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 the town and village level, the executive is represented by the *local council* which is an elected body. However, each Ministry has its own executive and guiding bodies at local level. At the county level, the Ministry of Agriculture is represented by the General Division of Agriculture and Food and the Veterinary and Hygiene Control Offices.

Rural population in 1994 represented 45% of the total, distributed in 2,688 villages.

### I.5 Historical background

**Rural life and agriculture play an important role in the Romanian economy.** Historically, Romania served as a breadbasket for the Ottoman empire and, after independence in the 19th century, for Western Europe. Still in the forties, 75% of the labour force was engaged in agriculture. This share declined dramatically as a result of the Communist emphasis on heavy industrialisation. In 1995, agriculture still accounts for 20% of GDP (2.5% in Eur-12) and 39% of the labour force.

Romania's post war patterns of industrialization had been influenced by its historical base of oil and gas production and oil refining. The socialist industrialization strategy emphasised heavy industry and a pattern of specialization within the Council for Mutual Economic Assistance (CMEA) with Romania having the role of major supplier of petrochemical, oil drilling, mining and a range of other industrial equipment. A structural characteristic of Romanian industry (for instance the fertilizers industry) is its high energy requirement. In addition, huge projects were approved without assuring sufficient funds for maintenance and necessary support.

This policy was reinforced by the drive for current account surpluses in the 1980s, as a result agriculture was starved of resources and investment. Production peaked in 1986 and dropped steadily thereafter. Romania remained a net food exporter through most of the 1980s, mainly through a major drop in food imports and domestic consumption: food imports were reduced from 800 million Ecu in 1986 to 450 million in 1988 and 600 million Ecu in 1989.

### Recent political evolution

Following a violent upheaval against the communist regime of Ceausescu, a coalition of reformists and former officials, who had fallen into disgrace during the previous regime, constitute the National Salvation Front (NSF). They declared themselves as taking over the power of the state with the constitution of a provisional government. The Front, with a message of stability, ample social provision and gradual reform, secured 66% of the vote the May 1990 election thus 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 year of the transition has not been stable. In September 1991, the Prime Minister, Mr. Roman, resigned and Teodor Stolojan became prime Minister.

Mr. Roman remained the leader of the Front but Mr. Iliescu founded the Democratic NSF (now called **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 parties coalition with 20% of the votes, performed reasonably well in many urban areas, but failed to make substantial inroads into DNSF worker and peasant votes. The NSF of Mr Roman (now the **Democrat Party**) took 10%. Later on, Mr Iliescu was re-elected with 48% of the vote in the first round and 61% in the second round of the presidential election.

After a period of uncertainty, a government was finally formed in November 1992 under Nicolae Vacaroiu, a former technocrat and not a PSDR member. The administration, made up of non-party technocrats as well as PSDR members (and, since August 1994 of the **Party of the National Union of Romania** with 8% of the votes) relies also on the parliamentary support of neo-communist parties. Mr Valeriu Tabara, Minister of Agriculture, is a member of the nationalist party. Mr. Alexandru Lapusan, State Secretary, is a member of PSDR.

The positive results of the 1994 stabilisation programme and the backing of multilateral creditors (see below) have also helped the government to consolidate its position. The next general elections are not scheduled until September 1996 but could be earlier for economical and political reasons.

## II. The Romanian economic situation

### II.1 Macroeconomic data

#### Main economic indicators

	1989	1990	1991	1992	1993	1994e	1995f
real GDP (%change)*	-5.8	-5.6	-12.9	-10.1	1.2	2.4	2.6
Private sector/GDP (%)	13e	n.a.	n.a.	26e	35	38	
consumer prices(1) (%change)	0.9	4.7	224	199	296	62	29
unemployment(%) (1)	n.a.	0.6	3.0	8.4	10.5	10.8	11.6
budget balance (%GDP)	8.2	0.9	- 1.9	- 4.4	- 2.6	- 4.4	- 3.3
government debt	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	
exchange rate (Lei/\$)	9.0	23.0	69.6	287.8	773.3	1,650	2,307
trade balance (mio Ecu)	1,861	-2,547	-1,233	-1,118	-1,391	-703	-169
foreign debt (1,2) (M.Ecus)	213	247	1526		2,470	3,546	
intern. reserves (3) (M.Ecu)	1,597	293	514	628	849	1787	

(1) December

(2) Foreign net convertible debt

(3) International banking reserve, without gold

GDP: After 4 years of decline, the Romanian economy registered growth in 1993 and 1994, further growth is expected in 1995 and 1996. The 1994 results can be explained by the improvement in agriculture and in processing industries linked to export activities: in ready made clothes, exports accounted for 53% of total industrial output, in furniture 52%, metallurgy 32% and textiles 22%.

Private sector contributed about 35% in 1994, against 32% in 1993 and 26% in 1992.

Unemployment: The unemployment rate increased to 10.9% in 1994. The upward movement in the level of unemployment is expected to continue in the coming years. In December 1994, almost half of the unemployment had been so far more than 12 months, young people (those under 35) accounted for 70% of the total and women represented 57% of the total.

The current economy is characterized by its inability to create employment for newcomers. These unemployment rates are quite high given the lack of radical restructuring of large parts of industry.

An increase is expected in the short and medium term following:

- the privatization and bankruptcy laws approved in March 1995 and
- the Government Ordinance n°1/1995 regarding the rise for the current year in the salaries of employees in autonomous administration and commercial companies, approved by the Parliament in April 1995. The exclusive criteria for a rise in wages are a higher productivity or the economic health/profit of the company.

Nevertheless, a critical mass of private activity in the medium term may produce a more active labour and capital market, which would be especially useful in offering more opportunities to the young and others entrants in the labour force.

**Employment evolution (1980-1993) (000 persons)**

	1980	1985	1990	1991	1992	1993
TOTAL	10,350	10,586	10,840	10,786	10,458	10,062
Agri culture	3,049	3,023	3,055	3,116	3,362	3,537
Silvi culture	99	89	89	89	81	77
Industry	3,642	3,938	4,005	3,803	3,301	3,030
Construc tion	862	797	706	501	579	574
Services	2,698	2,739	2,985	3,277	3,135	2,844

Source: National Commission for Statistics

Inflation: Inflation continues to be a major cause of concern. It accelerated during 1993 as a result of elimination of the remaining subsidies in May of that year (including electricity, but not drugs, rents, public transport and some other energy prices), the introduction of VAT, the continuing depreciation of the leu and large wage increases without corresponding rises in labour productivity. The lack of discipline of state enterprises and the remaining monopolies also served to fuel inflationary pressures.

There has been a substantial improvement in 1994, despite energy prices increasing to world levels in the middle of the year. The 1995 level could slow down further (to 29% as a target) as a result of tight monetary policy, fiscal discipline and limited depreciation of the currency. At the beginning of 1995, lending rates are close to 60% and deposit rates close to 32%, both positive in real terms.

Foreign debt: More than half of Romania's foreign debt consists of loans from the International Monetary Fund (IMF), the World Bank, the European Bank for Reconstruction and Development and the European Investment Bank. Foreign debt is low in absolute terms but is rising fast, from 2% of GDP in 1989 to 19% in 1994.

Foreign investment: The total amount of foreign investment by the end of March 1995 was 1,330 Mio US\$, including 250 Mio US\$ in agriculture and food industry (less than 20%) and the number of joint-venture companies was 44,893 from 140 countries, including 24,000 (more than 50%) in the food industry.

## II.2 Trade

A policy of debt repayment was implemented during the 1980s by means of severe reductions in imports and by export promotion policies. During this period, the population suffered a strong decrease in living standards and agriculture was starved of imported inputs. In 1989, the external debt was completely reimbursed but the country was in a disastrous situation.

### Trade balance FOB-CIF(1989-1994) M. Ecu

	Total exports	Total imports	Net balance
1989	9,519	7,658	1,861
1990	4,610	7,157	-2,547
1991	3,442	4,675	-1,233
1992	3,361	4,479	-1,118
1993	4,178	5,569	-1,391
1994	4,919	5,622	-703
1995f	5,575	5,744	-169

Since 1989, Romanian exports have been adversely affected by the following events:

- 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 of which Romania has been a major trading partner.
- weakened demand in Western European markets, produced by the economic recession;
- a decline of local export production, caused by the overall problems of the economic transition;
- the overvaluation of the Lei, which has been recognized by the National Bank of Romania (NBR);
- delays in anticipated foreign financing to support the reform programme.

The main products exported in 1994 were textiles (19%), common metals and metal articles (18%), machine building and engineering products (15%), mineral products (12%), furniture and wood products (10%) and chemical products (8%). **Exports of agricultural products and processed foods represent only 7%.**

The main imports in 1994 were mineral products (23%) and machinery (21%). Other major products were textiles (12%), **agricultural products and processed foods (10%)** and chemicals (8%).

In 1994, export growth significantly exceeded import growth (+22.6% and +5.1% respectively). Exports were partly driven by the recovery in Western European markets.

Private companies achieved about 30% of total foreign trade activity in 1994.

Romania signed a European 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.

### Regional trade

The E.U. was already an important partner for Romania before 1989, both in total and agricultural trade. Romanian exports to the E.U. were 20-30% of its total exports in the 1980s, but the E.U. accounted for only 10-20% of total Romanian imports. After 1989, the E.U. became the main trading partner for Romania.

**Breakdown of regional trade (average 1992-1994)**

	Exports	Imports
TOTAL	100	100
E.U.	42.2	56.3
EFTA	6.1	6.0
USA	5.0	3.1
Others OECD	3.1	7.1
PECO	7.6	13.1
CIS*	16.3	12.5
Others	19.7	1.9

\* with Baltic States

**European trade and the E.U. agreement**

The trade balance between Romania and the European Union is favourable to the latter. Romania has benefited from the advantages of the Generalised System of Preferences (GSP) in its relationship with E.U. since 1975. A specific Agreement with the E.U. was signed on 1 February 1993; the interim Agreement entered in force in May 1993 and the Agreement came into full effect in February 1995. The most important provisions are different concessions on quotas with reduced imported levies and preferential rates of tariffs for others products .

In general, the basis for the E.U. concessions was trade in the previous 3 years. In the case of Romania, the 2 sides agreed that the years 1990 and 1991 were not significant, in view of the embargo on food exports during this period, so 1987-1989 was taken as the base.

**Romanian Trade balance with E.U. (1989-1994) M.Ecus**

	Total exports	Total imports	Net balance
1989	2,548	699	1,849
1990	1,605	1,227	378
1991	1,467	1,330	137
1992	1,404	1,854	-450
1993	1,685	2,301	-616
1994	2,513	2,648	-135

Source: Eurostat

The real impact of this agreement must not be exaggerated. On the one hand, the preferential quotas given to Romania have not fully taken up; on the other hand, the global process of liberalization, the substantial overvaluation of the Leu and the limited availability of foreign currencies have been more relevant than the Agreement. Nevertheless, the Agreement is seen as an important step towards membership of an enlarged E.U. This is a major political and economic goal.

### II.3 Privatisation

The Romanian Parliament adopted, in July 1990, Law n°15 providing that all state owned enterprises would be transformed into either joint-stock or limited companies, called "commercial companies" (CC), or autonompuscient administrations, called "régie autonome" (RA) to remain under State control.

For carrying out the privatization program, the law stipulates the creation of 2 kinds of independent entities called "Funds":

- the State Ownership Fund (SOF), holding 70% of the total share of more than 6,300 CC, is a public institution under the control of the Parliament. Its original objectif was to privatize about 10% of its portfolio each year so that it could disappear in about 7 years;
- 5 Private Ownership Funds (POF), holding 30% of the shares of the *commercial companies* 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, the government created a National Agency for Privatization (NAP), as the governmental body responsible for the coordination, guidance and control of the privatization process. As the organization of privatisation has developed, the NAP appears to have lost power, and the SOF has become the dominant agency.

Until March 1995, Romania has sold off 863 *commercial companies*, with most of them purchased by management buy out (MBO) and employee groups. "Small" privatised enterprises have on average 167 employees, which mean that they would not be considered as "small enterprises" following Western European standards.

#### Companies privatised

	Number	Average share capital (Mio.Lei)	Average number of employees
Small	750	133	167
Medium	103	2,433	468
Large	10	39,250	4,815
<b>TOTAL</b>	<b>863</b>	<b>455</b>	<b>307</b>

Source: State Ownership Fund. March 1995

The objective for 1995 is to privatise 1,500 new companies, including 575 agribusiness enterprises.

In March 1995, the Romanian Chamber of Deputies passed a mass privatisation programme (MPP) and the country's first post-communist bankruptcy law. Those laws were part of a "package" of regulations requested by the IMF to grant loans to Romania. The MPP aims to sell off about 3,000 *commercial companies*, around half of those earmarked for privatisation. A 60% (in exceptional cases, the percentage could even reach 80%) will be offered to the citizens on the basis of individual options, freely, in exchange of the old property voucher booklets and of the privatization nominative coupons. Each Romanian citizen who is older than 18 (those who will come in the age at the end of 1995 included) will receive in the 60 days since the coming of the law into effect, a nominative coupon. The citizens who have already become shareholders of the already privatised *commercial companies* will not receive this document.

The remaining 40% will be sold to both Romanian and foreign companies and individuals through biddings. In case of no applicants are registered, the respective package of share remain the property of the State Ownership Fund.

Critics of this measure have argued that it will result in too wide a dispersal of ownership. IMF and World Bank officials have welcomed this program but say that it is too complicated and will be difficult to implement.

### III. Agriculture and forestry

#### III.1 Agriculture in the overall economy

Agriculture has declined less than the other sectors of the economy and share of agriculture in the overall economy has increased at the beginning of the transition.

	1989	1990	1991	1992	1993	1994e	1995f
GDP (%change)	-5.8	-5.6	-12.9	-10.1	1.3	3.4	4.0
Ind.prod. (%change)	-2.2	-23.7	-22.8	-21.9	1.3	3.3	4.5
Ag.prod. (%change)	-5.0	-2.9	0.8	-13.3	12.8	0.2	5.0
Services (%change)		6.3	-0.3	-1.1			
Ag/GDP(%)	14.4	21.8	18.9	19.2	20.0	19.2	19.6
Ag/employ(%)		28.2	28.9	32.2	35.2	39.1	
Agro-food/export(%)	5.0	1.4	5.8	6.6	6.7	6.8	
Agro-food/import(%)	4.3	12.3	13.3	17.0	14.8	9.9	

Its share in employment has increased from the beginning of the transition, for the followings reasons:

- a large rise in the number of older people in the labour force in 1990 in the wake of a general increase of the retirement age by 5 years. This was a non-repeatable increase and will not affect the labour force in the medium and long run.
- the agricultural sector is assuming the role of an employment buffer in a sharply deteriorating employment situation;
- employment in other sectors of the economy is decreasing;
- there are no alternative employment opportunities for rural youth;
- the voluntary return of workers of rural origin (or who were already living in rural areas) to agriculture on a full- or part-time basis following receipt of land. A special program exists to support people who come back to their village, giving them loans at an interest rate of only 15%.

FAO data on agricultural employment are in 1993 lower by 42%. The calculation is, in this case, made on the basis of "full time farmers". The difference with Romanian data underlines mainly the high level of under-employment existing in the agricultural sector.

During the first 3 years of transition, agricultural output decreased for the main products. The sharpest decrease occurred in 1992, especially for grains, as a result of drought, but also because of

- the transfer of land ownership to independent farmers (increase in self-consumption and of items which can be sold on local rural markets or are not subject to price controls such as corn and fruit and vegetables;
- the lack of supply or poor utilization of inputs;
- the deterioration of the irrigation system.

Subsequently, Romania had an ambitious and, to some extent, successful programme to support agricultural producers in order to provide capital and to stimulate the delivery of products to the state purchasing system, which continues in 1995. In 1994, agricultural production was adversely affected by extreme weather conditions in many regions: there was a severe drought in 13 counties in eastern Romania while floods caused substantial damage in other areas. Also early frost in November 1993 and in spring 1994 reduced agricultural output. This was compounded by severe hailstorms in the central part of the country during summer 1994. Notwithstanding, the overall crop increased in 1994 mainly due to the fact that the yields in western Romania were extremely good.

The relative share of crops in gross agricultural product (GAP) increased from 55% to 61%, due to a substantial decline in livestock population.

	1989	1990	1991	1992	1993	1994	1995
Share of crops in GAP	54.4	53.0	65.9	58.0	62.9	61.0	61.0
Share of livestock in GAP	45.6	47.0	34.1	42.8	37.1	39.0	39.0

The share of household expenditure on food remains very high, ranging from 58% for urban families with one child to 76% for rural families (20% as EU average in 1992, but 37% in Greece). Between these 2 extremes are families of pensioners who spend about 67% of their expenditure on food. It has been estimated that about 80% of food consumption of rural families comes from their own production. However, this data gives some grounds for reflection as to whether incomes in rural areas are properly measured and take enough into account of on-farm consumption and direct sales.

This high share of household expenditure on food explains why the control of food prices is a key piece of the governmental strategy to fight inflation.

### III.2 Land privatisation

Until 1989, the 411 state agricultural units and the 3776 agricultural production cooperatives (CAP) dominated the farm sector. Private producers were made up of small farmers mainly in the mountain areas and households producing on small plots (about 0.45 ha). The relative share of private producers in the livestock sector was higher than in the crop sector but an unknown proportion of animals was been fed with feed taken illegally from cooperative production.

Importance of the different production structures in 1989 (%)

	Area (%)	Average size (ha)	bovine herd	pig herd	sheep herd	poultry herd
State Farms	14	5,001	52	52	16	30
Collective Farms (CAP)	61	2,374	22	22	36	12
Private producers	25		26	26	48	58
TOTAL	100		100	100	100	100

Source: OECD-February 95

After the dissolution of the agricultural production cooperatives during 1990-1991 (in some case involving demolition of buildings or destruction of irrigation systems, vineyards or orchards), the main structures now in place are:

- State farms which have been converted into **commercial companies** (a company as defined in the commercial code) and 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). They are excluded from the redistribution of land. Official sources of the State Ownership Fund have reported that those companies will be among the last to be privatised.
- **farmers associations** with legal status consist 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. The *farmer association* employs some of its members and workers who are not considered as members and can rent land. They are frequently descended from the old agricultural production cooperatives. Specialist cooperative technicians and managers who lost their jobs due to the decollectivization were instrumental in convincing local farmers to contribute capital or land to the association.

- **family associations** have no legal status and therefore fail in general to qualify for state support. It seems to be a transitory phenomenon to formal associations or to be slip into individual farms.
- **individual farms.** In addition to the small farmers on the mountains which have never been associated, these are new owners who have decided to cultivate independently. Some of them are extremely dynamic but, in many places, individual farms correspond to small plots of land cultivated either by aged people or, on the evening and week-ends by individuals whose main job is outside agriculture.

**Importance of the different production structures in 1993 (% of land use)**

	Area (000ha)	(%)	Average size(ha)
Commercial companies	1,792	12	2002.2
Farmer associations	1,908	13	366.6
Family associations	2,065	14	113.6
Individuals	5,639	38	1.8
Others (1)	3,306	23	
<b>TOTAL</b>	<b>14,710</b>	<b>100</b>	

Source: OECD-February 1995

(1) Mainly communal management area, research centers,...

According to a 1993 survey conducted in 500 villages by the Chairman of the Romanian Academy for Agriculture and Forestry,

- 2.5% of farmers did not own any land;
- 26% owned less than 1 ha;
- 38% owned between 1 and 3 ha;
- 19% owned between 3 and 5 ha, and
- 14.5% owned between 5 and 10 ha.

59% of farmers were over 60 years old whereas only 9% were under 40. 43% of the land owners continue to live in town and rely upon other sources of income whereas only 18% live in rural areas and actually work on their land on a full time basis.

**Private sector share**

Farmers associations, family associations and individuals farms composed the so call "private sector". In 1994 they accounted for

- 83% of cereal grain production,
- 69% of sunflower production,
- 74% of sugar beet production,
- 94% of autumn potato production,
- 88% of vegetable production,
- 76% of grape production,
- 75% of fruit production.

These percentages are slightly lower than those for crop area because average yields in the private sector were a little under those of the public sector.

The private sector held

- 88% of the cattle,
- 56% of the pigs and
- 91% of the sheep and goats.

### Six key elements

1. The private sector has started to develop.
2. The fragmentation of land ownership is a major problem. For instance, an individual family farmer cannot own more than 10 ha of land under the present legislation. Privatisation has caused the average plot size to fall to a little less than 2 hectares of arable land and 3 hectares in total (versus 14 ha in Eur-12), divided into 4 or 5 separate land parcels. The pattern of small holding is found also with livestock: the privatisation of most dairy cow production has resulted in an average herd size of a little over two.
3. Only about a third of the farmers have (in February 1995) a definitive "Titlu de Proprietate". The others still have only their "temporary property certificates". The government expects to complete the granting of definitive title at the end of 1996. "Temporary property certificates" are not accepted as security. Many farmers are not eligible for loans because their assets are insufficient.
4. The Romanian government has sought 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 discriminatory access to the numerous state agricultural subsidies for credit, inputs and machinery services.
5. The real structure of production is less fragmented than the structure of ownership. As an active rent market exists, farmer associations (and to a certain degree also family associations and commercial companies) are bigger than the maximum allowed by the present regulation, which is 100 hectares, as it appears in the table shown above.
6. The poor state of local roads, together with the lack of other elements of a marketing infrastructure, create a *de facto* competitive advantage for the former state farms and collective farm units, most of which are better located than the new individual farms.

### III.3 Land use

Over 90% of the country's area is used for agriculture or forestry, of which 47% is arable land and permanent crops (1992 data). About 70% of the arable land is planted with cereals, mainly corn and wheat. The other crops are of lesser importance in land use terms.

The following table details the evolution of land use since 1989, the last year of the old regime, as far as plantings are concerned.

Land use 1989-1995 (000 ha)

	1989	1990	1991	1992	1993	1994e	1995f
Cereals	5,978	5,664	6,028	5,758	6,214	6,328	6,600
Rice	49	40	22	16	12	10	
Sugar beet	256	163	202	180	97	130	134
Oil seeds	966	598	594	728	667	650	
Potatoes	351	290	235	219	249	249	240
Dry pulses	311	130	81	69	66	67	
Vegetables	253	216	195	223	219	204	200
Tobacco	35	17	10	7	9	10	
Total main crops	8,199	7,118	7,367	7,200	7,533	7,648	7,174
Fodder crops	1,259	2,332	2,056	2,157	1,809	1,690	1,229
Arable land	9,458	9,450	9,423	9,357	9,342	9,338	9,351
Fruit	318	313	311	305	282	301	290
Wine	182	198	202	212	222	249	240
Permanent pasture	4,705	4,728	4,778	4,830	4,852	4,872	4,872
Agric. land	14,663	14,689	14,714	14,704	14,698	14,760	14,753
Wooded area	6,678	6,685	6,680	6,682	6,682		

Fodder crops and permanent pasture have increased in importance in the first years of the privatisation process. Under the land reform law, private farmers may lose their land rights if such lands are not cultivated. The response of some farmers has been in the first years of the transition to place their new farms under crops which minimize cultivation and farm management requirements.

#### III.4 Irrigation

Irrigation is vital for a large part of Romanian agricultural land, particularly for the southern part of the country. With 3.1 mio ha, Romania had the second largest irrigated area in Europe (after Spain but before Italy). Recent studies have estimated that only 1.3 mio ha can be irrigated efficiently; only 800.000 ha are currently irrigated for the following reasons:

- partial destruction of the installation during the first years of the transition;
- inefficiency of some remaining installations. They were originally designed for very large (3-4,000 ha) state-directed agricultural units;
- coordination problems associated with the new pattern of land distribution;
- limited credit available for irrigation and for inputs, with an interest rate of 55% (in 1993);
- high levels of operating costs, mainly fuel.

#### III.5 Environment

In Romania as in other Eastern European countries, pollution is generated mainly by industrial, energy and urban sources, and is severe but localised. Data available are mainly historical (1990).

There were about 14 areas of severe localised pollution and environmental degradation. Typically, these are the areas in which major industry is located. In the north west, Baia Mare is the more notorious with emissions and waste with copper and lead smelting. At Zlatna, the pollution is generated by aluminium smelters and at others Ploetsi and Pitesti, the pollution is generated by refining and petrochemical complexes...

**Air:** Air pollution in Romania is highly localised and severe. The principal pollutants are SO<sub>2</sub>, particulate, NO<sub>x</sub>, carbon monoxide, with unacceptable emissions of such toxic as chlorine, lead, phenols, ammonia and benzene.

The principal emitters were :

- Energy sources and power : 1.3 mil .tons SO<sub>2</sub> (85% of the total SO<sub>2</sub> emissions), 0.35 mil tons NO<sub>x</sub> (40% of the total NO<sub>x</sub> emissions), 0.24 mil tons particulate matter (36% of the total);
- Metallurgy : 67,000 tons SO<sub>2</sub> (5%), 44,000 tons NO<sub>x</sub> (5%), 75,000 tons particulate matter (11%), and 464,000 tons lead (93%);

- Manufacturing : 10,000 tons SO<sub>2</sub> (1%), 44,000 tons NO<sub>x</sub> (5%), 36,000 tons particulate matter (5%) and 10,000 tons lead (2%);
- Refineries and petrochemicals : 69,000 tons SO<sub>2</sub> (5%), 9,000 tons NO<sub>x</sub> (1%), 12,000 tons particulate matter (2%), 21,000 lead (4%) ;
- Cement, transports and others.

**Water:** Water pollution in Romania is a serious issue.

Romanian rivers are being polluted by waste water discharge which was estimated at about 10 bil m<sup>3</sup> per year. Of this quantity, only 10% was adequately treated, 60% partially treated and 30% was discharged without treatment. According to Ministry of Environment sampling, water quality in 39% of monitored river lengths fell into top category I (suitable for a drinking water supply source with minor treatment), 30% fell into the category II (requiring some level of treatment before use), and 12% fell into category III (requiring a high degree of treatment), and the remainder 18% was considered unfit for most uses (category IV).

Among 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 the basin. The major pollution sources were industrial waste (the most hazardous to health), agricultural runoff, animal waste, and municipal waste water. Extreme water pollution was generally a local phenomenon concentrated in river stretches downstream of industries and larger municipalities.

About 46.8% of the population depend on ground water for their drinking water source, and ground water is more and more threatened by pollution. In some areas, ground water was heavily polluted with nitrates, pesticides, heavy metals and other toxic substances.

Almost 7 mio t of polluting substances were discharged annually into the country's rivers, representing an effective and potential risk for agricultural crops and causing soil pollution over large areas, since a large part of the 3,3 mio ha of irrigated land gets water from these rivers. It was known that for about 200,000 ha of this land, the water source was unsuitable from the quality point of view.

The problem of high nitrate concentrations was particularly important 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 pollution by nitrate were agricultural runoff and livestock waste. Nitrate pollution of drinking water caused very serious health effects like methemoglobinemia and potential formation of carcinogenic nitrosamine.

The water quality of municipal drinking water supply system has been generally good in Romania.

**Soil:** According to the national quality monitoring system, in Romania about 12 million hectares of agricultural land (about 80% of the total agricultural area) were affected by one or more pollution phenomena and processes<sup>1</sup>: The most important one seems to have been soil erosion (4,065,000 ha), salinization (600,000 ha), low or very low content of humus (7,114,000 ha) and chemical pollution (900,000 ha).

While in the past soil samples have shown high contamination with chlorinated hydrocarbon residues for DDT, since DDT was banned in 1984, the majority of soils now show contamination with acceptable limits.

**Nature:** Romania is rich in beautiful landscapes and biodiversity and has taken initial steps to protect some of these. Protected areas currently encompass 4.8% of Romania's surface and include three biosphere Reserves (2.96%) -of which the Danube Delta is by far the largest, 12 national and 2 natural parks (1.68%), 571 strictly protected areas (0.64%).

Due to the combination of pollution and over fishing, natural aquatic system in Romania are seriously endangered. Romania's Black Sea fish industry is in a state of near-collapse ; in 2 years, the annual catch has decline from 14,000 mil tons (annual average 1983-1989) to 1,200 mil tons (1991).

### III.6 Rural standard of living

In rural areas, the death rate is considerably higher than in urban areas, both because of the different age structure of population (the share of 65 years old persons and over in total population is 15.4% in rural areas and 8% in urban areas) and such factors as labour conditions, level of training and access to health institutions. In 1993, almost 90% of beds were in urban hospitals. This situation is similar regarding health staff: only 21.5% of doctors carried on their activity in rural areas.

---

<sup>1</sup> soil erosion: 4,065,000 ha; landslide: 700,000 ha; soil loss by erosion: 1,5 mio t per year; NPK losses: 400,000/500,000 t per year; salinization: 600,000 ha; soil compaction: 6,500,000 ha; crusting: 2,300,000 ha; low or very low content of humus: 7,114,000 ha; strong and moderate acidity: 2,350,000 ha; strong alkalinity: 165,000 ha; low and very low content of available phosphorus: 4,500,000 ha; low content of potassium: 476,300 ha; low content of nitrogen: 3,437,700 ha; deficiency of micronutrients: 1,500,000 ha; secondary waterlogging: 200,000 ha; secondary salinization: 100,000 ha; pesticide pollution: 50,000 ha; oil pollution: 50,000 ha; chemical pollution: 900,000 ha; soil covered with solid wastes: 18,000 ha; complete disturbance of soil: 15,000 ha (Rauta-1992).

### Some demographic indicators 1993

Per thousand	Total	Urban	Rural
Birth rate	11.0	9.6	12.7
Death rate	11.6	8.8	14.9
Marriage rate	7.1	7.0	7.3
Divorce rate	1.37	1.93	0.72
Infant death rate*	23.3	19.7	26.4

\* Deaths under 1 year per 1000 live births

Source: National Commission for Statistics

The higher rural birth and marriage rates, even with an older rural population, can be explained by the higher opportunities to build dwellings in rural areas and more conservative behaviour.

As a result of past policies, the rural economy base is oriented singularly towards agriculture and there is a virtual absence of non agricultural economic activities. This lack of diversification is detrimental to the rural economy and society as a whole and impairs sound development of the agricultural sector. The burden of rural unemployment falls on agriculture and provides a strong incentive for young and educated people to migrate from rural areas whenever the opportunity arises.

Rural-urban migration has been highly selective. Entry into secondary education traditionally has been the watershed, as rural localities are also disadvantaged as far as education services are concerned. Those who manage to pass entrance exams for secondary education typically end up and remain in urban areas. Remaining in the village has often been the consequence of failure to advance beyond primary education.

Since 1991, there has been a tendency towards a moderate increase in the rate of migration from town to country accompanied by a reduction in the flow in the opposite direction. A considerable difference exists, however, between the percentage rate of these migratory flows.

### Internal migratory flows

	Total	Urban to rural	Urban to urban	Rural to urban	Rural to rural
1992	100	24.3	13.7	39.2	22.8
1993	100	25.4	14.6	35.0	25.0

Source: National Commission for Statistics

The current employment situation is forcing the agricultural sector to assume the role of an employment buffer, with widespread and increasing (hidden) under-employment as a result. The increase in the supply of rural labour displays large regional variation, with peri-urban areas being the most affected. As this phenomenon is unlikely to be temporary, it must be given due weight in the formulation of strategy for the development of agriculture.

Clearly, in the case of the 5,000-7,000 villages earmarked to be phased out under Ceausescu's regime, all new investments (both public or private) were prohibited and public services were reduced to virtually nothing. As a consequence, these villages often suffered heavy depopulation, even though there were few examples of actual physical destruction of villages.

The privatization of agriculture and the overall transition of the economy towards a market economy profoundly affect both the level and the structure of rural incomes in the following ways:

- a sharp increase in incomes from the transfer of land from collective farms to private households, which was mainly realized through the increase in self-consumption and direct sales;
- a decline in cash income as a result of unemployment.

Their influence is different depending of the characteristics of the rural communities:

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

#### IV. Agricultural markets

##### IV.1 Crop sector

The most important crops are cereals, primarily wheat and maize. After a dip in the first transition years, the cereals area has started to expand again, for the following two reasons:

- the increased planting of low yield traditional varieties of maize (feed and food maize). Private farmers emphasize production of crops for on-farm use and tend not to produce commodities where "integrators" are the main available marketing channel and/or prices are controlled. Maize does not require the buying of seeds and is easier than wheat to store on-farm (lower humidity content).
- after the disorganisation of the economy in the early years of the transition (and a severe drought in 1992 in 1993), the measures for granting credits with low interest and supporting the producers by offering selected seeds and fertilizers resulted in increased production.

##### Planting trends (000 ha)

	1989	1990	1991	1992	1993	1994e	1995f
Wheat	2,319	2,253	2,154	1,461	2,282	2,411	2,240
Barley	768	749	1,018	628	637	551	
Maize	2,733	2,467	2,575	3,336	3,066	2,990	3,350
Cereals*	5,978	5,664	6,028	5,758	6,214	6,328	6,600

\* Including also rye, oats and other minor cereals

Yields have been affected by a decrease in the level of inputs, which has been influenced by:

- changes in cropping patterns. As the land operated by the private farmers expanded, its utilisation has become less intensive;
- a reduction in the area irrigated, due to a general deterioration in the arrangements for systems facilities;
- the rising production costs and
- the severely rationed energy supplies.

The dependence of production on weather conditions has increased significantly.

##### Yield trends (t/ha)

	1989	1990	1991	1992	1993	1994e	1995f
Wheat	3.38	3.24	2.54	2.19	2.33	2.49	
Maize	2.47	2.76	4.08	2.05	2.61	3.11	2.87
Cereals	3.06	3.02	3.20	2.13	2.43	2.85	2.85

Some experts regard Romanian yields as low, taking account of the quality of land but are confident concerning their production potential. Obviously, a lot will depend on what happens with the irrigation system, nevertheless, Romanian wheat yields are already on average higher by 10% than Spanish yields (2 large similar countries with an significant proportion of irrigated land). For maize, yields reported are normal for traditional varieties.

#### Production (000 t)

	1989	1990	1991	1992	1993	1994e	1995f
Wheat	7,840	7,289	5,473	3,206	5,314	5,991	
Maize	6,762	6,810	10,497	6,828	7,988	9,300	9,600
Total cereals	18,309	17,107	19,275	12,250	15,131	18,184	18,800

In spite of a sharp decline in consumption, some imports have been needed to ensure that local demand is satisfied. In 1994, and for the first time since 1989, some cereals have been exported, mainly as part of barter operations with Russia.

#### Cereal balance (000 t)

	1989	1990	1991	1992	1993	1994e	1995f
Initial stocks	1,300	1,800	1,050	1,610	300	1,050	1,600
Production	18,309	17,107	19,275	12,250	15,131	18,010	18,800
Consumption	17,551	18,980	20,337	15,109	16,896	17,150	
Net trade	258	-1,123	-1,622	-1,549	-2,515	310	
Ending stocks	1,800	1,050	1,610	300	1,050	1,600	

The cereal balance calculation has to be read with great caution, mainly for the following reasons:

- it is not clear to what extent the production figures take account of harvest losses. Traditionally, they are calculated "on field", and losses have been reported in the past between 10 and 50%;
- the humidity content seems not to be homogeneous. The fall in production in 1992 is also the result of a drier harvested crop;

- the virtual absence of satisfactory storage facilities at farm level (nearly all of the country's all-weather facilities are owned by Romcereal and sited near transit points).
- the end of year stock data is not published and is regarded as highly confidential.

### Sugarbeets

Sugarbeets were mainly cultivated on state farms and co-operatives, and seem to be unattractive, as in the case of wheat and barley, for private farmers. In March 1995, some sugar beet producers had not yet received any payment for the products they delivered in November 1994.

The limited recovery seems to be a reaction of the private sector to a specific programme in order to support specifically this crop, with soft loans and inputs disposal.

	1989	1990	1991	1992	1993	1994e	1995f
000 ha	256	163	202	180	97	130	134
Yield (t/ha)	26.45	20.11	13.28	16.09	18.31	21.26	21.43
000 t	6,771	3,278	4,703	2,897	1,776	2,764	2,872

Romanian authorities believe that 200,000 ha need to be planted in order to achieve self-sufficiency in sugar (total consumption close to 500,000 t of refined sugar). An average sugar yield of 2.5 t per hectare is well below European average (8 t), and even well below the Spanish or Italian yields (6 t or 5.5 t respectively). An efficient production requires a high level of co-ordination and collaboration between competent farmers and a competent industry.

The deficit will be largely covered by imports of raw sugar to be processed in Romania as there is enough local refining capacity.

### Oilseeds

Soya and rapeseed have been cultivated mainly on the state farms (and co-operatives) and continue to be cultivated on *commercial companies*, and are unattractive for private farmers. They are highly input-intensive when compared to sunflower which produces yields similar to those non-irrigated areas of Spain (1 t/ha).

### Trends in plantings (000 ha)

	1989	1990	1991	1992	1993	1994e	1995f
Sun flower	434	395	477	615	588	583	685
Rape	20	13	9	2	2	2	
Soya	512	190	108	166	75	65	
TOTAL	966	598	594	728	667	650	

### Potatoes

Since 1989, the area planted to potatoes and the production had decreased.

	1989	1990	1991	1992	1993	1994e	1995f
000 ha	351	290	235	219	249	249	240
Yield (t/ha)	12.58	11.00	7.97	11.90	14.90	15.62	14.58
000 t	4,420	3,186	1,873	2,602	3,709	3,889	3,500

Potatoes are produced by private farmers for on-farm consumption, for pig fattening (increasing year by year) and for sales on the local market. No major trade is recorded.

### Potatoes balance sheet (000t)

	1989	1990	1991	1992	1993	1994e	1995f
Production	4,420	3,186	1,873	2,602	3,709	3,889	3,500
Net import	117	281	35	206	64		
Total use	4,537	3,467	1,908	2,808	3,773		
Seed use	520	420	390	450	390	430	
Feed use	1,279	1,235	720	880	1,749	1,920	
Food use	2,738	1,812	798	1,478	1,634		

## Vegetables

Since 1989, the area planted to vegetables has decreased by 21% or 53,000 hectares and the production by 22%. The main vegetables produced in Romania are tomatoes and cabbage. There is also some production of cucumbers, peppers and onions. As in the case of potatoes, private farmers are now the main producers. Under the Ceausescu regime Romania exported more than 100,000 t of vegetables, mainly to the Soviet Union. Some small volumes, close to 30,000 t, have been exported.

Because of the increasing importance of small scale and subsistence farming, production data (as for fruit) have to be taken with particular care.

	1989	1990	1991	1992	1993	1994e	1995f
000 ha	253	213	195	222	219	204	200
Yield (t/ha)	15.52	13.58	15.85	15.56	17.51	15.05	15.25
000 t	3,926	2,893	3,091	3,455	3,834	3,070	3,050

Source: OECD-February 1995

## Fruit

Since 1989, the area planted has been comparatively stable. The main fruits are apples, table grapes and plums, with some production of melons and peaches. Scattered trees and shrubs are included in official data. This means that there is some additional uncertainty about those figures.

	1989	1990	1991	1992	1993	1994e	1995f
000 ha	318	313	311	305	282	290	290
Yield (t/ha)	7.78	7.67	6.46	6.77	12.43		
000 t	2,474	2,401	2,010	2,066	3,505		

Source: OECD-February 1995

## Wine

Romania is a traditional producer of wine, with an average level of production close to Portugal or Germany and an average yield close to Spain. Since 1993, the production seems to have recovered to the level of the mid 80s. In 1995, the area planted is 240.000 ha. Romania is a net exporter of wine, in particular to Germany, the United States and the United Kingdom, and imports are mainly bulk wine coming (with EU refunds) from Spain and Italy, and from Argentina.

	1989	1990	1991	1992	1993	1994e	1995f
000 ha	182	198	202	212	222	249	240
Yield hl/ha	25.44	23.76	24.79	22.20	35.14	24.10	27.92
000hl	4,630	4,705	5,008	4,707	7,800	6,000	6,700

## IV.2 Livestock

After privatization and the dissolution of the cooperative sector, organized animal production has been split into 2 different systems:

- on one side *commercial companies*, mainly in industrial complexes which hold even today, almost 43% of the pig herd and 37% of the poultry population;
- on the other side, millions of individual private households breeding a small number of animals, with poor technical facilities. Most of them are "subsistence" level units which produce mainly for their own consumption.

### Livestock numbers 1989-1995 (000 head)

	1989	1990	1991	1992	1993	1994e	1995f
Cattle	6,416	6,291	5,381	4,355	3,683	3,597	3,565
Milk cows	1,704	1,954	1,898	1,782	1,550	1,500	
Pigs	14,351	11,671	12,003	10,954	9,852	9,262	7,727
Sheep	16,210	15,435	14,062	13,879	12,079	11,499	12,119
Poultry	138,661	123,868	121,379	106,000	87,725	76,532	75,133
Horses	702	663	670	749	721	727	

N.B.: figures are for the beginning of the year

In contrast to the crop sector where the area remained relatively stable or increased, the livestock sector experienced a considerable fall in the size of herds, which as yet seems to have slowed down but not to have stopped. The major reasons behind this decline have been:

- the dissolution of the cooperatives and the unsuitability (or destruction) of their buildings or installation;
- the inefficiency of the remaining industrial complexes;
- the severe financial difficulties of the *commercial companies*, arising mainly from their inefficient operations;
- in addition, privatization was the reason that many big units lost a part of their land area;
- decrease of pig and poultry stocks due to difficulties in obtaining certain feedstuffs, mainly proteins and additives;
- lack of profitability in livestock production, linked to the increasing price of energy and fuel, fodder and labour, the decrease in consumption subsidies and the consumer price control for production which is sold through public slaughterhouses and meat factories;
- decrease in consumer demand following the decline in consumer subsidies and the increase in retail prices.

The privatisation process has increased the demand for horses, mainly for transport but also as farm workhorses. Horses seems to be as expensive now as cars and well adapted to the new farming structure.

### Milk

There is a huge range in the estimates of milk production. For instance in 1992, national statistics reported 4,585 mio t (4,493,400 thousand liters), USDA 3,520 mio t and FAO 3,464 mio t. The explanation is probably different estimates of milk used in reproduction cows. Production trends in the recent years are also different between sources. At the same time, all sources agree on a decrease in both total beef cattle numbers and cow (milk and meat) herd. All sources expect a production recovery in 1995.

	1989	1990	1991	1992	1993	1994e
Cows (000)	1,704	1,954	1,898	1,782	1,550	1,500
Yield (t/cow)	1.95	1.74	1.91	1.94	1.98	2.0
Production (000 t)	3,323	3,408	3,620	3,464	3,069	3,000
P.c use (kg)	143.5	146.9	156.1	152.0	135.3	133.0

## Meat consumption

The fall in size of herds observed since 1989, the economic crisis and the removal of consumers subsidies have modified domestic disappearance (also called domestic use): there was an increase in the first years of transition, followed by a decrease from 1990. Per capita meat disappearance in 1994 is estimated to be 8% lower than in 1989.

### Per capita meat disappearance (kg)

	1989	1990	1991	1992	1993	1994e
Beef	10.9	16.1	14.0	11.3	11.8	12.0
Pork	33.0	36.7	34.7	33.1	31.2	28.9
Sheep	3.4	3.5	2.9	3.1	2.8	3.1
Chicken	14.3	18.5	15.6	13.9	12.7	13.3
Total	61.6	74.8	67.2	61.4	58.5	57.3

Pork is the main meat consumed in Romania. Per capita consumption has decreased by 12% since 1989 even if this has brought about the continued decline of the herd. In 1994, 56% of pig herd was owned by the private sector.

### Pork balance sheet (000 t)

	1989	1990	1991	1992	1993	1994e
Slaughter (000 head)	10,000	9,313	9,820	8,862	8,500	8,300
Weight (kg)	80	85	85	89	88	89
Production	800	792	835	789	748	739
Net exports	34	-63	28	34	44	82
Total use	766	855	807	755	704	657
p.c.use (kg)	33.0	36.7	34.7	33.1	31.2	28.9

Poultry production and consumption are now also lower than in 1989. But as it is not a difficult breeding, private herd (72% of the total) has rapidly begun to grow, compensating to some extent the decline in commercial companies. Even a small increase in 1994 is reported for 1994.

**Chicken meat balance sheet (000 t)**

	1989	1990	1991	1992	1993	1994e
Slaughter (000 head)	300,000	374,975	332,733	328,633	290,000	298,000
Weight (kg)	1.13	1.03	1.00	0.90	0.91	0.90
Production	339	386	333	296	264	268
Net exports	8	-43	-31	-23	-27	-34
Total use	331	429	364	319	291	302
p.c.use (kg)	14.3	18.5	15.6	13.9	12.7	13.3

In 1994, 85% of beef herd was owned by the private sector. This high level of private activity explains the small recovery observed since 1992 which was based on an increase weight per animal.

**Beef balance sheet (000 t)**

	1989	1990	1991	1992	1993	1994e
Slaughter (000 head)	1,000	931	982	886	850	830
Weight (kg)	220	340	323	282	306	320
Production	220	317	317	250	260	266
Net exports	-32	-57	- 7	-8	-7	-5
Total use	252	374	324	258	267	271
p.c.use (kg)	10.9	16.1	14.0	11.3	11.8	12.0

Mutton and lamb production is stable, mainly located (91% in 1994) in the private sector. The production is mainly self-consumed or limited to Easter, when market price is quite high.

**Mutton/lamb balance sheet (000 t)**

	1989	1990	1991	1992	1993	1994e
Slaughter (000 head)	8,800	8,265	7,274	8,646	8,371	8,685
Weight (kg)	9.99	9.86	9.30	8.42	8.00	8.29
Production	88	81	68	73	67	72
Net exports	9	0	0	1	2	1
Total use	79	81	68	72	65	71
p.c.use (kg)	3.4	3.5	2.9	3.1	2.8	3.1

Traditionally, Romania was an important exporter of live animals and of food products. Animal products exports registered their best performance during 1980-1987. The large export volume was not based on marketing the surplus which remained after satisfying domestic market demand but was a means by which the old government repaid external debts. An export ban on food exports was put in place in 1990 in order to satisfy public demand. After the abolition of the export bans the trade balance is slowly becoming more balanced.

### IV.3 Forestry

Wooded area represented 6.69 million ha in 1992 (28% of the total country), with 60% situated in the Carpathian mountains and 30% in the foothills. The forest has a varied composition: 31% of coniferous trees and 69% of broad-leaved trees. The general condition of the trees and woodland is 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 1994.

#### Production of wood

	1970	1980	1985	1989	1990	1994e
M.m <sup>3</sup>	21.1	18.3	23.0	19.3	16.3	14.0

Forestry had suffered in the past from intensive use and deforestation and is presently suffering in some regions from "parcelling" (fragmentation). At the beginning of 1995, out of the 323,000 ha of forests to be privatized (accounting for 5% of the country's overall forest area) about 300,000 ha were distributed to private owners in plots of 1 ha, which has made the husbandry and the profitability of private forest enterprises very precarious.

The current Forestry Code has been in force since 1962. Romania's Senate is debating a new one, which takes into consideration the private property of certain forests. The responsibility for the management and protection of private forest property will be incumbent on the owners. In exchange, the National Forest Corporation which manages the public forests (that is more than 95% of the wooded area) will have the obligation to guard against illegal cutting, abusive clearing, theft, poaching and the protection against fire and pollution.

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

## V. Upstream and downstream industries

### V.1 Upstream

Input utilisation has declined dramatically since 1989. The most severe declines were reported in use of fertilizers, plant protection chemicals and machinery services. Since 1993, a recovery can be perceived.

#### The "integrators" (mainly Romcereal)

The input distribution system is similar to the system that existed before 1989. Producers must make contracts for their production with the "economic agents qualified by the State" (*integrators* is the word currently used in Romania, which means intermediaries) which are mainly **Romcereal** and the milling and bakery *commercial companies* for the wheat, the commercial companies for sugar beet industrialization, *Romcereal* and **Semrom** for seeds of wheat, maize, sunflower, soya and rape. On the basis of *Romcereal* data, 25% of the 1994/95 cereal output has been bought by them, which would mean more than 25% of the marketed production. *Commercial companies* (ex-state farms) are the main *Romcereal* suppliers.

The farmer must contract a percentage of his production at a fixed price, with a minimum quantity per ha (1995 data): bread-making wheat, fibre hemp and perennial vegetables for seed: 40%; wheat for seed: 60%; sugar beet, soya, sunflower and fibre flax: 80%; maize for seeds: 90%. In return, the farmer has access to subsidized credits for the inputs and the mechanisation services. The local press has reported that, in some counties, the local branch of *Romcereal* has started to supply free chemical fertilizers.

*Integrators* collect demand information and pass it on to the factories and supplying companies. The Minister for Agriculture (MAF) still actively participates in fixing maximum prices for inputs. *Integrators* are also credit intermediaries and distribution agents. Their positive role as an additional source of credit during the previous emergency period must be recognized.

It must be realized, on the other hand, that this role should not be permanent, that their presence delays and impedes the development of a permanent input distribution system in the private sector and strengthens the competitive advantage of *commercial companies* and former collective farms.

Privatisation of the main *integrator*, *Romcereal*, is one of the key issues of the agricultural transition.

## The "agromecs"

Secondary *integrators* supply inputs and services through their linkage with a primary "integrator". *Agromec* companies supply mechanization services to farmers, mainly as sub-contractors to *Romcereal* and to *Romcereal's* clients. *Agromecs* act as distributors of seeds, fertilizer and fuel to farmers who request it. Some *Agromecs* have also become dealers of tractors and farm machinery companies.

Mechanization seems to be the least affected of all production inputs. The unit costs of machinery services and fuels increased much more rapidly than all other input prices since 1989, accounting in 1992 for 46% of average crop production costs (the share in western countries is close to 20%).

Almost all *agromec* companies have been put on the lists of the State Ownership Fund (SOF) in order to be privatized. In February 1995, only 86 had been privatized, in effect "sold" to managers and workers with highly subsidized credits. These *agromecs* are allowed to lease land.

At least in some regions, a recent fact is the existence of a private segment in the market, selling services (mostly involving small machinery) at a discount which can reach 10 or 20% of *agromecs'* fees. In 1993, this private sector owned 13.5% of machinery, 26.4% of mechanical seeders and 35.2% of physical agricultural tractors.

In other regions, competition is avoided by a price agreement between *agromecs* and *commercial companies*.

## Machinery

Romania has a large domestic capacity for manufacturing nearly all its farm machinery and has been an exporter of machinery. There is one large tractor plant at Brasov which produces 95% of the nation's tractors. There is one combine factory in Bucarest which produces all of Romania cereal harvesters. In addition to 2 other small tractor plants, there are 30 machinery enterprises. Each of them specializes in manufacturing a narrow range of implements, machinery and livestock equipment.

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

Since the mid 1980s, the plants have suffered from a lack of investment in new machine tools and processes. The lack of investment stems largely from continual government manipulation of selling prices, which are below the cost of production. Problems have also been heightened by a chronic lack of foreign exchange for the import of special steels, alloys and specialized components, by workforce overmanning, seasonal shortage of energy, excessive vertical integration resulting in large inefficient factories and large outstanding debts.

## Fertilizers

Commercial companies and farmers associations, which normally contract with integrators, have been able to maintain a certain level of input consumption. The average commercial company fertilizer use, for example, only fell off to about 70% of historical levels while total consumption was in 1993 only 28% of 1989 data.

Romania has a major fertilizer industry, built up mainly during the 1960s and 1970s to serve both the domestic and export markets. It is characterized by old technology, inefficient material and energy consumption (possibly the double that of some international levels) and, in the case of sulphuric and nitric acid production, by serious pollution levels.

Capacity totals over 10 mio t of product. Production averages 3.3 mio t per year of nutrient, equivalent to some 8.2 mio t of products, from 1985 to 1988. Production decreased to 2,8 mio t in 1989 and 1,2 mio t in 1994 (3.0 mio t of products).

The necessary modernization of the fertilizers' industry is estimated to cost the equivalent of 360 mil US\$ and to trigger a reduction of the work force by around 17%.

In addition, the amount of organic fertilizers normally used has been very small. The main constraint in utilizing organic fertilizers for soil fertility improvements was the concentration of livestock in big industrial complexes, so that the problem of collection, storage and utilization of manure could not be solved; the situation was aggravated by the fact that those who were working the land not being the landowners, showed a lack of interest in problem-solving.

### Consumption of fertilisers (000 t, 100% active substance)

	1989	1990	1991	1992	1993
TOTAL	1,378	1,103	462	418	385
Nitrogen	778	656	274	258	238
Phosphates	360	313	145	133	131
Potash	240	134	43	27	16

## Plant protection chemicals

The fall in pesticides/herbicides use paralleled the decline in fertilizer use, 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. Production decreased from 33,000 t in 1989 to 13,658 t in 1994.

### Consumption of plant protection chemicals (t)

	1989	1990	1991	1992
TOTAL	31,153	25,255	19,898	15,134
Insecticides	7,229	5,797	3,921	2,514
Herbicides	7,927	7,567	4,120	4,173
Fungicides	15,997	11,891	11,857	8,447

## Animal feed

The animal feed industry is concentrated in 67 large, *commercial companies*, already state-owned feed mills, located near *Romcereal* grain storage facilities and other processors. Total capacity for animal feed production is estimated at 6.4 mio t. Current demand is estimated to have fallen to less than 4 mio t. Feed is of low quality, mainly due to the shortage of protein from local sources.

In addition local private mills exist in the countryside and are mainly the ex-cooperative mills.

## V.2 Downstream

Romania's food industries were largely established 20-30 years ago. Major producing 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 which was 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, produce relatively poor quality products. Due to their location which was poorly related to the supply of raw materials some are currently oversupplied while others are undersupplied. In these circumstances it is not surprising that the rate of wastage is high.

The following table presents (for 1992) a brief profile of 4 significant branches: meat, dairy, edible oil and sugar. The dairies most clearly illustrate the legacy of centrally planned investments in the food industries. Dairies were set up in every county in Romania, with just over 1 firm in each on average (although most firms 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 oilmills employed on average 370 employees per enterprise, followed by sugar with 351, dairies with 321 and meat plants with an average of 151 employees.

	Enterprises	Counties	Output 1991	Output 1992	Employees
Meat	132	41	825	579	19,957
Fresh milk	48	41	391	363	11,118
Oilmills	14	11	236	217	5,182
Sugar	36	24	326	300	12,629

Output: Milk, million litres; all others thousand tonnes

Until 1990, food industry activity was carried out within 365 State enterprises. After 1990, through restructuring and reorganization of the food sector, 431 *commercial companies* and an autonomous unit for tobacco processing activities were established.

The corporate objectives of those *commercial companies* may be characterized as keeping the firm intact and preserving employment levels as far as possible. At the same time, they have suffered from significant delays in the receipt of payments from customers and subsidies from the government. Having to contend with high inflation, accumulating inventories and inappropriate accounting methodologies, *commercial companies* have suffered from massive decapitalization, the cash flow consequences of which were estimated by the OECD as 1.739 billion and 1.605 billion Lei in 1991 and 1992 respectively. The 1992 figure is equivalent to 18% of turnover or 663% of net profit in the year.

### V.3 Privatisation

An increase in competition among suppliers and purchasers is a major pre-condition in the development of a modern and competitive agricultural industry. Privatisation is an important step on that way. A delay in such process may hamper the development of the Romanian agriculture.

Only 89 commercial companies in the field of upstream and downstream industries (of which 74 are agromecs) have been privatised up to March 1995, with an average share capital of 187 Mio Lei and an average of 154 employees, well above average in comparison with the overall economy. The biggest company has been a sweet factory in Brasov, with 1,200 employees and 1,200 Mio Lei of share capital. Kraft Jacob Suchard has acquired the whole package of shares held by the State Ownership Fund (70%).

The State Ownership Fund target for 1995 is to privatize 575 agribusiness enterprises.

**Privatisation target for 1995**

	Number	Average share capital (Mio Lei)
Small	507	725
Medium	64	5,500
Large	4	63,150
<b>Total</b>	<b>575</b>	<b>1,691</b>

Source: State Ownership Fund. March 1995

## VI. Input and agricultural capital markets

### VI.1 Land market

The law sets a maximum of 10 hectares per individual farmer and 100 hectares on the size of holding or amount of land which may be leased by any one family. It prohibits recipients of returned land from selling their land for 3 years and of non-returned land (e.g. collective members who did not surrender land in the initial collectivisation) for ten years. Selling (only at local level) or leasing of land must be approved by the local commission and are 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 is a legal person requires approval by the MAF or the Ministry of the Environment. There is no land registration service as a land market institution.

All owners of arable land are required to maintain it under cultivation, subject to fines, and can have their land expropriated after 2 years of non-cultivation. Many small holders (mainly urban inhabitants or elderly people) choose to lease their land. Lessors are *commercial companies* (ex-state farms), *private agromecs*, *farmers associations* but also individuals farmers and *family associations*. Lease arrangements range from all work being done by the lessor, a system especially popular with urban owners, to provision of certain services, machinery services being the most common. Most contracts stipulate payment in shares of output rather than cash. These arrangements allow small farm owners holders access to the services and capital which they need, and to share risks while at the same time without being committed to selling their crops to *integrators*.

As has been already underlined, the Romanian government has sought 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 numerous state agricultural subsidies for credit, inputs and machinery services.

### VI.2 Banking system

Up to December 1989, the Romanian financial system was exclusively geared to the implementation of the central plan: flows of funds were controlled administratively, leaving little role for commercial banking functions. Risks were absorbed by the government. Banks consequently maintained little or no capital, and there was no government supervision of financial institutions. The 4 main institutions were the National Bank of Romania (NBR), the Romanian Bank for Foreign Trade, the Investment Bank and the Bank for Agriculture and 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 liberalized early in 1990 and NBR was granted significant independence from political interference and given a mandate to pursue price and exchange rate stability.

Until now, agriculture and the food industry have not been able to draw the attention of private banks to their activities and BA is likely to remain dominant in agricultural credit (95% of the market in 1994) for the foreseeable future, although this activity represents only 20% of overall banking activity. Credit policy and interest rate subventions, mainly through BA, are the most important way of public support implantation and will be analyzed later (see point 7.2).

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

Other institutions, including the new cooperative **Bancoop** still play a marginal role. This cooperative was established by the consumer and credit movements in 1990 and they are the main shareholders. Despite an intensive network, the bank do not have a huge interest in the agricultural sector. the consumer cooperatives, representing consumers, have rather different interests from the farmers.

In August 1994, a Rural Credit Guarantee Fund has been established with 4 main rural commercial banks and the government of Romania. This Fund has already committed 20% of its capital cover (to which PHARE contributed 6 Mio Ecu, plus substantial allocations for technical assistance. It helps meet a critical Romanian lack of borrowers' securities for bank loans.

## VII. Production costs

There is little reliable information available on production costs in Romania in comparison with the main exporting countries. The only reliable data found for 1994 concerned wheat and even this is incomplete.

The cost structure, per hectare, was as follows:

	Lei/ha	US\$/ha	Ecu/ha
Mechanical works	164,000	109	92
Seeds, chemical, ...	187,000	125	106
Workforce	6,283	4	3
Interests on credits for inputs	168,064	112	95
Total	525,347	350	296

With an average yield of 2.5 t/ha, this incomplete data indicates a production cost for wheat of 209,339 lei/t, or 140 US\$ (the exchange rate was at that moment 1,500 lei for 1 US\$) or 118 Ecu. With a higher yield (3 t/ha), it goes down to 117 US\$ or 99 Ecus.

A partial explanation of this relatively high cost of production, in addition to a overvaluation of the Leu, is the local monopoly of *agromecs* and the *commercial companies* which rent the machinery and have reached a price agreement. Between 1990 and 1994, ploughing and sowing costs have increased by 5500%, while diesel oil and spare parts have registered a price rise of 78% and 90% respectively. These prices, called "excessive" by many farmers reflect the inefficiency of the existing structures: repair works represent 20% of the overall cost. As a result, many private producers, with reduced financial possibilities, have not been able to use the standard cultivation technologies.

Studies have been carried out by the OECD and the World Bank in 1993 on the relationship between Romanian domestic prices and world market prices and concluded that local prices tended to be below the international ones. This result is not consistent with the table above: world market prices do not cover the (incomplete) cost of production, at farm level. The world market price for wheat (OECD data) is 93 US\$ per tonne in 1995 and is predicted to be 118 US\$ in year 2,000. In addition, border protection was increased in 1994.

Even if local production today were apparently competitive in a world market context, this would give no indication as to what could happen in the future, largely for the following reasons:

- the exchange rate of the Leu and its evolution;
- the artificial input price relationship, which changes greatly from one year to the next;
- the supply constraints of inputs or animal feed;
- the artificial structure of input consumption, which is a derivative of the 2 previous points;
- the inefficiency of the current upstream and downstream industries and services;
- the non adaptation of those industries and services to the needs of the new farmers,
- the difficulty of estimating future crops yields;
- the difficulty in defining a reference farm;
- the future evolution of interest rates...

When a society (and a farm sector) suffers such a radical change, the only certainty which remains is that the historical data and trends are not useful. The efficiency of the farm sector can only improve if the effectiveness of the economy in general, and of the overall farm industry in particular, improves. This means investments, privatization and clear political and social policies for the future.

Comparative advantage in agricultural trade will depend, among other factors, upon the opportunity cost of devoting resources to agricultural production rather to other productions, in Romania and in other countries of the world.

## VIII. Systems of support and taxation

### VIII.1 Agricultural policy

Restoring agricultural production and launching agricultural reform were immediate priorities for the new government in 1990. Prices in local rural markets were liberalised almost immediately in early 1990 and formal state monopolies for the buying of agricultural commodities and supplying of inputs were quickly abolished. An initial land privatisation programme in early 1990 was followed by the almost complete privatisation of agricultural cooperatives, in a mixture of spontaneous popular reaction and juridic initiatives.

To protect consumers and provide for the needs of the population, price controls and subsidies on essential food items were maintained or introduced in 1990, and these have been removed only gradually and still exist for wheat and milk. Domestic supply of key consumption items like bread, milk and cooking oil have been insufficient to meet domestic demand at controlled prices. Significant expenditure of scarce foreign exchange on food, fodder and fertiliser imports have not resolved the problem. For some key food items, Romania is still best characterised as a poor economy.

In recent years, the development of agricultural strategies has been characterized by trade off and conflicts which have finally favoured short term decisions to solve immediate constraints against the setting of more forward plans to implement market mechanisms.

On one hand, **food security** (which means urban consumer protection and provision of essential consumption) is a major concern of the Romanian authorities. Under Ceausescu's regime, producers (mainly state farms and cooperatives) had to deliver their products to the state. With the new regime, producers have to be persuaded to deliver to the state purchasing system at fixed and low prices, as part of the overall strategy to maintain a social consensus and to fight inflation. In order to compensate them, they receive short term credits, inputs and bonuses on final prices. On the other hand, food security has been used by the most conservative part of the Administration to avoid (or to limit) reforms and to favour the former state and collective farms units.

The government has publicly stated goals of decentralisation, elimination of state intermediaries and the privatisation of retail outlets. These have not been eased by the consequences of food security policy: farmers incomes are depressed by the official purchase prices and state monopolies still dominate the industrial transformation and distribution networks for agricultural products.

In addition, the farm sector has increased its employment share, mainly with unemployed workers who had been living in the villages and working in the cities. It plays a key role in avoiding social tensions in the cities and ensuring a degree of food consumption through informal channels, in most cases relatives.

Government officials and the domestic press regularly portray agriculture as being in a state of near crisis, ascribing this to a shortage of various inputs and problems in adjusting production, input delivery and marketing systems to a decentralised market with many small producers. Nevertheless, a large number of foreign studies underline the distortion effects of subsidies and price controls as well as the absence of a fair and transparent system of land reform and markets.

### VIII.2 Pricing system

The pricing system has undergone a very profound transformation. The current situation is rather confusing, and information from various sources are contradictory. Producer and consumer prices, subsidies and profit margins are the elements of this gradual liberalization puzzle.

Recent developments seem to have taken the following forms:

- Producer and consumer prices on local rural markets are completely free. Not surprisingly, the vast majority of prices have rapidly increased in real terms.
- Until October 1993, procurement prices were still fixed by the Ministry of Agriculture and Food (MAF), under the supervision of the Ministry of Finance, for wheat, barley, maize, oat, rice, potatoes, sugarbeet, soya, beans, sunflower, milk, eggs, pork and poultry meat. These prices only applied to the purchases made by the *integrators* or the direct acquisition by state processors and often included a subsidy paid by the State budget. When the product was acquired by an *integrator* (e.g. wheat by *Romcereal*) and resold to state agro-industries (e.g. State mills), the subsidy was deducted from the prices charged to the processors.
- Until October 1993, controls were also exercised on State wholesale and retail prices for bread, milk, eggs, sunflower oil, sugar, pork and poultry meat. This actually meant that the whole State agro-industrial chain was controlled for these products. Procurement wholesale and retail prices (as well as profit margins) were all administratively managed.

- Since October 1993, according to a new legislation in force (law 83/1993), the government establishes every year, on March 1, a "minimum guaranteed acquisition price", on the basis of the evolution of the agricultural products market for the products of "national importance". These prices should represent the equivalent in Leu of the average price of the previous year on the world market for that product. A minimum guaranteed price can be established for the following products: cereals, oilseeds, vegetables, beans, sugar beet, potatoes, tomatoes, seeds and seeding materials and milk. In 1994 and 1995, only wheat and milk have been considered of "national importance", hence with "minimum guarantee prices".

#### Current milk prices (lei)

	Producer price*	Subsidy	Selling price**
Nov-30 April	425	225	300
1 May-October	370	170	300

\* with 3.5% fat content

\*\* with 1.8% fat content

The average input prices paid by the farmers have increased more quickly than the average producer prices, and both of them more quickly than the consumer prices, even with the suppression of consumption subsidies.

#### Price developments 1990-1994 (1990=100)

	1991	1992	1993	1994
Input	1,702	2,758	6,591	13,428
Output	642	1,401	4,418	9,843
Retail food price	289	974	3,397	5,581

Source: OECD-February 1995 and National Commission for Statistics

The slower growth of the retail prices has caused a profit squeeze on the processors and distributors. The administrative control of margins has increased the financial difficulties of the food industry.

### VIII.3 Subsidies

To keep track of the changes in the provision of subsidies is an even more difficult exercise. Consumption subsidies were completely suppressed in May 1993. Subsidies to agro-industries are said to be being progressively eliminated.

The main domestic support is given through commercial loans (provided normally by Banca Agricola), with low interest rates. Several new credit subsidy schemes were introduced or existing schemes continued in 1994 and 1995. For example,

- medium-term loans ((5 year term after a 1-year grace period) to private farmers and farming associations for the purchase of agricultural machinery, which cover 85% of the acquisition price. 10,000 tractors and 7,800 combines were bought in 1994 with this facility;
- short term credits for the completion of farming operations, subsidized by the National Bank of Romania (and the national budget). The farmer pays a 15% interest rate per year if he makes a contract with an *integrator*.

As potential credit demands, estimated by the MAF for the 1995 spring plantings to 1,600 Mio Lei (550 Mio Ecu), is higher than availabilities (500 Mio Lei or 175 Mio Ecu for 1995 spring plantings), some criteria are used for rationing. They do not favour individual farms.

The Minister of Food and Agriculture accounted for 9.5% of the State budget expenditure in 1994, almost a reduction of 2 percentage points from the 11.5% level of 1993.

#### VIII.4 Taxation

In July 1993, Value-Added Tax (VAT) replaced the previous turnover tax system. For most product categories, a flat rate of 18% is applied while in the case of basic products such as meat, butter, milk, fish, bread, fuel and energy for household use, medicines and public transportation, a rate of 9% applies.

In 1994, a so-called "agricultural income tax" was introduced. In practise, this income tax operates as a form of land tax. More specifically, from the second half of 1994, all land owners have to pay a tax on a standard income, which is determined on the basis of the physical fertility of the land and type of farming. This new tax supersedes the exemptions of the past few years.

For instance in 1995, and depending on the quality of arable land, the per hectare tax varie between 20,000 Lei and 141,000 lei.

## IX. Agricultural Trade

The Romanian economy was dominated by agricultural grain exports during the latter half of the nineteenth century and during the inter-war period. By the outbreak of the First World War, Romania was the world's fourth largest exporter of cereals and the fifth largest exporter of wheat. The country's heavy dependence on grain exports exposed it to severe adverse effects following the collapse in agricultural trade during the Depression, the increased agricultural protection in traditional markets, the intense competition from the United States, Canada and Australia and a radical land reform in 1921 which resulted in a significant switch from wheat to maize. Agricultural trade continued to have an important role after the Second World War. The main changes have been an increase of the trade with the Soviet Union and a reduction of the role of cereals.

The 1989 revolution caused a dramatic change in the agricultural balance. In addition to the points already underlined on the evolution of global trade, the government adopted export bans and export quotas for agricultural products and increased food imports to limit the decrease of the living standards of the population and, in particular, of urban population.

In 1994, agricultural trade accounted for only 8% of total Romanian trade, but the agricultural trade deficit represented 130% of total trade deficit.

**Agricultural Trade balance (1989-1994) M.Ecus**

	Total exports(FOB)	Total imports(CIF)	Net balance
1989	479	333	146
1990	64	880	-816
1991	199	622	-423
1992	223	761	-538
1993	281	826	-545
1994	334	556	-222

The main exports in recent years have been meat and live animals, fats and oils, fruit and vegetables, alcohol drinks and timber and cork. The main imports have been cereals, sugar, fruit and vegetables, coffee, tobacco, meat and animal feed.

## Legal provisions

According to current legislation, trade has been liberalized, with the exception of the exports of wheat, maize, sunflower seeds and molasses which, for the time being, need administrative authorization to be exported. There are no quotas for import or licences for imports or exports, but imports of several important agricultural commodities or inputs are still managed by a few large traders, linked to integrators.

In 1994, border protection for agriculture and food products was increased. The Romanian authorities justified this increased protection "on the basis that highly subsidised low quality imports were flooding into the country and were having disastrous effects on domestic producers". Romania also attempted to reorient policies toward greater self-sufficiency and import substitution in 1994. The main measures were:

- an increase in import tariffs on wheat (from 10,000 to 40,000 Lei/t) and milk (from 5,000 to 10,000 Lei per hl), in January 1994;
- a "compensatory tax" on wine imports to curb the large increase in imported wine, in January 1994;
- minimum import prices for wheat (150 US\$/t), barley (126 US\$/t), tomatoes (615 US\$/t), potatoes (124 US\$/t) and sunflower oil (1,035 US\$/t). The "compensatory taxes" were set equal to the difference between the actual and the minimum import prices, since June 1994.

In 1994, Romania signed a protocol on trade and co-operation in agriculture with Moldova. The protocol includes a list of products that can be exchanged and the quantities involved.

## Regional agricultural trade

### Breakdown of regional agricultural trade (average 1992-1994)

	Exports	Imports
TOTAL	100	100
E.U.	30	40
EFTA	6	4
N-America	1	11
Others OECD	10	8
PECO	10	10
CIS	16	3
Middle East	17	7
Others	10	17

The E.U. is the Romania's main partner, both for imports and exports. Nevertheless, some increase can be observed year by year in the level of trade with the other PECO countries, with Moldavia and Russia.

### Agricultural trade with the European Union

The agricultural trade balance between Romania and the European Union is favourable to the latter. The E.U. exports mainly cereals, dairy products and fats and oils. Romania exports mainly cereals, oils and fats, meat, beverages and fruit and vegetables. The agricultural trade deficit with the E.U. represents 34% of the total agricultural deficit.

#### Agricultural trade balance with E.U. (M.Ecus)

	Total exports	Total imports	Net balance
1989	103	82	21
1990	41	267	-226
1991	76	243	-167
1992	78	324	-246
1993	82	318	-236
1994	104	180	-76

### The agreement with the E.U.

Romania has benefited from GSP advantages in its trade relationship with E.U. since 1975. A specific Agreement with the E.U. was signed on 1 February 1993; the interim Agreement entered into force in May 1993. The most important provisions are different concessions on quotas with reduced import levies and preferential rates of tariffs for others products (see annex).

In general, the basis for the E.C concessions was actual trade in the previous 3 years. In Romania's case, the 2 sides agreed that the years 1990 and 1991 were not significant, in view of the embargo on food exports during this period, so 1988-1989 was taken as the base.

The real impact of this agreement must not be exaggerated. On one side, the quotas given to Romania are not totally used; on the other, the global process of liberalization, the overvaluation of the leu and the limited availability of foreign currencies have been more relevant than the Agreement. Nevertheless, the Agreement is seen as an important step towards membership of an enlarged E.U. This is a major political and economic goal.

## X. The GATT agreement

Romanian is the only country of the PECO members of GATT which has opted for the status of a developing country. This status allows Romanian to have comparatively more relaxed Uruguay Round commitments than the other PECOs.

The GATT agreement imposes restrictions in 3 areas: internal support, export subsidies and access for imports.

### X.1 Internal support

Romania did not specify any non-exempt domestic support during the reference period, expressed as an Aggregate Measure of Support (AMS). Therefore, as a developing country, Romania is only allowed to spend 10% of the value of output on non-exempt domestic support.

### X.2 Exports

The following table summarizes the main subsidized exports, and the expenditure allowed in the years 2,000 and 2004 for Romania by the Uruguay Round agreement.

#### Subsidized Exports allowed (t)

Products	1995	2000	2004
Cereals	332,100	310,600	283,500
Oilseeds	3,200	3,090	2,750
Vegetable oil	97,500	93,900	83,600
Sugar	172,900	165,900	147,600
Wine	9,400	8,070	7,900
Fruit	155,600	149,300	132,800
Vegetables	130,400	125,100	111,400
Poultry meat	32,600	31,300	27,800
Other meat*	161,200	154,600	137,600
Live animals	19,600	18,800	16,700
Eggs**	1,390	1,310	1,110
Cheese	13,000	12,500	11,100
Butter and butter oil	16,900	16,200	14,500
Allowed expenditure (Mio Lei*** )	2,830	2,657	2,202

\*Beef meat, pigmeat, sheepmeat, tinned meat and meat products

\*\* mio units

\*\*\* constant lei 1986-1989

Source: Romanian GATT schedule

### X.3 Imports

As a developing country, the commitment for a reduction of tariff bindings by 24% is spread over a period of 10 years. Moreover, Romanian ceiling tariff bindings are often equal to or higher than those of the E.U. in the case of beef, pork, barley and maize. Effectively, this allows larger increases in import protection in comparison with the current applied tariffs. Therefore, the 24% reduction is not seen as an effective constraint on border protection.

Import tariff quotas are applied for few products. In addition to the quotas covered by the following table, those products are seed potatoes, chocolate, some pasta, ice-cream, beer, vermouth, undenatured ethyl alcohol and cigarettes.

#### Main tariff quotas ( t)

	1995	2004
Meat*	19,000	19,000
Powder milk	500	900
Cheese	1,600	2,600

\*Meat and edible offals of bovine and pork, fresh, chilled or refrigerated

Source: Romania GATT schedule

## XI Medium term Outlook

### XI.1 Constraints for the future

The future development of the Romanian economy is confronted with a whole series of constraints (**the major ones are not specific to the farm sector**) which have to be taken into account, regarding the international environment, the national environment and specific agricultural aspects. The following list does not claim to be exhaustive.

#### International environment

- the political and economic situation in the region. The two main uncertainties seem to be what will happen in Russia and other countries of the former Soviet Union, and in the Balkans;
- the economic evolution in the European Union, the other major trade partners
- the Uruguay Round commitments.

#### National environment

- the evolution of the Romanian economy. A huge recovery is essential to:
  - generate the resources (private and public) needed for a long term recovery in the farm sector. A restructuring program has high financial needs over a rather lengthy period.
  - create alternative employment outside agricultural activity,
  - stimulate a certain recovery of non subsidized demand for agricultural products, in particular for meat,
- the economic policy in practice applied by the Romanian authorities: budget deficit, exchange rate, tariff, privatisation, ...
- the evolution of the banking system

#### Specific agricultural aspects

- the agricultural policy, and its degree of consistency with the overall economic policy,
- the creation of a real land market, to achieve the process of land privatization with definitive property titles,
- the development of real competition in the upstream and downstream industries, which implies at least a certain degree of privatization and the removal of state and local monopolies,
- the lack of (national or foreign) capital, the enormous investments needed in all the sectors of the economy and the relative lack of attractiveness of the agricultural industry as compared with the alternatives,
- the characteristics of agricultural employees: high number, age, lack of training.

## XI.2 Policy scenarios

On this basis, three future scenarios (optimistic, pessimistic and intermediate) can be foreseen.

### Optimistic scenario

An optimistic scenario could be based on the main following assumptions:

- International environment: political stability and economic growth in the former Yugoslavia, in Russia and the other Republics of the former Soviet Union.
- National environment: GDP must grow more than 6% by year in order to decrease the unemployment pressure on the agricultural sector and to generate the resources needed for development of the rural infrastructure

### Pessimistic scenario

A pessimistic scenario could be based on the main following assumptions:

- International environment: continuity in the current political and economic uncertainties.
- National environment: budget constraints and international pressures may not allow the Romanian government to maintain their current system of input subsidies and to compensate the continuous losses of the upstream and downstream industries. In addition, few effective steps would be made in practice in the privatization process and agriculture would still play a major role in keeping unemployment under control.

### Intermediate scenario

An intermediate scenario could be based on the main following assumptions:

- International environment: some improvements could be expected in the political and economical situation in the neighbouring countries.
- National environment: a moderate GDP growth of 3% per year (which is already expected for 1995). According to official Romanian sources, only 70% of the industrial capacity was used in 1989. By 1992 and 1993, it fell well below 50%, although it remains to be seen how much of the unused capacity can ever be regained. Some parts will require severe rehabilitation while other parts should be scrapped. In that context, a 3% increase in GDP seems realistic.

Economic policy will continue to follow, in general terms, the recommendation issued by the IMF and the World Bank and other assistance purveyors.

Unemployment could rise to 16% in the year 2000. No big emigration movement can be foreseen. The population is expected to be 22.5 million in the year 2000.

- Statu quo trend in the privatization process, which assumes a continuation of current process of privatization as described above.

- Specific agricultural aspects: The agricultural sector will continue to assume the role of an employment buffer. An increase in on-farm consumption and labour intensive production can be expected, to the detriment of extensive crops such as wheat and barley. In concrete terms, this means an expected increase in:

- corn production and potatoes (for feed and food) and forage area,

- fruit and vegetables (for local markets).

No huge recovery in irrigation area is expected until the year 2000. No increase in average yield in grains is expected for this reason.

The scenario is based on the development of small or medium farms which integrate crop and livestock productions and are labour intensive. They would be:

- as self-sufficient as possible;
- oriented mainly to self-consumption, local markets or direct sales;
- not very efficient as far as feed-ratios is concerned and
- producing a wide range of products.

Food security will continue to be a major concern for the Romanian authorities. But little budget expenditure would be available to finance surpluses, in an overall context of budget discipline and huge investment needed in all the sectors of the economy and in the infrastructure.

For reasons of simplicity, this is the only scenario for which a detailed calculation have been made.

### XI.3 Land use

The land use distribution expected in the year 2000 has been forecast on the base of the general assumptions already presented and of the coming factors:

- no increase of agricultural area, which means that the wooded area should be stable at around 6.68 mio ha.
- stability of the permanent crop area, with a small decrease in fruit area (mainly in the big plantations owned by the commercial companies) and a small increase in vineyards.
- increase in fodder crops and permanent pasture, for animal feeding in the private sector;
- increase in vegetable area, for self-consumption and direct sales on the markets;
- stabilization of potatoes (for feed and food) and at a low level of industrial crops as oilseeds and sugarbeet. It is supposed that the current support given through commercial loans with low interest rates will be removed at the same time

as the privatisation of the "integrators".

- decrease in the overall cereal area, but an increase in the corn area.

#### Land use (000 ha)

	1992	1993	1994e	2000f
Cereals	5,758	6,214	6,328	5,950
Sugarbeet	180	97	130	150
Oilseed	728	667	650	650
Potatoes	219	249	249	250
Vegetables	223	219	204	250
Total main crops	7,200	7,533	7,648	7,250
Fodder crops	2,157	1,809	1,690	2,000
Arable land	9,357	9,342	9,338	9,250
Fruits	305	282	301	280
Wine	212	222	249	270
Permanent pasture	4,830	4,852	4,872	4,900
Agric. land	14,704	14,698	14,760	14,700
Wooded area	6,682	6,682		6,680

#### XI.4 Cereals

The main expected evolutions are:

- an overall decrease in the cereals area;
- an increase in the cereals area planted by the private sector (mainly traditional corn varieties) and of on-farm consumption;
- an increase in the average cereals yield close to 1989 and 1990 level, 3 t/ha
- the forecasted production in the year 2000 is close to the expected harvest in 1995. Nevertheless, a significant decrease in losses can be expected, which means that the production available for selling on the market will increase.
- exports are predicted to be at the level of the ceilings fixed by the GATT agreement, but could be lower if internal demand were higher.

### Tentative cereal balance sheet for 2000

Cereals (000t)	1992	1993	1994e	2000f
area (000 ha)	5,758	6,214	6,329	5,950
yield (t/ha)	2.13	2.43	2.85	3.0
production	12,250	15,131	18,010	17,850
Consumption	15,109	16,896	17,150	17,539
Exportable surplus	-2,859	-1,765	860	311
GATT ceiling				311

The main conclusion of this scenario is that a huge increase in cereal production and in the exportable surplus is not expected. Uruguay Round commitments will not be a major concern in the cereals sector.

### XI.5 Livestock

#### Tentative pork balance sheet for 2000

Pork (000t)	1992	1993	1994e	2000f
Production	789	748	739	765
Use	755	704	657	715
P.c. use (kg)	33.1	31.2	28.9	31.8
Imports	-34	-44	-82	0
Exportable surplus				50

#### Main assumptions:

- per capita use: an increase in consumption by 10% on 1994 data, to 31.8 kg per capita, always lower than the pre-revolution level, when high consumers subsidies were granted.
- slaughterings are estimated at 8.5 million head as a result of a huge decline in public sector activity compensated by an increase in private sector.
- carcase weight: stable at 90 kg.

### Tentative poultry balance sheet for 2000

Poultry (000t)	1992	1993	1994e	2000f
Production	296	264	268	350
Use	319	291	302	329
P. c. use (kg)	13.9	12.7	13.3	14.6
Imports	23	27	34	0
Exportable surplus				21
GATT ceiling				31.3

#### Main assumptions:

- per capita use: an increase in consumption by 10% on 1994 data, to 14.6 kg per capita, always lower than the pre-revolution level, when high consumers subsidies were granted.
- slaughterings should grow to 350 million head, an initial increase is forecasted in 1994 and this trend, based on the relative importance of the private sector, could continue in the following years.
- carcase weight: stable at 1 kg.

### Tentative beef balance sheet for 2000

Beef (000t)	1992	1993	1994e	2000f
Production	282	260	266	306
Use	258	267	271	270
P. c. use (kg)	11.3	11.8	12.0	12.0
Imports	8	7	5	
Exportable surplus				36

#### Main assumptions:

- per capita use: an increase in consumption is observed since the beginning of the transition. As beef is not the preferred meat in Romania and pork and poultry meat consumption is expected to grow, per capita use has been estimated as stable, at the high 1994 level.
- slaughterings should increase as the private sector is already owns most of the cattle, to 900.000 animals.
- carcase weight: stable at 340 kg.

**Tentative per capita meat disappearance (kg/ha) for 2000**

	1992	1993	1994e	2000f
Beef	11.3	11.8	12.0	12.0
Pork	33.1	31.2	28.9	31.8
Sheep	3.1	2.8	3.1	3.0
Chicken	13.9	12.7	13.3	14.5
<b>Total</b>	<b>61.4</b>	<b>58.5</b>	<b>57.3</b>	<b>61.3</b>

Up to the year 2000, the following developments are expected:

- an increase in meat consumption by 11%, generated by the overall economic improvement. As far as food is concerned, meat products are the most demanded by Romanian consumers and a margin of manoeuvre already exists for an increase in consumption.
- a global increase in production, generated by small/medium size private farms clearly oriented to local and national markets, which overcompensate the decrease in commercial companies production.
- as for cereals, no significant surpluses for exports can be expected. On the contrary, some imports of high value-added products will take place to be consumed by a small urban minority.

**The main conclusions of this scenario are:**

- a recovery in meat consumption, mainly for pork and poultry meat;
- no major difficulties are expected in the livestock sector regarding to the consequences of the Uruguay Round agreement, even if internal market prices are higher than the world market prices.

## MAIN BIBLIOGRAPHY

AGRER/AGRICONSULTING(1994): **Food security** (40 pages + tables and graphics)

Business Journal (Romania): **several issues**

Economist Intelligence Unit: **several reports**

European Bank for Reconstruction and Development (EBRD-1994): **Strategy for Romania** BDS/RO/94-1 (Final)

European Commission (EC-1992): **Situation, tendencies et perspectives de l'agriculture en Roumanie** (147 pages)

Grozea, D.; Helmenstein, C.; Tomescu, G.; Ursulescu, M.; Worgotter, A. (1994): **Country report: Romania** Institut für Höhere Studien-Bank Austria

Jackson, M.; Swinnen, J. (1995): **A statistical analysis of the current situation of agriculture in the Central and Eastern European Countries**. Report to DGI, European Commission

Joint Romanian-International Agricultural Strategy Team (1993): **A strategy for the transition in agriculture** World Bank in cooperation with EC-Phare, EBRD, USAID and the French and German government

National Commission for Statistics: **several issues**

O.E.C.D.: **several reports**

Platteau, J.P. et al (1993): **Romania: a strategy for the transition in agriculture** AGRER/AGRICONSULTING study

Steine, W.J. (1994): **First study on data collection on "Visegrad" countries and ECO countries**. Empirica Delasasse. Eurostat

Swinnen, J.F.M. as editor (1994): **Policy and institutional reform in central Europe countries** Averbury

TANGERMANN, S.; JOSLING, T.E. (1994): **Pre-accession agricultural policies for Central Europe and the European Union**, report made for the European Commission (DG I)

Rauta, C. (1992): **Soil pollution in Romania: achievements and prospects** (8 pages)

Romanian Economic Observer: **several issues**

World Bank: **Several reports**

## Annex

### PHARE Assistance to Romania's Agriculture

#### 1. General Framework and Background

Between 1990 and 1993, Romania has been the second beneficiary of Phare Assistance for agriculture after Poland, with an amount of 76 Mio ECUs commitments, out of a total of 415.9 Mio ECUs for Phare agricultural tranche in the CEECs on this period.

The agricultural commitments were higher in 1991 when began Phare assistance for the agricultural field in Romania and in 1992, than in 1993, agriculture representing only 3.8% of the total Phare commitments in this country. There was no agricultural tranche in 1994 Phare Programme for Romania.

Within Romania, the **Ministry of Agriculture and Food Industry** is the responsible authority for the realisation of Phare assistance for agriculture ; its Programme Management Unit is responsible for the overall management, co-ordination and financial administration of the programmes.

#### Phare agricultural commitments for Romania (Mio ECUs)

1990	1991	1992	1993	1994
0	39	32	5	0

#### 2. Specific Actions

There were two major Phare Programmes for Romanian agriculture in 1991, so called "**Agricultural Inputs and Animal Feed**" (25 Mio ECUs), which was not a programme geared to the long term restructuring of the animal production sector, but one which would help the Romanian farmers feed their animals and keep the sector afloat until more systematic reform could take place, and "**Critical Import Supply for the Agroprocessing Industries in Romania**" (9 Mio ECUs). The latter programme aimed firstly to help the country to maintain production in key food production sector, by importing consumables and spare parts, and secondly to ensure existing agroindustries can function and process agricultural production.

In 1992, the programme set up for Romanian Agriculture ("**Privatisation of Agriculture and Agro-industries**") mainly aimed to promote the potential of private agriculture and to accelerate the reform process by encouraging the development of the private sector and the privatisation of all types of rural enterprises. This programme was decided in 2 phases.

The first one (12 Mio ECUs) focused on four core activities which were : Assistance to the Ministry of Agriculture in developing an agricultural policy and in implementing the land reform programme ; Technical, financial and legal assistance to private-sector farmers ; Assistance to establish private-sector distribution networks (expertise and technical advice, establishment of a Market Information System) ; and Assistance to the reorganisation of agro-industrial units.

The second one (20 Mio ECUs) was made up with two major components : firstly the establishment of a Rural Credit Guarantee Fund (9 Mio ECUs) with provision of part of its capital basis, and secondly a supplement support for the Privatisation Programme ; it also provided the establishment of a Farming and Agribusiness Consultancy service, and technical assistance (Training and Management programmes).

The overall objective of the 1993 so called "**Land Reform Program**" (5 Mio ECUs) was to extend previous Phare assistance to the land reform process by providing additional support for the establishment of a nation-wide Land Information System. The immediate objective was to accelerate the issue of land property titles through systematic cadastral surveys.

## Annex

### Utilization of the association agreement quotas

PRODUCT (tonnes)	Quota available	Quota utilized	% of utilization
<b>01.07.94-30.06.95</b>			
<b>CEREALS</b>			
<i>Common wheat</i>	20220	0	0.0
<b>DAIRY PRODUCTS</b>			
<i>Cheeses</i>	1333	42	3.1
<b>POULTRY</b>			
<i>Chicken meat</i>	1022	256	25.1
<b>BEEF</b>			
<i>Beef</i>	1390	1002	72.1
<b>1994</b>			
<b>PIG MEAT</b>			
<i>Sausages</i>	785	0	0.0
<i>Processed products</i>	1302	0	0.0
<i>Meat of swine, fresh, chilled, frozen</i>	11230	9	0.1
<i>Total pig meat</i>	13317	9	0.1
<b>SHEEP &amp; GOATS</b>			
<i>Live animals</i>	595	735	123.6
<i>Meat</i>	95	4	4.2
<i>Total sheep &amp; goats</i>	689	739	107.3
<b>01.01.94-30.06.94</b>			
<b>GOOSE MEAT</b>			
<i>Goose meat</i>	55	0	0.0
<b>MAIN FRUITS AND VEGETABLES</b>			
<i>Tomatoes : 07020010</i>	1780	71	4.0
<i>Cucumbers : 07070011</i>	810	217	26.8
<i>Peppers : 07096010</i>	935	0	0.0
<i>Plums : 08094011</i>	980	0	0.0
<i>Strawberries : 08111010</i>	940	600	63.8
<i>Dried fruits : 08131000</i>	310	119	38.4
<i>Sunflower oil : 15121191</i>	1475	0	0.0
<i>Apple juice : 20097019</i>	570	70	12.3

Source : European Commission

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

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

Achévé d'imprimer en juillet 1995  
dans les ateliers de la Commission Européenne