Agricultural Situation and Prospects in the Central and Eastern European Countries

Bulgaria

EUROPEAN COMMISSION
DIRECTORATE-GENERAL FOR AGRICULTURE
Working Document
European Commission
Directorate General for Agriculture (DG VI)
Working Document

Agricultural situation and prospects in the
Central and Eastern European Countries

BULGARIA

VOL. I

This report has been prepared by DG VI in close collaboration with Dr Sophia Davidova from University of London, Wye College, Kent, and Dr Svetla Batchvarova from AMIS (Agricultural Market Information System), Sofia, and with the advice and contributions of Professor Alain Pouliquen, Directeur de Recherche at INRA (Institut National de la Recherche Agricole), Montpellier. Assistance was given by DG IA and DG II.

The manuscript has been prepared by H. C. Beaumond and Manuel R. Gavira Montiel. The authors accept full responsibility for any errors which could still remain in the text. The manuscript was concluded on 30th of June 1995.
# TABLE OF CONTENTS

## VOL. I

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>TABLE OF CONTENTS</td>
<td>II</td>
</tr>
<tr>
<td>FOREWORD</td>
<td>V</td>
</tr>
<tr>
<td>About the data</td>
<td>VI</td>
</tr>
<tr>
<td>Bulgaria in comparison with other CEECs and EU-15 (Table)</td>
<td>VII</td>
</tr>
<tr>
<td>Geopolitical map of Bulgaria</td>
<td>VIII</td>
</tr>
<tr>
<td>GLOSSARY/ABBREVIATIONS</td>
<td>IX</td>
</tr>
<tr>
<td>ABOUT BULGARIA</td>
<td>X</td>
</tr>
<tr>
<td>EXECUTIVE SUMMARY</td>
<td>XI</td>
</tr>
</tbody>
</table>

## 1. GENERAL OVERVIEW

- 1.1 Geographical characteristics                                     1
- 1.2 Natural characteristics, potentialities and constraints          1
- 1.3 Population                                                        3
- 1.4 Political situation                                               5
- 1.5 The socio-economic situation                                      7
- 1.6 Employment structure and agriculture                              10

## 2. LAND REFORM AND FARMING STRUCTURES

- 2.1 Concepts used for the agricultural reform                         15
- 2.2 Results of land reform                                             17
- 2.3 Land market                                                       18
- 2.4 Land restitution: comments on the present situation              18
- 2.5 The evolution of farming structures                               19
  - 2.5.1 Situation at the end of the communist period                   20
  - 2.5.2 New farming structures                                        21
  - 2.5.3 Development of individual farms                               22
  - 2.5.4 Conclusions: foreseeable mid-term evolution of farm structure 26

## 3. AGRICULTURAL ECONOMY

- 3.1 Importance of agriculture in the economy                         28
- 3.2 Domestic consumption                                              29
- 3.3 Land use                                                          32
  - 3.3.1 Distribution of uses                                          32
  - 3.3.2 Irrigated land                                                32

II
3.3.3 Fallow land

3.4 Crops
3.4.1 Cereals
3.4.2 Sunflower seeds
3.4.3 Sugar beet and sugar
3.4.4 Tobacco
3.4.5 Fruit
3.4.6 Vegetables
3.4.7 Potatoes
3.4.8 Vineyards table grapes and wine

3.5 Livestock
3.5.1 Inventories
3.5.2 Meat production
3.5.3 Other main animal products

3.6 Forestry

4. UPSTREAM AND DOWNSTREAM SECTORS
4.1 The current situation
4.2 Outlook
4.3 Agricultural machinery
4.4 Fertilizers and pesticides
4.5 Banking system

5. AGRICULTURAL POLICY
5.1 Situation before the transition period
5.2 Changes brought about during the transition
5.3 Price policy
5.4 Production costs and sectoral transfers
5.5 Border measures
5.6 Market regimes
5.7 Support measures and budgetary outlay
5.8 Fiscal considerations
5.9 Outlook

6. AGRICULTURAL TRADE
6.1 Agricultural trade before the transition
6.2 Agricultural trade regime during the transition
6.2.1 Exports of main agricultural products
6.2.2 Imports of main agricultural products
6.2.3 Exports and imports by main partners
6.2.4 Regional cooperation
6.3 Trade with the European Union. The Association Agreement
6.4 Agreement with the EFTA countries
6.5 Accession to the GATT and the WTO
6.6 Outlook
7. OUTLOOK FOR 2000 FOR THE MAIN AGRICULTURAL COMMODITIES

7.1 The general context
7.2 Land use outlook
7.3 Per commodity analysis
7.3.1 Cereals
7.3.2 Oilseeds (Sunflower seeds)
7.3.3 Sugar
7.3.4 Other crops
7.3.5 Livestock production
7.3.6 Cow's milk
7.3.7 Beef and veal
7.3.8 Pigmeat
7.3.9 Poultrymeat
7.3.10 Sheep and goat meat

LIST OF TABLES AND TEXT BOXES

BIBLIOGRAPHY

VOL. II (separate volume)

ANNEX I PHARE Assistance to Bulgaria's Agriculture
ANNEX II Utilization of the Association Agreement quotas
ANNEX III Statistical information
FOREWORD

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

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

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

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

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

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

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

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

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

---


---

## Bulgaria in comparison with other CEECs and EU-15

<table>
<thead>
<tr>
<th>Country</th>
<th>Population (mio)</th>
<th>GDP (ECU)</th>
<th>GDP pc (ECU)</th>
<th>Total area (mio ha)</th>
<th>Agricultural area (mio ha)</th>
<th>Arable area (mio ha)</th>
<th>Agricultural production (bio ECU)</th>
<th>Agricultural employment (000)</th>
<th>Rainfall (mm/year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bulgaria</td>
<td>8.5</td>
<td>9.4</td>
<td>1110</td>
<td>11.1</td>
<td>6.2</td>
<td>4.0</td>
<td>1.131</td>
<td>694</td>
<td>21.2</td>
</tr>
<tr>
<td>Czech. Rep.</td>
<td>10.3</td>
<td>26.7</td>
<td>2586</td>
<td>7.9</td>
<td>4.3</td>
<td>3.2</td>
<td>0.871</td>
<td>271</td>
<td>5.6</td>
</tr>
<tr>
<td>Estonia</td>
<td>1.6</td>
<td>1.5</td>
<td>938</td>
<td>4.5</td>
<td>1.4</td>
<td>1.0</td>
<td>0.266</td>
<td>89</td>
<td>8.2</td>
</tr>
<tr>
<td>Hungary</td>
<td>10.3</td>
<td>32.5</td>
<td>3150</td>
<td>9.3</td>
<td>6.1</td>
<td>4.7</td>
<td>2.068</td>
<td>392</td>
<td>10.1</td>
</tr>
<tr>
<td>Latvia</td>
<td>2.6</td>
<td>2.2</td>
<td>850</td>
<td>6.5</td>
<td>2.5</td>
<td>1.7</td>
<td>0.232</td>
<td>229</td>
<td>18.4</td>
</tr>
<tr>
<td>Lithuania</td>
<td>3.8</td>
<td>2.3</td>
<td>627</td>
<td>6.5</td>
<td>3.5</td>
<td>2.3</td>
<td>0.259</td>
<td>399</td>
<td>22.4</td>
</tr>
<tr>
<td>Poland</td>
<td>38.5</td>
<td>73.4</td>
<td>1907</td>
<td>31.3</td>
<td>18.6</td>
<td>14.3</td>
<td>4.648</td>
<td>3661</td>
<td>25.5</td>
</tr>
<tr>
<td>Romania</td>
<td>22.7</td>
<td>21.8</td>
<td>961</td>
<td>23.8</td>
<td>14.7</td>
<td>9.3</td>
<td>4.500</td>
<td>3537</td>
<td>35.2</td>
</tr>
<tr>
<td>Slovakia</td>
<td>5.3</td>
<td>8.7</td>
<td>1643</td>
<td>4.9</td>
<td>2.4</td>
<td>1.5</td>
<td>0.512</td>
<td>178</td>
<td>8.4</td>
</tr>
<tr>
<td>Slovenia</td>
<td>1.9</td>
<td>9.8</td>
<td>5018</td>
<td>2.0</td>
<td>0.9</td>
<td>0.2</td>
<td>0.250</td>
<td>90</td>
<td>10.7</td>
</tr>
<tr>
<td>CEEC-10</td>
<td>105.4</td>
<td>188.3</td>
<td>1786</td>
<td>107.7</td>
<td>60.6</td>
<td>42.3</td>
<td>14.7</td>
<td>9540</td>
<td>26.7</td>
</tr>
<tr>
<td>EU-15</td>
<td>369.7</td>
<td>5905.1</td>
<td>15972</td>
<td>323.4</td>
<td>138.1</td>
<td>77.1</td>
<td>208.8</td>
<td>8190</td>
<td>5.7</td>
</tr>
</tbody>
</table>

All figures are for 1993. Rainfall long term average.

Source: DGVI CEEC dataset.
## GLOSSARY/ABBREVIATIONS

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AA</td>
<td>Association Agreement (between the European Union and Bulgaria)</td>
</tr>
<tr>
<td>ACC</td>
<td>Agricultural Credit Centre (Bulgaria)</td>
</tr>
<tr>
<td>AMIS</td>
<td>Agricultural Market Information System (Bulgaria)</td>
</tr>
<tr>
<td>AIC</td>
<td>Agro-industrial complexe</td>
</tr>
<tr>
<td>APK</td>
<td>&quot;Agrarno-Promishelni Kompleski&quot; (see AIC)</td>
</tr>
<tr>
<td>BSP</td>
<td>Bulgarian Socialist Party</td>
</tr>
<tr>
<td>CAP</td>
<td>Common Agricultural Policy</td>
</tr>
<tr>
<td>CEECs</td>
<td>Central and Eastern European Countries</td>
</tr>
<tr>
<td>CIS</td>
<td>Community of Independent States (part of the Former Soviet Union)</td>
</tr>
<tr>
<td>CMEA</td>
<td>Council for Mutual Economic Assistance (also called &quot;COMECON&quot;)</td>
</tr>
<tr>
<td>DG VI</td>
<td>General-Directorate VI, Commission of the European Community</td>
</tr>
<tr>
<td>EBRD</td>
<td>European Bank for Reconstruction and Development</td>
</tr>
<tr>
<td>EC</td>
<td>European Community</td>
</tr>
<tr>
<td>ECU</td>
<td>European Currency Unit</td>
</tr>
<tr>
<td>EFTA</td>
<td>European Free Trade Agreement</td>
</tr>
<tr>
<td>EIU</td>
<td>The Economist Intelligence Unit</td>
</tr>
<tr>
<td>EU</td>
<td>European Union</td>
</tr>
<tr>
<td>FAO</td>
<td>Food Agriculture Organization, United Nations</td>
</tr>
<tr>
<td>GAP</td>
<td>Gross Agricultural Product</td>
</tr>
<tr>
<td>GATT</td>
<td>General Agreement on Tariffs and Trade</td>
</tr>
<tr>
<td>GDP</td>
<td>Gross Domestic Product</td>
</tr>
<tr>
<td>ha</td>
<td>Hectare</td>
</tr>
<tr>
<td>IMF</td>
<td>International Monetary Fund</td>
</tr>
<tr>
<td>KZ</td>
<td>Collective Farms</td>
</tr>
<tr>
<td>LEV, lev</td>
<td>Leva (Bulgarian national currency)</td>
</tr>
<tr>
<td>MLC</td>
<td>Municipal Land Commission</td>
</tr>
<tr>
<td>NAPS</td>
<td>&quot;Natsionalen Agrarno-Promishelen Soyuz&quot; (National Agro-industrial Union)</td>
</tr>
<tr>
<td>NEM</td>
<td>New Economic Mechanism</td>
</tr>
<tr>
<td>NMP</td>
<td>Net Material Product (communist concept of GDP)</td>
</tr>
<tr>
<td>NSI</td>
<td>National Statistical Institute (Bulgaria)</td>
</tr>
<tr>
<td>TKZ</td>
<td>Labour Cooperative of Agricultural Firms</td>
</tr>
<tr>
<td>TPK</td>
<td>Labour Production Cooperative</td>
</tr>
<tr>
<td>OECD</td>
<td>Organisation Européenne pour la Coopération et le Developpement</td>
</tr>
<tr>
<td>o.w.</td>
<td>of which</td>
</tr>
<tr>
<td>PAK</td>
<td>&quot;Promishelno-Agrarni Kompleski&quot; (see AIC)</td>
</tr>
<tr>
<td>p.c.</td>
<td>per capita</td>
</tr>
<tr>
<td>PHARE</td>
<td>Poland and Hungary Aid Restructuring Economy; EC programme of assistance extended to all CEECs</td>
</tr>
<tr>
<td>RPK</td>
<td>Regional Consumers Cooperatives</td>
</tr>
<tr>
<td>TBS</td>
<td>Territory Belonging to a Settlement, i.e. towns, villages or hamlets</td>
</tr>
<tr>
<td>UDF</td>
<td>Union of Democratic Forces</td>
</tr>
<tr>
<td>USDA</td>
<td>United States' Department for Agriculture</td>
</tr>
<tr>
<td>VAT</td>
<td>Value Added Tax</td>
</tr>
<tr>
<td>VISEGRAD</td>
<td>Central European Free Trade Agreement between Poland, Hungary, Czech Republic and Slovakia, also known as CEFTA.</td>
</tr>
<tr>
<td>WTO</td>
<td>World Trade Organization</td>
</tr>
</tbody>
</table>
ABOUT BULGARIA

The Republic of Bulgaria lies in south-east Europe, in the Balkans. The Danube is the northern border with Romania, and the Black Sea being the eastern limit. Mountains surround the country on the west and south, making borders with Serbia, the former Yugoslav Republic of Macedonia and Greece. Turkey, in the south-east, is the biggest neighbouring country. Bulgaria covers an area of 110,000 square kilometres, of which a third is mountainous. It became an independent nation in 1878, after 500 years of Ottoman domination. Bulgarians are a Slavic people and Bulgarian is the official language. The total population was 8.5 mio at the end of 1992 (76 per km²), of which 20% are less than 15 years old. There are 3 mio households, consisting on average of 2.8 persons. 67% live in cities and 32% in rural areas and the total work force is 4.7 mio. The average annual growth in population is slightly negative due to low fertility and ageing. Population decreased in 1989, with the departure of a last wave of ethnic Turk migrants (around 1.5 mio Turks left Bulgaria since its independence). The last census in 1992 shows that the population comprises the following ethnic minorities: Turks (9.4%), Gypsies (3.5%) and others (1.2%). The largest religious community is Christian Orthodox (86% of the population) with the other big community being Muslims (12.7%).

Sofia (1.2 mio inhabitants) is the capital city. Other main cities and industrial centres are, Plovdiv (0.4 mio), Varna (0.3 mio), Burgas (0.2 mio) and Ruse (0.2 mio). The territory is divided into 9 regions ("oblasti"), comprising 280 municipalities, each of them divided into "Territories Belonging to Settlements" (5336 TBS, corresponding to towns, villages or hamlets). The average size of a TBS is 1.000 ha and of a municipality, 40.000 ha.

Bulgaria is endowed with natural resources: substantial quantities of lead-zinc, manganese, iron ore, coal and brown coal, and reserves of chromium and copper ores. A significant share of the country's industry relies on domestic raw materials. The country is also rich with non-metal natural resources: quality stone, marble, kaolin, gypsum, suited especially for the construction materials industry. Heavy industry and engineering produce steel, cables, non-ferrous metal, storage batteries, motors, electric hoists, forklifts, rolling stock, trucks, agricultural machinery,... The chemical industry is well developed, with production of fertilizers (urea, ammonium) and pesticides (carbamides). The textile (cotton, wool and silk) and leather industries (shoemaking factories) enjoy a long standing tradition. The food industry is also an important element of the Bulgarian economy. A mild climate, beautiful traditional villages and interesting historical sites, high mountains and the Black sea shores make Bulgaria a pleasant destination; there is scope for tourism development (approximately 2 million tourists visited the country in 1993).

Since the adoption of a democratic constitution in 1991, Bulgaria is a parliamentary republic with one chamber of 240 deputies, elected for 4 years. The President and the Vice-President are elected through direct elections every 5 years. The current president is Zhelyu ZHELEV and the Prime Minister is Zhan VIDENOV. Following the most recent elections held in December 1994, the Bulgarian Socialist Party has an absolute majority. The Union of Democratic Forces is the opposition coalition. Bulgaria is a member of the Council of Europe and since 1993 has been an Associate member of the European Union. Bulgaria is a full member of the IMF, the IBRD, the World bank, the EBRD and is currently negotiating its membership at the WTO.
EXECUTIVE SUMMARY

General economy

The transition process towards a free market economy, under way since 1989, has been accompanied by a strong economic recession, which primarily affected the industrial sector and which is now more important for agriculture. Gross domestic product decreased by 28% over the period 1989-1993. Bulgaria is more affected than other CEECs by the collapse of the previous system and trade arrangements, because of the high level of integration it used to have within the CMEA. The development process carried out under the communist regime was characterized by a high degree of urbanization and industrialization, and agriculture was geared to producing for export to CMEA markets. Signs of recovery appeared in 1994, thanks to good results in manufacturing and, in the case of agriculture, to a better harvest after two years of drought. It is however too early to deduce from this that the Bulgarian economy has bottomed out. More or less zero growth is forecasted for 1995.

The public deficit in 1995 should be limited to 7-8% of GDP, due to a tight policy on salaries in the public sector, an increase in state revenues and the successful negotiation of the rescheduling of international commercial debts. However, the loosening of monetary policy in 1994 almost doubled the inflation rate (120%), reflecting the depreciation of the leva and the progressive alignment of internal prices with those on the world market. Because of the effect of variations in the exchange rate, the trade balance was slightly negative in 1994, after having been substantially negative in 1993. Privatization is in process, although somewhat delayed compared to other CEECs and progressing at various rates in different sectors of the economy. Privatization is well advanced in the distribution sector, but up to 1994, only a small proportion of state-owned enterprises had been privatized. Around a third of the deals had been made with foreign investors, in fields like the engineering industry or mining. Private banks are growing in number.

The socio-economic situation is difficult, with high unemployment and a continuous erosion of purchasing power due to high inflation. The increase in food prices was stronger than those for other goods. Current average salaries are around 50 U$/month and the average share of incomes dedicated to food is high (estimated at 45%)c. Poverty affects a significant part of the population, although household plot production, allowing for on-farm consumption, eases the situation of many families. Official figures show 14% registered unemployed but other estimates give higher figures [e.g. OECD, 1995]. Because of overmanning in the public sector, privatisation will tend to increase this figure in the short term. Employment in the private sector accounted for 24% of total employment in 1993.

---

a because of the difficulties in registering the economic flows during the transition, substantial revisions of data might still take place.

b These were reduced by the London Club in July 1994 by 48.3% of 8,16 bio U$ [ The Economist Intelligence Unit, country profile 1994-1995].

c Including an estimation of food produced and consumed within household.
The overall situation may, in fact, be slightly better due to the size of the underground economy which creates a certain dynamic but makes it more difficult to have a clear picture. The strengthening of state institutions is considered vital for the success of the transition as well as for the stability of the country’s revenue base and revenue collection. Privatisation is generally acknowledged as the solution to Bulgaria’s problems but progress has been disappointing so far. At this stage, there is still a risk of prolonged recession, characterized by insufficient adaption to a modern market orientated economy, which would pose a problem for the convergence towards the EU. As the new Government has not yet clearly implemented a new policy it is too early to provide a more definite picture.

Agriculture

Bulgaria enjoys good natural conditions for agriculture on two thirds of its territory, the rest being semi-mountainous or mountainous zones. Fertile soils in the Danube and Maritsa plains, as well as along the Black Sea, combined with a mild continental climate in the north and a Mediterranean climate in the south, are favourable for arable crops and fruit and vegetables. Most summer crops, however, need irrigation. Water is readily available and, before 1989, a quarter of the arable land was irrigated. Agriculture, which accounts for 10-11% of GDP, is by far the major rural activity and plays a positive role in the trade balance.

Agricultural output has severely declined by 30% between 1989 and 1994. Since price liberalization, agricultural producers have been affected by a large increase in input prices, reduced demand, and by government intervention aimed at slowing the rise of consumer prices of the main foods and at ensuring food security by limiting exports. The combination of this pressure with the hardship resulting from land reform gives an explanation to the slump in agricultural output. The failure to coordinate the process of land restitution to former owners with the liquidation of state controlled cooperatives has increased the difficulties of the transition. New types of associative farming units are the dominant farming structures emerging from the land reform. There are mainly private production cooperatives (with an average of 800 ha), producing essentially annual arable crops. Private individual farms also exist. They are small scale farms (up to 10 ha), of which mainly former household plots of the communist period (less than one ha) and cover over 10% of the agricultural land. They account for a significant share of production, mainly in the livestock and fruit and vegetables sectors. Some middle-size farming structures (100-400 ha) start also to appear. Most of these structures are transitional, subject to further evolution, and many of them are informal, i.e. not registered. A significant share of the agricultural land was, however, until May 1995, still farmed by state controlled cooperatives in liquidation process.

The decline in production was accompanied by a drop in domestic demand and a change in consumption patterns, mainly from animal products to cereals, due to the general loss of purchasing power and the high share of incomes dedicated to food. This adjustment has allowed the supply needs for the population to be met.
Agricultural land accounts for about 6.1 million hectares (55% of the country's area), of which 1.8 mio ha are permanent pastures. In 1994, 2.3 mio ha were cultivated under cereals and half a million were for sunflower seeds. Most of the crops have been very sensitive to the changes experienced in Bulgarian agriculture and the process of transition has meant a reduction in their areas or in their production levels. In the case of tobacco, sugar and wine the decline has been very significant. Cereals and sunflower seeds appeared to be the main alternative crops of the transition period. The relative share of these latter in the crop output has increased. Sunflower seeds is one of the few crops where production has increased substantially.

Since 1989, the livestock sector has experienced, on average, a stronger contraction than crop production (more than 50% in livestock numbers). At the end of the eighties, livestock was highly concentrated in large state controlled cooperatives and in intensive state livestock complexes. The liquidation process of state controlled cooperatives and the fall of domestic demand marked the start of a decapitalization phenomenon. The consolidation of small-scale farms, which are now the main farming structures rearing animals, has not compensated for the effects of the downwards trend in livestock numbers. Future development of bigger livestock units is still being examined.

Upstream and downstream sectors

These sectors are very much at a standstill mainly due to their low efficiency, the delay in the privatization process and to the lack of competition on the domestic market. At present these sectors are characterised by two types of enterprises. On the one hand there are the former large enterprises, many in a critical financial situation, and on the other small private units with a small but growing share of the market.

The agricultural machinery sector has suffered due to the transition. The production capacity of the sector has declined considerably and the machinery available is now largely obsolete and probably to a significant extent unused. Fertilisers and plant protection chemicals production have dropped by more than 50% since 1989. The use of these inputs also declined drastically in the same period for two main reasons. Firstly, a generalised lack of financial means and, secondly, users have responded to the changes in relative prices with a more rational economic approach than in the past, currently leading to extensive levels of production.

Agricultural policy

Agricultural policy during the transition period was mainly characterized by short-term measures, like subsidized campaign credits, aimed at ensuring production in the turmoil of land reform. Price liberalization started in early 1990. Price policies and other related measures have had however a depressing effect on producer prices but not on retail prices. In 1994 the producer price index reached 868 (1990=100) whereas the input price index reached 2342 and the retail price index 2208. The massive price adjustments, resulting from price liberalization induced negative profit margins for producers. Whereas input prices have more or less increased to world prices, prices of basic agricultural products remain below.
On June 1995, a new "Law for state protection of agricultural producers" is in discussion in the National Assembly. The adoption of such a Law has been foreseen with a view to closer links with the Visegrad countries and to bring about gradual convergence with the Common Agricultural Policy.

Agricultural trade

In 1993, food products accounted for 21% of total exports compared to 9.4% of total imports. The main exported commodities are tobacco, fruit and vegetables, wine, live animals and animal products (meat and dairy products). Prior to the transition, more than half of the agricultural trade was with CMEA countries, with a much higher volume than at present. Until 1989 Bulgaria followed a similar trend to other CMEA countries as regards trade: foreign trade was controlled by state monopolies and a high volume of it was with these countries. With the break up of the communist regimes, Bulgaria, like other CMEA countries had to change its trade patterns. In the case of Bulgaria, the break up of the socialist block and of its trade regime probably had a more dramatic impact than in other CEECs. The volume of agricultural trade was reduced by 50% between 1989 and 1994, and the former CMEA countries lost their position as the main destinations of agricultural products (43% of total agricultural exports in 1994 went to these countries, mainly to the CIS, compared to 80% in 1989).

Trade with the EU has developed a particular significance. Agricultural exports to the EU increased from 6% of total exports in this sector in 1989 to 20% in 1994. Agricultural imports from the EU increased from 18% in 1989 to 29% in 1994, although they rose as high as 54% in 1992. Like other CEECs, Bulgaria signed an Association Agreement with the EU in late 1993 in order to benefit from trade with western markets.

The state monopoly on foreign trade was removed as part of the transition. Although Bulgaria used to be a food export orientated country before 1989, current border measures are restrictive for agricultural exports. Export limitations of raw agricultural products are stricter than those for finished products which is a result of official concern for food security and for securing the position of the remaining state processing enterprises. The import regime is controlled through customs duties and minimum specific duties. Currently, Bulgaria is also negotiating to join the GATT and WTO.

Outlook

Forecasting the future of the Bulgarian economy is an exercise fraught with uncertainty. Additional changes are being made to the legal framework, before previous ones have been consolidated, making the future of the agricultural sector hard to predict. Nevertheless, assuming a scenario of a global economic recovery and institutional stability, with the progressive removal of the main constraints remaining in the agro-food sector, some predictions for the main agricultural commodities can be made.
The main assumptions are that the government will keep as its priority the satisfying of domestic demand by national production rather than by imports, which would correspond for many commodities to a rather limited development of export orientated production, and that investment facilities will remain limited for most producers during the coming years. The need for stabilisation of farming structures will, in the short term, prevent big shifts towards capital demanding activities or the development of long cycle productions such as permanent crops or cattle.

The forecasts are based on balance sheets, taking into account foreseeable increases of domestic production and utilization. They show only net trade figures as a balance. Trade volume is not reflected in this exercise, as taking into consideration trade opportunities would add another speculative element. Indeed there is scope for quick development of some profitable exports, as Bulgaria benefits from some comparative advantages, but it is assumed that such operations would be limited to moderate quantities, as currently there are only a few entrepreneurs who have enough capacity to invest, to satisfy international standards and to compete on international markets. Competitiveness would be, to some extent, less a problem, however, in case of a rapid recovery of former CMEA markets.

On the base of these assumptions, the outlook for the 2000 horizon, taking 1994 as a starting point, could be developed as follows:

**Cereals:** Global increase in area, yield and production. Net export capacity.

**Oilseeds:** Increase in area, yield and production. Net export capacity.

**Sugar:** Recovery to 1989 levels. Need of imports.

**Vegetables:** Small increase in area and production. Possibility of speculative targeted exports.

**Fruit:** Small increase in area and production. Only small export capacity, because of the difficulties linked to permanent crops.

**Wine:** Limited increase of production and of net exports, because of investments necessities.

**Milk:** Number of cows near the 1993 level. Milk yield may recover to 1989 level. Possible need of imports.

**Cattle:** Cattle numbers and beef meat production may recover to 1994 levels, after some decrease. No net export capacity.

**Pigs**

Pig numbers close to 1993 levels. Small increase in pigmeat production and in consumption. Very limited net export capacity, unless a discrepancy occurs between production recovery and domestic demand.

**Poultry:**

Poultry numbers may recover to 1991 levels. Possibility of more significant increase in production and in consumption, with limited net export capacity.
1. GENERAL OVERVIEW

Bulgaria lies in the heart of the Balkans and consequently reflects a mingling of Continental, Mediterranean and Oriental elements. The Slav and Orthodox identity, on the one hand, and the long Ottoman historical presence on the other, have made a deep impression on the country. Roman and Byzantine influences belong to the past. In contrast with its close links to the Austro-Hungarian empire and to Germany during the first part of the century, cultural affinity with Russia was reinforced during the communist period. Bulgaria has often been regarded as the "little brother" of the former USSR. Bulgaria was a rural society until World War II and was a significant wheat exporter to the European market during the first half of the century. Its transformation into a modern, industrialized and urbanized country took place under the Communist regime. Communism was deeply rooted in the country and in its thinking, which made the transition a huge task.

The strong agricultural character of Bulgaria was established a long time ago. Besides its famous rose oil, the country traditionally enjoys a good reputation for products like yoghurt, white ewe cheese in brine and yellow cheese ("kashkaval"), wines, fruit and vegetables and cigarettes. It has diversified production and its agro-exports contribute significantly to the economy.

1.1 GEOGRAPHICAL CHARACTERISTICS

The territory of the Republic of Bulgaria covers a total area of 110,994 km², that is to say approximately one fifth the size of France (or the same size as Belgium, Holland and Denmark together). It lies south of the river Danube between latitudes 41° and 44° north in the eastern part of the Balkan peninsula. Its maximum length (from east to west) is 520 Kms and its maximum width is 330 Kms. The country is bordered to the north by Romania, to the west by Serbia and former Yugoslave republic of Macedonia, to the south by Greece and Turkey, and to the east by the Black Sea.

1.2 NATURAL CHARACTERISTICS, POTENTIALITIES AND CONSTRAINTS

Natural conditions are diversified and favourable for agricultural production. Farming takes place across the country from the rich Danube plain of the north to the rolling coastal regions along the Black Sea, through the warmer hills and valleys of the centre and south, and to the mountains that border the west and reach across the centre. The soil is quite favourable for agriculture production¹.

¹ Moderate to good quality soils, in terms of fertility and workability, account for about two thirds of all arable land. Poorer quality soils are mainly associated with marginal farming areas in the foothills and mountains. Most of the arable land is to be found between the river Danube and the Balkan mountains, in the Maritsa valley and in the hinterland of the Black Sea. The brown chernozemic alluvial soils, in the Danube plain and north east of Bulgaria (30% of the country's arable land), are free draining loose soils, suitable for all types of agriculture; the shallow grey-brown forest type soils at the foot of the Balkan range (Stara Planina) in northern Bulgaria (12%), have good physical properties but suffer from water logging and poor drainage in some areas, they can be used for most of crops and are suitable for wheat; the vertisols in the Maritsa valley (9%) are very suitable for all types of agriculture; cinnamonic forest soils, in low mountainous terrain of southern Bulgaria, are highly susceptible to erosion, but are used with good results for tobacco.
The climate is temperate, moderately continental in the north and of a Mediterranean type in the south, with the exception of the mountain regions. Mountains and semi-mountain regions form more or less a third of the country and account for around 20% of agricultural land\(^2\) (see map in Annex 1.1). The Maritsa plain, in the central-southern region, is one of the most fertile and productive parts of the country.

Cereals and wines are found more commonly in the north and the east, fruit and vegetables in the centre, south and south west, and cattle and sheep production in the semi-mountainous and mountainous zones. Wooded areas (oak, beech and coniferous) and permanent pastures account for 35% and 16% of the country respectively. Occasional droughts bring irregularity to rainfed crop yields; lack of rainfall in summer time\(^3\), mainly in the centre and south of the country, can be overcome by irrigation, thanks to the proximity of rivers and of reservoirs or mountain barrage lakes\(^4\). Irrigation is very necessary for many summer crops. Some occasional late frosts may damage fruit production. Water-logging, requiring drainage, is a problem for 0.4 mio ha (6.5% of arable land). Sensitivity to erosion limits cropping possibilities even outside the hilly zones (15% of the land affected). An estimated 2.2 mio ha (48% of arable land) have been subject to uncontrolled use of chemicals, poor irrigation practices, damage by heavy machines and destruction of ecosystems [Ghirardi, 1990; Wallden, 1991]. Some significant areas of valuable agricultural land, as well as water, have been seriously polluted by industry and mining activities in the neighbourhood of industrial towns, as there have been almost no regulatory constraints\(^5\).

---

\(^2\) The administrative regions, which include the semi-mountainous and mountainous zones, cover 46% of Bulgaria and represent 28% of its population, 39% of total arable land and 72% of its forests [Euromontana, 1995]. The Stara Planina (the "old mountains"), cuts the country east-west in two different natural parts: northern Bulgaria, continental, with the Danubian plain, and southern Bulgaria, Mediterranean. The Stara Planina lays in important economic regions of the country, with different industrial centres. The Ossovo-Ograjden, on the border with the former Yugoslav republic of Macedonia, is in a small industrial region. The Rila-Rhodopes massif, on the south border is shared with Greece and has high mountains (the highest elevation is the Mussala, 2,925 m). It is the most picturesque part of the country.

\(^3\) Rainfall ranges from 450 to 650 mm annually and occurs in summer in the north, in autumn-winter in the south and is evenly distributed throughout the year in the Black sea coastal area. The reliability of June rains in the north allows for rainfed cultivation of all main crops but consistent yield increases are expected when summer crops are irrigated. In the southern part of the country, especially in the Maritsa valley, irrigation is essential for optimal plant growth. About one in three on average of the last ten years recorded low rainfall levels.

\(^4\) There are around 2,000 reservoirs in which water can be stored during the summer with a capacity of 5.2 bio m\(^3\), i.e. 26% of the total run-off of the inland rivers. Design have been prepared to increase storage, particularly in south eastern, southern and central areas. Four bio m\(^3\) of water have been used for irrigation in 1989.

\(^5\) For instance, soil contamination by lead, zinc or arsenic in the rich agricultural region of Plovdiv (Maritsa plain) or radiation contamination in Kozlodui, on the Danube. Six per cent of the land could no longer be reclaimed and only one of the country's 16 big rivers, the River Mesta, is unpolluted [Dempsey, 1990]. Livestock waste, from big units, is a concern in many parts of Bulgaria.
Historical background

Bulgarian identity goes back to the ninth century, with the Christianisation of the "protobulgarians". The friars Cyril and Methodius played a major role in the development of the Orthodox Church in Slav countries, by the transcription of the Byzantine liturgy into Slavonic language and the invention of glagolitic writing, which was at the origin of the so-called cyrillic alphabet. Bulgarian civilization then flourished and the middle-ages twice witnessed the peak of the Bulgarian empire, which then covered part of Albania, Serbia, the former Yugoslav republic of Macedonia, Greece, Turkey and Romania, south to the Danube. This empire was wiped out by the Mongol invasion of 1242 and what remained, a century later, fell an easy prey to the Ottoman army.

From the end of the fourteenth century, Bulgaria was ruled by the Ottoman Turks, for five centuries. It emerged finally as a nation thanks to Russian intervention against the repression of independance movements by the Ottomans. The Treaty of San Stefano in 1878 gave Bulgaria borders almost as large as in its glorious past, but this was immediately negated by the Berlin Treaty. A series of disputes and wars with neighbouring countries followed, mainly about possession of Macedonia, Thracia and Dobroudja. Local rivalries and national ambitions brought Bulgaria to the German side in both world wars. Just before the advancing Soviet army entered Bulgaria in September 1944, a coup brought a broad anti-fascist coalition to power. Soviet support, however, ensured the emergence of the Bulgarian Communist Party (BCP) as the dominant force. Bulgaria was declared a People's Republic in December 1947 and BCP dominance was consolidated with considerable violence against opponents and factions within the BCP itself. A Soviet-style one-party system was established (although the Agrarian Party survived, but only as puppet organization) which lasted for four decades.

The first leader of Communist Bulgaria, the former Comintern chief, Georgi Dimitrov, promoted the idea of a Balkan federation including Bulgaria and Yugoslavia but this was rejected by Stalin. Changes after the death of Stalin in 1953 brought Todor Zhivkov to the fore, first as a counterweight to Mr. Dimitrov's successor Vulko Chervenkov and from 1956 as undisputed leader, with the support of the Soviet leader, Nikita Krushchev. He remained in power for 33 years, largely because of his skills in preemting potential challengers at home and in retaining the favour of successive leaders in the Kremlin - Gorbachev being an exception. Extreme loyalty to the USSR in foreign affairs was combined with, at least, the appearance of innovation in the domestic economy, and in its last 25 years or so, Bulgaria's communist regime was both one of the least repressive regimes in the region and one of the least internally unstable. Mounting economic problems and the repercussions of developments in the USSR undermined Mr Zhivkov's position in his last few years, and at the time of the fall of the Berlin Wall, in November 1989, a "palace coup" was prompted against him by his leadership colleagues, led by the foreign minister, Petar Mladenov.

1.3 POPULATION

The last census, conducted in December 1992, showed a population of 8.5 million (density 76 inhabitants per km²), which represented a significant decline compared to the 1985 figure of 8.9 million (see Annex 1.2). Emigration provides an explanation for this decline: many ethnic Turks left in 1989 and some others, who were looking for better living conditions, emigrated after the regime

---

6 These two friars, originated from Saloniki, were sent by the Patriarch Photius of Constantinopolis to preach Christianity in the Slav world. They converted the ruler of Bulgaria, Boris, who was baptized around 865. In 926, an independent Bulgarian Patriarchate was created.

7 With tsar Simeon, in 893-927, and during the Tarnovo period, end XII and beginning XIII century.
for foreign travels was eased\(^8\). Otherwise the evolution in population growth, density and age structure shows a similar trend to that in Western Europe:

- fall in both mortality and birth rates; trend towards a decline in population
- increasingly high proportion of people aged over 60\(^9\) (average life expectancy is 71),
- urbanization of the population.

Before the First World War, Bulgaria had the high birth rates traditional to Balkan societies. From the mid-1920s, structural changes set in, with a rapid decline in the birth rate and a natural population growth which slowed down but still remained relatively high in European terms. This trend continued after the Second World War, with a low natural population growth. The net reproduction coefficient then fell below one, resulting in a long term decline in population. The average number of children per married woman, which was seven at the turn of the century, has fallen to less than two, in parallel with the increase of women at work and urbanization. In 1992, the average size of a family was 2.8. Financial incentives to increase the birth rate have had little effect. However, it seems that housing shortages influenced the demographic trend, as increased facilities for living space increased the birth rate in low-income groups.

Population density exceeds 100 inhabitants per km\(^2\) in industrialized areas such as Ruse, Plovdiv and Varna and can be fewer than 50 inhabitants per km\(^2\) in more agricultural areas. The Sofia city district, which accounts for 14% of the total population, with 1.2 million inhabitants, shows an average density of more than 900 inhabitants per km\(^2\). The number of other cities with more than one 100,000 inhabitants rose between 1978 and 1992 from seven to nine (Plovdiv, Varna, Burgas, Ruse, Stara Zagora, Pleven, Tolbuhin, Sliven, Sumen). With its present urban population of about 67% of the population, Bulgaria is heavily urbanized compared to other countries in South-Eastern Europe. This urbanization brought about a demographic distortion in the rural areas, i.e. depopulation of villages and ageing of the population, leading to the erosion of social and cultural services, and encouraging further migration. However, the economic reforms, particularly land restitution and the deterioration of employment facilities in urban areas, have temporarily stopped this trend and have provoked a modest de-urbanisation phenomenon. It is not sure whether a stabilisation of the rural/urban ratio of population distribution in the mid-term can be expected, having in mind the high percentage of the rural population employed in agriculture, a sector characterized by overmanning and an ageing work force. Seventy three per cent of the people employed in rural zones (676,715 out of 924,239 in the census of 1992) work in agriculture. In the short term though, the restructuring of the agriculture means at least a stabilisation of this rural/urban ratio.

\(^8\) Such flow emigration is, for the time being, over. In general, keeping in mind international restrictions to free settlement, there is no great wish among the Bulgarians population to emigrate. This would of course change if the economic situation were to deteriorate. There is also some seasonal emigration, mainly linked to agricultural work in Greece.

\(^9\) The present age distribution of the population is as follows: 20% are aged under 15, 67% between 15 and 64, and 13% over 64.
Ethnic Groups and Religions

According to the 1992 census, the total Bulgarian population included, besides the predominant Slav ethnic group, a Turkish ethnic group of 800,000 (9.4% of the population), and some 400,000 (4.7%) of other groups, mainly gypsies. Nearly 87% of the population define themselves as Christians, mainly Orthodoxes, and 13.1% as Moslems. The Moslems are ethnic Turks, some Slavs who have adopted Islam under Ottoman rule and who are called the "Pomaks", and a part of the gypsy population. The gypsies are split between Christianity and Islam. This difference in religion beliefs does not seem to pose a problem today.

The new constitution has eliminated the distinctions between ethnic groups. The post-reform policies aim for the integration of minorities. Currently, unemployment is higher for these minorities as a result of lower qualifications or regional difficulties. The majority of the ethnic Turks work in agriculture and are concentrated in some areas traditionally producing tobacco. They have been badly hit by the collapse of tobacco production. Historic reasons, however, are at the origin of a kind of anti-Turkish sentiment, nourished today by the difficulties of the transition, and there is tension in regions which have mixed populations. Sometimes, also, the media stimulates fears of expansion of the Turkish language and culture at the expense of Bulgarian national interests.

By 1952, over a million Bulgarian citizens who regarded themselves as Turkish moved to Turkey under numerous resettlement schemes. During the ten year validity of a 1968 agreement on reuniting families, a further 130,000 Bulgarian citizens settled in Turkey. In May 1989 the Bulgarian Communist Party leader called on Turkey to open its borders to those who wished either to visit the country or to settle permanently. Given the forced assimilation policy imposed since 1984, this lifting of restrictions led to an exodus of unexpected dimensions. Up to the beginning of September 1989, when Turkey closed its border, 320,000 people had left Bulgaria.

The economic situation of the majority of Gypsies is disastrous and can only be described as one of exclusion. Most of them have no qualifications and live in bad conditions, with delinquency problems. They use to participate in agriculture as seasonal workers.

1.4 POLITICAL SITUATION

In 1989, the political monopoly of the Bulgarian Communist Party quickly disappeared, as an anti-communist opposition grouped itself into the Union of Democratic Forces (UDF), while the Agrarians quickly asserted their independence. As a reaction to the repression suffered by ethnic Turks in the late 1980s, the Movement for Rights and Freedoms (MRF) was founded. The lack of a serious opposition during the Communist period, however, made these anti-Communist forces rather weak, while the Communist Party itself - renamed as the Bulgarian Socialist Party (BSP) - remained significantly stronger than most of its East European counterparts.

The period 1990-1994 has been characterized by political instability. There were three (1990, 1991 and 1994) parliamentary elections and four changes of government, with an alternance of BSP and UDF. The electorate has been evenly balanced between these two main political forces. As a result, the legislative process has been difficult and subject to substantial compromise, which partially explains the erratic character of reform legislation. Efficiency considerations have enjoyed a lower priority than what is perceived as greater social justice. This has been coupled with a hesitation in designing and implementing reform based on economic rationality because, in the short run, such measures were expected to be highly unpopular, thus weakening political support [S. Davidova & A. Buckwell, 1994].
The last victory of the Bulgarian Socialist Party, in the elections of 18 December 1994, which gave it an absolute majority (with 125 seats in the 240-seat National Assembly), allows for some political stability during the four coming years. Farmers' interests are directly represented in a coalition between the Democratic Party and the Agrarian Parties (the People's Union). The BSP won, mainly thanks to the support of the older part of the population, who reacted against the difficult living conditions brought about by the transition, compared with the previous better standard of living. Pensioners are particularly affected by the erosion of their purchasing power, due to high inflation. One of the first tasks of the BSP government was to write a White Paper, describing the current situation in the different economic and social sectors, as a basis for a policy programme. This paper turned out to be a criticism of the reform results of the previous government. In May 1995, the new Government programme for the period 1995-1998 was officially published. The main objective set in the programme is to further develop parliamentary democracy and civil society in Bulgaria as well as to set up a modern social market economy. The fight against impoverishment is the main social issue. As far as external relations are concerned, the first priority is the preparation for the accession to the EU (the other main objectives set in this programme are presented in Annex 1.3).

The task of the Government will be difficult because privatization is still not very advanced and only a minority of Bulgarians are pushing for a quick implementation of a full free market environment. Those are the people who attempt to develop private activities and who need a favourable environment in order to do so. The majority of people, however, seems to have adopted a more cautious attitude, with the loss of purchasing power and the security of their jobs being their major preoccupations. The BSP faces the difficulty of trying to do something for this anxious and unsatisfied part of the population (i.e. the people who voted for them) but, at the same time, attempting to go on with the economic reforms, i.e. bringing up further changes and employment difficulties on the short term. It will have also to win the confidence of the younger generations if it wants to retain power in the future.
1.5 THE SOCIO-ECONOMIC SITUATION

The shock of transition is considerable in Bulgaria. Production has fallen dramatically since 1989, the gross domestic product having registered a 30 per cent contraction. There are so far no clear signs of bottoming out, even if experts are, on the whole, more optimistic for the future. The slight improvement observed is due to a growth in private sector activity, that is partly compensating for the decline in the state sector. The reform process so far has produced only modest results, but the adoption of further steps towards a market economy could have immediate and positive effects on economic recovery. However, the balance of payments remains negative, the budget deficit is a handicap, inflation is above 100%\(^{10}\), unemployment is high and poverty\(^{11}\) affects many people.

The rate of unemployment in Bulgaria is estimated at around 14% and may continue to rise throughout 1995. Although it is difficult to assess changes in the unemployment pattern in precise terms, it has risen sharply since 1989, in line with a contraction in output over the same period. Furthermore, a significant percentage of the labour force in the state sector remains underemployed at present levels of state sector output. In the short term, privatization will therefore increase unemployment. The current situation is, however, likely to be better than that revealed by official sources because of the importance of the underground economy. Anecdotal observations in the country suggest that a certain amount of economic activity is not declared. These undeclared activities benefit a small part of the population but could, by stimulating private initiatives, ease the reform process in the short term. In the longer run however, it weakens the role of public authorities and represents a loss of budgetary resources. Counteracting fraud and tax evasion is one of the priorities of the new Government. More serious are the manoeuvres of some groups with vested interests which attempt to appropriate public goods or to consolidate former advantages, such as monopolistic or monopsonic situations. They naturally tend to oppose open competition and therefore delay the reform process. The large scale privatization still to be done encourages opportunism. Only the future will show whether the government can succeed in limiting bribery and corruption, and in bringing shadow activities within a controlled institutional frame.

\(^{10}\) The government's agreement with the IMF set a target of 30%.

\(^{11}\) The Bulgarian Business News of February 27 - March 5, 1995, mentioned that almost 65% of Bulgarians live at poverty level, i.e. 20% more than in the previous year, with incomes at or below a poverty line of 2.676 LEV/month. Most of the figures about poverty come from various non governmental organizations.
A large part of the population survives the current economic difficulties thanks to the strong solidarity within extended families and to a significant phenomenon of on-farm consumption. Also, important flows of agricultural products go through short marketing circuits from rural zones to towns (mainly fruit, vegetables, pork and lamb). Most Bulgarians own their own home and many families cultivate small plots or rear domestic animals. These elements, as well as the black economy, provide a buffer, limiting the risks of social instability. Some strikes and demonstrations against worsening living conditions did occur in 1993 and 1994, but these are not really typical of the social situation, which can be described as quite stable, considering the present difficulties.

Table 1.2
Main economic indicators

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>GDP growth rate</td>
<td>-9.1</td>
<td>-11.7</td>
<td>-5.8</td>
<td>-4.2</td>
<td>0.2</td>
</tr>
<tr>
<td>GDP/ inhabitant (Lv)</td>
<td>5.206</td>
<td>15.183</td>
<td>22.833</td>
<td>33.772</td>
<td></td>
</tr>
<tr>
<td>GDP/inhabitant (US$)</td>
<td>2467</td>
<td>812</td>
<td>980</td>
<td>1224</td>
<td></td>
</tr>
<tr>
<td>Sectoral growth rates:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Agriculture</td>
<td>-3.7</td>
<td>7.7</td>
<td>-7.7</td>
<td>-9.0</td>
<td>-5.0</td>
</tr>
<tr>
<td>- Industry</td>
<td>-11.6</td>
<td>-18.6</td>
<td>-7.0</td>
<td>-8.5</td>
<td>1.3</td>
</tr>
<tr>
<td>- Services</td>
<td>-6.1</td>
<td>-11.3</td>
<td>-3.3</td>
<td>2.0</td>
<td>0.7</td>
</tr>
<tr>
<td>Unemployment rate (%)</td>
<td>0.5</td>
<td>6.1</td>
<td>12.7</td>
<td>15.9</td>
<td>14.3</td>
</tr>
<tr>
<td>Prices and exchange rates:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-consumer prices, g. r. /1</td>
<td>50.6</td>
<td>338.5</td>
<td>79.5</td>
<td>63.9</td>
<td>121.9</td>
</tr>
<tr>
<td>-nominal exchange rate: Lv/$</td>
<td>2.11</td>
<td>18.7</td>
<td>23.31</td>
<td>27.6</td>
<td>54.1</td>
</tr>
<tr>
<td>-nominal exchange rate: Lv/Ecu</td>
<td>2.67</td>
<td>23.11</td>
<td>30.19</td>
<td>32.36</td>
<td>64.1</td>
</tr>
<tr>
<td>for information 1$ = ...Ecu</td>
<td>0.790</td>
<td>0.809</td>
<td>0.772</td>
<td>0.853</td>
<td>0.845</td>
</tr>
<tr>
<td>Public finance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-total govt expenditure in % of GDP</td>
<td>65.9</td>
<td>55.6</td>
<td>53.4</td>
<td>50.9</td>
<td>44.8</td>
</tr>
<tr>
<td>-public deficit (-) in % of GDP</td>
<td>-13</td>
<td>-14.7</td>
<td>-15</td>
<td>-15.7</td>
<td>-6.7*</td>
</tr>
<tr>
<td>External account</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- current account ($ mil)</td>
<td>-2805</td>
<td>-73</td>
<td>-436</td>
<td>-1226</td>
<td>122</td>
</tr>
<tr>
<td>- current account in % of GDP</td>
<td>-13.0</td>
<td>-1.1</td>
<td>-5.0</td>
<td>-11.0</td>
<td>1.1</td>
</tr>
<tr>
<td>- external debt in % of GDP</td>
<td>62</td>
<td>147</td>
<td>148</td>
<td>137</td>
<td>116</td>
</tr>
<tr>
<td>- international reserves ($ bn)</td>
<td>0.3</td>
<td>0.9</td>
<td>0.7</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

1/ at the end of the year
a/ preliminary or (*) planned data
Source: National Statistical Institute, European Commission (DG II) and OECD

12 It is, however, difficult to assess the real importance of such phenomena as on-farm consumption and short circuits. Considering the high degree of urbanization, it is likely that dependance on the main distribution channels is the norm.

13 Strike of the 21,000 coal miners, who wanted higher salaries and restructuration of the sector. Demonstration of 460,000 people in Sofia on 4.5.94.

14 These figures are obtained by using the nominal exchange rate and not the purchasing power parity. They underestimate the internal purchasing power.
Communist rule transformed Bulgaria from a primarily agricultural country into a largely industrial one, by introducing heavy industry (e.g. chemical, electrotechnical, metallurgical and mechanical engineering industries, armaments) and, in the late 1970's, high-tech branches like electronics and telecommunications equipment (it was the leading producer of Personal Computers within CMEA, which, although out of date compared to western standards, demonstrate the existence of valuable engineering skills in this field). In 1939, 15% of Net Material Products (communist concept of GDP) was provided by industry and 65% by agriculture, reversed to 59% and 11% respectively in 1989. Developments since the fall of the communist regime have affected the place of both in the economy. The service sector has accounted for a growing share of GDP\textsuperscript{15} in recent years (42% in 1992).

At the beginning of the transition, the agricultural sector was seen as a locomotive of the economy, because of its lower fall in output relative to the industrial sector. Now, less is expected of agriculture and some of the branches of the industry or services are expected to lead the recovery of the economy. However, the difficulties and uncertainties which have accompanied the process of transition to a market economy due to the economic heritage of communism are still present:

- with a high percentage of the economy still run by the state, the economy suffers from resource misallocation, losses and waste, which were common features of the communist system. The opening up of the economy after 1989 revealed this general economic imbalance, bringing inflationary pressure, which has still not been overcome;

- the structural situation is unsatisfactory: industrial plants are generally inefficient and technologically obsolete, with excessive rates of consumption of energy and raw materials; [the EIU, 1993].

Another factor that has influenced events significantly was the collapse of trading relationships with the CMEA markets where a big proportion of Bulgarian trade was previously carried out. Bulgaria was affected, perhaps, more than the other CEECs by the switch to hard-currency trading with the former Soviet Union and the removal of CMEA. Since 1990, the trade balance was mainly in deficit. This aggravated the deficit of the balance of payments and the burden of a large external debt\textsuperscript{16}. This trade deficit is attributed to difficulties in exports (weakened demand on West European markets or on former CMEA markets) and to the relative increase in import needs, due to the disruption of production. The tightening of United Nations trade and transit sanctions (embargo on Serbia) constitutes also a constraint on the Bulgarian economy and favours shadow economy activities. In 1994, the trade imbalance is once again negative but small.

\textsuperscript{15} Calculation of GDP share for the service sector is a new, post-reform exercise, as the communist accounting system did not consider the service sector. The current figure is high, due to the contracted economy. This percentage might decrease with the recovery of the economy.

\textsuperscript{16} This latter has, however, been lowered due to negotiations with the London Club in August 1994, which provided a discount for rescheduling the commercial debt and reduced it to 8.16 bio U$ [the EIU, 1995]. The annual repayments of an external debt (total, including payments on loans received after 1991 from international financial institutions) will be about 1 bln U$ in 1995 and 1996, and more than 1.3 bln U$ in 1997.
The budget deficit remains a serious problem for the Bulgarian economy, eventhough its growth was restricted by a tight policy, mainly towards salaries in the public sector, didacted by the IMF. In 1994, a variety of factors such as wage demands, welfare payments, past and present currency depreciation, tax collection problems, a small revenue base due to falling corporate profits, and the need to service a rocketing domestic debt, etc, combined to produce a deficit considerably exceeding the projected 6.7 per cent of GDP. The budget deficit limits the possibilities of macroeconomic or sectorial developement. Future macroeconomic policy and developments are of a crucial importance for the agricultural sector.

1.6 EMPLOYMENT STRUCTURE AND AGRICULTURE

In 1948, agricultural workers accounted for 82% of the total work force (see Annex 1.2). Currently there is still a large proportion of the labour force in agriculture, in spite of the industrialization process and of the high urbanization rate. The labour-intensive and inadequately mechanized production of tobacco, fruit, vegetables, scents and aromatic plants, and additionally the small-scale livestock production on household plots, were and are partly responsible for the relatively high labour requirement. Agriculture 's share of the labour force has been consistently higher than either the share of output or the share of fixed assets. This implies a labour-intensive agriculture with low-average labour productivity, compared to the other sectors of the economy, and consequently lower income levels17. Low substitution of capital for labour has resulted in insignificant technological changes. This has had a negative impact on production performance and productivity, especially in the 1980's.

The number of persons engaged in agriculture decreased from 789,093 (in 1989) to 676,715 (in 1992, i.e. -14%) [data: NSI]. The decrease of the total number of persons engaged in the whole economy during the same period is even bigger (from 4,365,034 to 3,273,661, i.e. -25%). Falls in employment levelshare affected each sector differently. As a result, the share of agriculture, which was 18% of employment in 1989 rose to 21% in 1992. Changes brought about by the transition, however, suggest the need for caution in the interpretation of the data. It is not clear what is included under the agricultural sector, as farming structures are in a process of transformation. Distinction between household plot farms, many of which have gardening-type activity, and real private farms is one problem. The manpower employed in cooperative structures, whose members now include land owners, is equally difficult to assess. It is assumed that only a part of the people registered in cooperatives work full time.

17 The average salary in the public sector, for March 1995, is 7.009 leva/month. Post-reform differences between branches are however important: for the agricultural sector, this average is 4.447 l/m, compared to 8.312 l/m for industry. The general minimum salary, related to the official safety net system, has remained however unchanged for many months (2.200 l/m 40 U$/ month), as the Government fights to reduce expenditures.
National statistics show also a strong decrease in personnel employed in the public sector\(^{18}\) (former state controlled cooperatives in liquidation, state or public enterprises, political or religious organizations, non-profit institutions, etc...), corresponding to a growing share of people working in the private sector. In 1992, 9.7% of the employed persons in agricultural production worked in the private sector, compared to 1.2% for the industrial sector, agro-food enterprises included\(^{19}\).

In agriculture, the decrease was quite important in the state controlled cooperatives as a consequence of the liquidation, i.e. of the disruption in former labour intensive activities (livestock units, tobacco, fruit and vegetables,...). It was alleviated by a transfer of some of this work force to the sectors of household plots and new cooperatives. It is likely that this transfer has increased the hidden unemployment in the countryside. It is beyond doubt that the pace and the path of land restitution will influence the future dynamic of agricultural employment. The political wish of revitalisation of large collective farms, with their hired labour, might increase temporarily the number of people employed in agriculture but there is a low probability of viability for this design\(^{20}\). The implementation of the political intentions for land settlement of landless rural families could also act for employment\(^{21}\).

Only a general economic improvement may change these patterns and create working possibilities, probably mainly in the service sector, which might accelerate the departure of people (mostly young) from the agricultural sector. The deteriorating age structure of the agricultural labour force will also lead in long-term (10-15 years) to a decrease in the share of agriculture in total employment. A new generation of better educated farmers will be needed for more efficient agriculture, as the current education level is quite low and hinders the development of the sector.

\(^{18}\) The public sector employed 374,032 persons in agriculture in 1992, compared to 701,893 in 1989. Last figure for the beginning of 1995 is around 100,000 persons.

\(^{19}\) Altogether, the share of employed persons in the private sector in the national economy was of 17.7% in 1992, mainly in trade and distribution (including workers in small shop activities)

\(^{20}\) The BSP campaigns to maintain employment levels. The most recent amendments made to the Land Law could be interpreted as a wish for keeping the former employment structures of cooperatives. These structures will all be transformed into cooperatives of private owners and hired labour. The question is who would pay for a higher number of workers. Until now, liquidation, along with the recession has created unemployment, mainly among managerial staff.

\(^{21}\) Present landless rural families are assumed to be mainly former workers of state-controlled cooperatives, who do not benefit from land restitution, or possibly some new private farmers, who work on some leased land. The land distribution among all agricultural workers and the ownership of the cultivated land are considered as equity measures. This may echo the Labour Land Ownership Law of 1946, by which some land was distributed among landless agricultural workers, and demonstrates the need for a mentality change towards the land market.
2. LAND REFORM AND FARMING STRUCTURES

In recent years farming has gone through dramatic changes in Bulgaria. The political priority of the post 1989 reform has been to break up the structures of the previously centralised and state controlled agriculture, which were perceived by many of the emerging post-reform parties as a stronghold of communism in the country. The means by which the agricultural sector is to be restructured is the subject of a major political debate. "The land reform agreed upon requires restitution of the private ownership of agricultural land and the liquidation of all state controlled cooperatives. This has been seen by the policy makers as the core of the reform in agriculture. The strong ideological commitment to destroy the basis of communism in the countryside meant that other available options for reforming agriculture (i.e. changing pricing policies and providing the right incentives for producers without radical changes in asset ownership or in farm structures) were not given serious consideration". [S. Davidova & A. Buckwell, 1994]


- Farm land may be the property of individual citizens, the state or municipality and other legal entities.
- Land is to be returned to those who owned it before the collectivisation in the late 1940s and 1950s or to their heirs. Property rights are to be restored in farm land areas as set by the Law for Labour Land Ownership, passed in 1946.
- Private land on which there are no claims due to the lack of heirs or title documents will be transferred into municipal land reserves.
- Where the area of farm land within the territory of any settlement has been reduced, the area of land subject to restitution shall be reduced accordingly. In this case, owners will be compensated for the difference between the area under rightful claim and area restituted, by means of land from state or municipal land reserves or by means of financial compensation.
- Reinstatement of property shall be done within the real original boundaries of land owned where these still exist or where they can easily be re-established. Where boundaries of land no longer exist, reinstatement of ownership shall be done within real boundaries in compliance with a plan of farm land division.
- Nationals living abroad and theirs descendants, even with another nationality, are allowed to own land only on the basis of inheritance, and they must transfer the property rights to the state, municipalities, Bulgarian individuals or legal entities within a three-year-period.
- During the first two years from the date of reinstatement of ownership, the area of land owned and purchased through legal contracts is limited to 30 hectares per family. Farmers are exempt from taxes on farming revenues for a period of five years.
- Households and individuals are allowed to lease or rent land without limits. Owners are allowed to rent out and lease out land immediately after the recognition of property rights.
- Agricultural land may be used only for farming, but the owner can choose the way it will be used to this purpose. Expropriation is allowed for "major state reasons" and in compliance with the law.
- Existing or former members of state controlled cooperatives or their heirs have rights to shares in the farms' capital stock. The size of each individual share is determined in accordance with land and other physical or financial assets which the owner has added to the farm, and his labour contribution. If a member withdraws from the state controlled cooperative he has the right to receive his share in the form of physical assets or money. In the case of indivisible assets the former member will receive appropriate shares.
Historical view of farming structures

Before 1946

Small agricultural holdings were predominant in Bulgaria on the eve of the communist take-over (see Annex 2.1 & 2.2). In 1944 there were 1.1 million private farms with an average size of 4.3 hectares and most of the agricultural land was in holdings under 20 ha. On the whole, with few exceptions, there were no large holdings, especially in the Varna region; this network of small private farms were already working with the help of marketing and credit cooperatives. Private ownership of land by farmers was higher than 80% and renting was a minor feature of agriculture.

Communist period

The collectivisation of land was staggered over ten years. It started by land redistribution to landless rural dwellers in 1946, after the adoption of the Labour Land Ownership Law. According to this Law, land over 20 and 30 hectares (depending on the region), was nationalized. This involved about 375,000 hectares of which about 120,000 hectares were distributed to a similar number of these people. The remaining land was used for setting up state farms. The process of concentration and centralization was achieved in three stages:

1) Collectivization of agriculture in accordance with traditional Soviet patterns: by 1958 there were around 3,290 cooperative farms covering 90 per cent of the total agricultural area and averaging 1,200 hectares each ("Labour Cooperative Agricultural Farms" or TKZSs).

2) Regrouping and "rationalizing": this stage took place between 1958 and 1960. The total number was reduced to 930, with an average area of 4,000 ha (enlarged TKZSs, plus state farms). By that time, it was claimed that the state and cooperative sector's share in agriculture exceeded 98 per cent of the land use, household plots included.

3) Large scale integration: In 1971, more than 800 collective and state farms (774 and 56 respectively) were regrouped into 161 agro-industrial complexes, "Agrarno-Promishelni Kompleksi (APK)". These new complexes averaged 24,000 hectares and 6,500 members each. In 1973, industrial-agricultural complexes, "Promishelno-Agrarni Kompleksi (PAK)", were created. They were 7 of them, each with an average area of 55,000 hectares.

"This last reform was justified in taking advantage of large-scale rational production, and in the "industrialization" of the agricultural economy. But in fact, during the 1970's, combined factors' productivity stagnated. Technological innovation, improvements in the organization of production, etc., factors supposedly benefiting from large-scale production and rationalization, did not contribute to agricultural growth" [Boyd, 1990; Wallden, 1991].

22 Each holding comprised several plots of land located in different areas. The average number of plots in a holding was 15, i.e. an average of 0.36 ha, for a total estimated at 16 millions plots.
The types of crops produced were progressively modified to meet the directives from the central planners. Quite diverse agriculture therefore emerged. For example, even in regions well-suited for grain production (by far the major crop before 1946), cooperatives also engaged in fruit and vegetables, livestock, and dairy production. Over time, enterprise management and labour became increasingly specialized, allowing for diversification and regional specialization. Each branch of the cooperative (grain, dairy, fruit, ...) acquired an increasing number of managers, agronomic specialists and administrative personnel. But management and legal authority were removed from village control and centralized. The ability to adapt became more difficult as the decision-making process became more cumbersome. This brought about the general decline in agricultural productivity during the 1980s [S. Davidova & A. Buckwell, 1994].

The number and average size of the APKs were changed almost annually. They reached the smallest number and the largest average area in 1977, i.e. 143 on 32.800 ha each.

From 1977 to 1979, the authorities reduced the size of the APK's. Their number almost doubled, from 143 to 268, bringing down the average area to 18.000 ha. At the beginning of 1979, a new reform was introduced: the "New Economic Mechanism" (NEM) aiming at decentralization and increasing flexibility: more decentralized decision-making, a reduced number of plan indicators, an increased role of contracts among entreprises, as well as of production from household plots. Through out all the communist period, household plots existed. They were first dedicated to on-farm consumption but they regularly increased their marketed output. Their share in agricultural production increased steadily. Their average size started to increase mainly in the second half of the eighties.

The NEM reforms from 1979 to 1989 were no more successful than the APK reform of 1971. In December 1986, additional measures were adopted, with a view to strengthening the financial self-sufficiency of firms in agricultural sector. While in 1986 the total number of "enterprises and firms" grouped within the 287 the APK's was around 700, that number increased in 1987 to 2.160 due to decentralization. A "National Agro-Industrial Union" (NAPS, "Natsionalen Agrarno-Promishelen Soyuz") was created and replaced the Ministry of Agriculture, which was temporarily abolished. Regional offices (RAPS) were also introduced, at an intermediate coordination level.

In May 1989, only a few months before the change of regime and under the influence of the Soviet reforms, a series of new measures were adopted. These included decrees for an extension of the system of leasing to private farmers and for breaking up the APK's. Several structures emerged after this removal of APKs. "Collective farms (KZS)" was the name given by the decree. In some places, people opted for the old "Labour Cooperative Agricultural Firms (TKZS)". The third structure, relatively less numerous, was "agro-firms" and the forth "Agricultural Brigades". These last were formerly subunits of TKZS and of state farms, often covering one village, within the APKs. The fifth structure were the "state farms". As a result, structures having identical ownership and management forms subsisted under different names. A small number of private entrepreneurs was also generated by these last communist reforms, who could lease land and buildings from the state controlled cooperatives.

---

23 See output figures (chap 3).
2.1 CONCEPTS AND INSTITUTIONS USED IN THE AGRICULTURAL REFORM PROCESS

Land restitution is the process by which farmland is returned to its former owners (based on the situation in 1946) or their heirs. Proof or evidence of former ownership must be furnished by the claimants. As in some other central and eastern European countries, the former communist collectivisation of land was not formally a nationalization. Only a small part of the land is state owned. Most of the landowners kept their titles to the property. In the case of absence of documents, witnesses can help to put forward a claim. The household plots, which have been created during the communist period, were not privately owned and are included in the land restitution process.

Privatization is the sale of state assets (state farms, seed selection stations, feed mills, livestock complexes,...). The Agency for Privatisation and the Ministries of Agriculture and Industry are responsible for this task and operate either by negotiation with potential buyers, foreigners or nationals, by public auction or sale of shares, included to plant workers on preferential terms, by debt-equity swaps or sales on leasing.

Liquidation is the dismantlement of the collective farming structures (TKZs, KZs, existing agro-firms and agricultural brigades, all of them simply referred to in the text as "state controlled cooperatives"), with the attribution of their assets to those who contributed to the land and non-land assets, and to their workers.

Decentralization is the whole process of agricultural reform, targeted at a market orientated economy, and implying liberalisation of state control and decentralization of decision making process at different levels (land use, production, processing, marketing, administrative channels). Decentralization in fact is a concept developed in the late 1970s by the communist regime, in order to alleviate the effects of the collectivisation and of central planning.

Municipal Land Commissions (MLC) deliver different types of certificates during the process of land restitution: they examine individual claims, provide certificates allowing temporary use of claimed land, allocate the land to the claimants thanks to a land reallocation plan, and deliver ownership certificates at the end of their work.

Liquidation committees are responsible for the liquidation of state controlled cooperatives and the allocation of their non-land assets amongst eligible owners; on a transitional basis, they also sow the land which remains under their responsibility, mainly the land which is in the first stages of the restitution process.

Private ownership can be certified, for the non-land assets, by attribution of shares issued by a liquidation committee or, for land, by certificates issued by a municipal land commission. However, in order to sell or transfer legally a piece of land, a notarised deed is necessary.
Successive stages of the land restitution process

a. The claimant (one of the heirs of the original owner) puts his request for land restitution to the Municipal Land Commission (MLC). Evidence of previous ownership can normally be found in the municipal land registers of 1946.

b. After verification of authenticity and accuracy, the MLC acknowledges the claims and aggregates them at the level of a "Territory Belonging to a Settlement" (TBS), so that the claims can be compared with the land available. Then, the MLC issues temporary certificates recognizing the individual rights for ownership, without specifying the location and reducing the area proportionally to the losses of farm land within the TBS. These certificates give a right to temporary use of an equivalent plot of land, on an individual or on a collective base.

c. The MLC has to allocate the land to all acknowledged claimants:

* if the 1946 land register specifies the location of the previous individual plots, with their real original boundaries, or if these old boundaries are easy to restore (existence of natural delimitations), the allocation is quite easy to implement (this is especially the case in some mountainous municipalities);

* if it is not possible to establish old boundaries (the vast majority of the cases), the MLC has to organize a land survey, with the help of geometricians, in order to draw up a cadastral map, on which proposed plot boundaries are defined and soil qualities are taken into account, and which also aims at land consolidation thanks to swap arrangements. This map, or plan for land reallocation, has to obtain the approval of at least 70% of the claimants.

d. When the land reallocation plan is agreed, the MLC issues ownership certificates, giving an immediate property right. This certificate specifies quantity, quality and location of land and is issued to one of the heirs of the original owner, who claimed the land on behalf of all the heirs. It does not however allow legal transfer nor sale of land.

e. The last stage, obtaining a notarised deed, is not compulsory for cultivating or renting the land but is indispensable for consolidating property rights and thus allowing for transfers of the land. This stage particularly involves division of land ownership between the heirs of the original owner. Notarial deeds are issued to each heir.

24 There has been a total of 1.7 millions claims, of which 99.6% are individual claims, corresponding to former landownership (see Annex 2.3). The rest of the claims are made by public bodies (the State, municipalities, other legal entities). With on average 2 or 3 heirs for each previous owner, the number of new owners is estimated at 3-4 millions. The average amount of land restituted to individuals is expected to be between one and two hectares, divided in several plots.

25 There are 5,336 so-called Territories Belonging to a Settlement (TBS). They correspond to towns, villages or hamlets. Municipalities, which aggregate TBS, are 280, with an average size of 40,000 ha.

26 The PHARE programme provided useful technical assistance (Geographical Information System, both hardware and software).
2.2 RESULTS OF LAND REFORM

By the deadline for submitting claims in 1992, 1.7 millions claims were collected by the MLCs (see Annex 2.3). The total amount of land claimed was 5.569.600 ha, 91% of which was claimed by individuals (i.e. 5.073.200 ha), 1.4% by the state, 5.1% by municipalities and 2.4% by other legal entities. The total area claimed exceeds the land planned for restitution (5.374.300 ha\(^2\)) by 195.200 ha. By mid 1993, only one tenth of the area claimed had been restored to former owners, corresponding to situations where original boundaries were easily re-established. By the end of March 1995, after more than three years of the land restitution process 39% (2.074.000 ha), of the land destined for restitution, had property rights issued by MLC (in restored old boundaries or through reallocation plans), but the number of the notarised deeds issued was fairly small (15.132, for 46.533 ha, i.e. 0,9% of the restorable land). The percentage of land given for temporary use was considerable: 36% , (1.931.800 ha). The remaining 25% are still at an early stage of the land restitution process, and probably still cropped by the state controlled cooperatives under liquidation [data: NSI].

The main difficulties, which the land restitution process has encountered are the following:

- financial and technical aspects: as land reform is financed by an extra-budget fund which is not adjusted for inflation, the annual budget has decreased substantially in real terms and has become insufficient to cover the cost of the reform. This has resulted in lack of qualified staff, the insufficiency of equipment and the work disruption of some land surveyors, whose contracts have not been indexed to inflation [PHARE, Boyana seminar, 1995 ];

- legal aspects: MLC reallocation plans are frequently controversial. Overclaiming seems also to be important in some areas. As the Supreme Court gave an interpretation which ruled that MLCs could not change their decisions, the courts are themselves inundated with appeals against decisions\(^2\). The vast number of people concerned, many living in other municipalities, results in a huge administrative burden, increased by the need to divide the property among heirs.

- fees: the State requested compensation fees for the existing irrigation equipment (amounting up to 20.000 leva/ha) or for planted trees (orchards, vineyards; price depending on the age of the plantation), that people have generally considered excessive;

---

\(^{27}\) This should correspond to the total agricultural area, 6 159 000 ha, minus public land, for which the legal attribution is already confirmed. However, there is no clear balance available, which would show how much the agricultural land is not destined for restitution and what the total public agricultural land would be (claims included). In 1991 the State-owned land area was expected to be approximately 800.000 ha, as reported by the Director of the Department of State Land Fund at the Ministry of Agriculture [newspaper "Zemia", 29 October 1991]. No figures are available for municipal land area.

\(^{28}\) On 27.03.1995, there were 131.521 objections against decisions of MLC, concerning 261.400 ha.
the continuing use of the land by liquidation committees (until the changes brought about in May 1995) has slowed down the restitution process by creating conflicts concerning the reallocation of land. It is also probable that in some municipalities there has been unwillingness to break up the former farming structures, thus bringing about abnormal delays in the implementation of land reform.

2.3 LAND MARKET

A land market is almost non-existent. Notarised deeds either appear too expensive to many people or they do not feel the necessity to fully enforce their property rights at this stage. This is one of the factors impeding the emergence of a land market, which would help ease the land reform.

The land leasing market has begun to develop but essentially based on temporary use certificates (land under process of restitution), which only permits renting on a yearly basis. There is a lack of a proper legislative framework regulating longer term land lease contracts.

2.4 LAND RESTITUTION: COMMENTS ON THE PRESENT SITUATION

The present situation is a clear example, on one hand, of the discrepancy between the politically approved reform and its implementation, and on the other hand, of divergences between the individual property interests and the need to preserve and promote efficient production structures. Restoring former property rights as they were fifty years ago, while neither the corresponding structures of production nor a proper land register with records of previous boundaries exists, is a costly, energy demanding and time-consuming exercise. On the other hand, land ownership is to be distributed very widely among households (around half of the families are concerned). This has a big sociological impact, even if a large percentage of the new landowners are neither farmers, nor country dwellers, but town dwellers. This choice of a radical land reform amplified the effects of the breakdown of the communist centralised control of production. The absence of a policy coordinating the process of land restitution with the farming necessities contributed a lot to the present situation. Current uncertainties about ownership (land under temporary use) have an adverse impact on production. In contrast with the official time-table, which scheduled the completion of the land restitution for 1993, the reallocation of ownership to the former owners is still largely unfinished. Considering the implementation difficulties, especially the numerous disputes, finalization under such conditions will take another few years, even if pressure builds up for completion of the reallocation plans per municipalities.

---

29 By end of March 1995, there were only 791 sales of land based on exchange of deeds, altogether on 487 ha (on average, 0.6 ha per exchange).
The new government wishes to ease the current burden of land restitution and is pushing now for other means, in order to secure immediate production. The main justifications given by the Government for this re-direction are: the slow rate of the land reform, risk of over fragmentation of the land, numerous disputes and overclaiming, depreciation of fixed capital due to the never-ending temporary activity of liquidation councils, the great number of rural people without land ownership\textsuperscript{30} and the growing share of land lying fallow (see Chapter 3).

\begin{tabular}{|l|}
\hline
\textbf{Main amendments to the Land Law, May 1995} \\
This Land Law has provisions for facilitating shared ownership and proposes a pre-emption right, in case of land sale, to neighbours or public authorities, in order to group together plots or to allocate land to landless young farmers. In the meantime, the liquidation of state cooperatives should be finished in the near future, which might mean, for these remaining structures, a formal dissolution followed immediately by registration as private cooperatives. This Law allows also for revision of previous decisions of the Municipal Land Commissions for facilitating dispute arrangements and checking rights.

These substantial new amendments to the Land Law were passed through the National Assembly in May 1995. The history of these amendments is interesting as it exemplifies the political sensitivity of the path of farm restructuring. During the previous substantial amendments to the Land Law in 1992, the political balance in the National Assembly was different. The amendments introduced maximum scope of the land restitution process, and almost total removal of public and some types of collective structures. The spirit of the amendments was to put a clear emphasis on the landowner instead of the operator. During the debates, the supporters of these amendments faced the strong opposition of the left wing parties. This opposition was partly based on ideological grounds and partly on the ground that such a political design of the agricultural reform would be highly disruptive to the agricultural sector, at least in the medium term [Buckwell, Davidova, Kopeva, 1995].

Once the political balance changed after the general elections in December 1994, one of the first steps of the Parliamentary Group of the Democratic Left Parties was to table amendments to the Land Law. The motives accompanying the draft amendments were mainly focused on the disruptive character of reforms pursued: the risk of fragmentation of land and rapid decrease in the value of non-land assets of state controlled cooperatives under liquidation, due to the lack of incentives for the liquidation committees to preserve them. The amendments were passed by the National Assembly, but rejected by the President on legal grounds and returned for an additional reading to the National Assembly. The main justifications for this rejection were that some of the amendments were held to be in contradiction with the Constitution or with other laws already in place. Despite this reaction of the President, the National Assembly passed the amended Land Law with small changes on 10\textsuperscript{th} May 1995. However, the Constitutional Court has recently rejected many of these amendments, for instance on pre-emption right in case of sales. The Law will again probably go through a Parliamentary procedure. Land restitution will remain a major issue in Bulgarian politics during the coming years.

\textsuperscript{30} About 28\% of rural households are expected to be left without land after the restitution, according to the survey done together with the census of population carried out by the end 1992. A minority of the previous agricultural workers of the state controlled cooperatives have no land to claim. A part of them cultivate now leased land. The new Government wishes to offer the possibility of owning land to all "landless" agricultural workers, leasing being not considered as an equitable solution. This approach in some way echoes the 1946 land reform (cf box "historical view of farming structures").
2.5 THE EVOLUTION OF FARMING STRUCTURES

The fragmentation of estates among many owners does not necessarily mean a radical change of farming structures. A distinction has been progressively introduced between the two notions of ownership and operation. However, the most recent amendments to the Land Law, as they were proposed by the Government, can be interpreted as a wish to preserve both of these notions.

2.5.1. Situation at the end of the communist period

There were basically two types of farming structure during the communist period, which were at opposite sides of the spectrum: the tiny private farming taking place on household plots\(^{31}\), which, however, had a substantial impact on production and food security, and the large state controlled cooperatives, regrouping several TBS. In 1989, on the eve of the reform, private plots (all of them of a surface less than one hectare per family) represented 635,000 ha, i.e. 10% of a total of 6,159,000 ha of agricultural land (see Annex 2.1 & 2.2).

Introduction of incentives to private farming started with the NEM reforms in 1979, following the Soviet example. Land was leased by APKs to individual farmers on the basis of a contract. As payment for leased land farmers delivered the quantities of output defined in the contract. Quantities produced in excess of contractual requirements could be sold on the so-called cooperative market. There was an upper limit in the leased land of 0.5 hectares per farmer or 0.2 hectares in the case of intensive crops, as there were limits to the number of animals one could have. APKs used also to lease marginal lands to city dwellers, in urban peripheries. It was generally accepted that the private sector performed much better than the state farm in Bulgaria, as in other CMEA countries. It is nevertheless difficult to quantify the performance because of the poor reliability of the pre-1990 statistics. Official estimates show that private farming represented, in 1989, 46% of the crop vegetable areas, 13% of cereals and 9% of fruit trees. In the animal sector, the population owned on a private basis was about 18% stock cattle, 20% pigs, 30% sheep, and 38% poultry.

As far as marketing of private farming products is concerned, the state purchased practically the whole production of industrial crops, 70-80% of the animals and poultry for slaughter, 86% of the wool, and 62% of eggs. These percentages were lower for the rest of the products (vegetables, fruit, wheat and maize). Retail distribution of food products was organized through three state channels and through producer markets. State channels were stores controlled by the Ministry of Domestic Trade. The stores of the central cooperative union and sectorial unions did not differ from the State channel. On the producer markets, only small quantities of products were sold, but nevertheless, they were important for products such as vegetables and fruit.

\(^{31}\) There is not a single notion used to refer to these plots. In Bulgaria, they are called personal or private. In Western literature, they are called household plots.
Liquidation of state-controlled cooperatives

The liquidation of all state controlled cooperatives has been carried out, until May 1995\textsuperscript{32}, by appointed liquidation committees, replacing the management. Non-land assets have to be distributed between the people who contributed land, nonland assets or labour to the state controlled cooperatives. The Land law, at the beginning, provided for equal weighting of labour and land shares, but the amendments of 1992 shifted the distribution largely in favour of landowners. This distribution had to be done on the basis of an inventory and valuation of these assets, this last point appearing quite arbitrary without market references and without resorting to auctioning. In the meantime, some of the debt load of these state controlled cooperatives has been cleared by the government.

Liquidation committees had to run what remained from the state controlled cooperatives until the emergence of other farm structures capable of working the land. They had the right to use, on a temporary base, the land in the first stage of the restitution, without paying any fees. Animals were the first to be distributed among beneficiaries. That was the starting point of the livestock decapitalization. The distribution of other assets is much more cumbersome to achieve and it is not clear to which extent is has been completed. A very limited number of state controlled cooperatives have been until now officially liquidated, with all assets distributed among eligible owners. Some state controlled cooperatives have unofficially leased out capital assets to former workers and given them land for temporary use. Thus, some state controlled cooperatives are, to some extent, shells without content, although they are still liable for accumulated debts. Other state controlled cooperatives have developed as service units, providing machinery or storage services. Another group of state controlled cooperatives has remained in production, retaining most of the assets, mainly in municipalities where land restitution is a problem and where creation of private cooperatives has not occured. It seems then that some state controlled cooperatives under liquidation still play a significant role and have benefitted, to a certain extent, from the advantages of both public and private sectors, and delayed the land reform. Therefore, the new Government wants to rapidly end with this situation.

Land reform and liquidation have been accompanied in many cases by self appropriation of farming assets, without either proper distribution or payment ("wild privatization"), or, worse, by acts of vandalism. This occurred in livestock buildings, in some orchards where trees were chopped down or for the irrigation network, which the land claimants destroyed or damaged the equipment, in order to escape the payment for irrigation facilities placed in their claimed land. More generally, lack of investments and maintenance, or care of perennial crops (pruning, weeding, pest control...), means that much equipment of orchards are out of order or no longer usable. Huge investments are needed for restoring production capacity in many places (estimation of 500 ecu/ha for irrigation).

\textsuperscript{32} The amendments to the Land Law, which were adopted by the Parliament in May 1995, imply the immediate dissolution of all the Liquidation Committees and a quick registration of what still remains from the state controlled cooperatives, after the processes of liquidation and land restitution, as private structures. These amendments were not rejected by the Constitutional Court.
2.5.2 New farming structures

Comprehensive and consistent information on emerging farm structures does not exist. This results from the informality of many of the new farm structures and the inability of the statistical services to keep up with the rapid changes taking place. Nevertheless, it is possible to identify the following main farming structures, in addition to the remaining state controlled cooperatives under liquidation:

- private family farms and household plots
- private cooperatives
- private registered companies
- associations (schools, churches, ...)
- state farms and state registered companies
- municipal farms.

New types of cooperatives and small private farms (most of them being in fact household plots) are the dominant farming structures of the transition period. By the end of March 1995, there were 2029 new cooperatives or similar structures. They are mostly production cooperatives, producing arable crops. Some machine cooperatives are emerging, providing services (tillage, harvesting, ...) to private farms or to cooperatives without assets. On the other hand, about 1950 organisations still belong to the previous system, i.e. state farms or state controlled cooperatives under liquidation. Most of the newly created cooperatives are formed in districts where ploughable land is important. They have an average size of around 700-800 ha, i.e. they are one or more per TBS (compared to one state-controlled cooperative for 2, 3 or more TBS before 1989). In most cases, there is one cooperative per TBS, often because of political splits in the village. The average number of members is between 300 and 400, more than 80% being landowners, from whom a small minority works full time in the cooperative. It is frequently observed that cooperative members decide collectively to limit the individual land use to a small part of the land, thus avoiding fragmentation and letting their cooperative have a big size. There are also some smaller collective structures emerging, of 200-400 ha, and many informal associations.

These new structures are subject to quick evolution. Short term availability of land is indeed a major constraint to the stabilization of these new structures, called some times transitory structures. Some of them facing too many problems (renting difficulties, lack of capital or working tools) even disappear.

---

33 A survey of intentions (National Statistic Institute, census of population, 1992) showed that, in rural areas, 32% of households would opt for leaving their land in cooperatives, in order to get rents on ownership, another 23% would pool their land in cooperatives and would cultivate it by contributing labour to the cooperative, (more than half of land claimants would then participate in cooperatives). The proportion of households that intend to farm individually was 23%, and 14% had no plans. The share of households that prefer to rent out or lease out land to individuals or who intend to sell land was negligible. Those, most active in farming their land, were the households with up to 1 ha owned land. The survey showed that the larger the land area owned is, the more popular the cooperative idea is.
The very notion of "transitory structures" does not mean however that they are temporary but rather describes the length and complex process of evolutionary changes of the functioning forms of management, depending on changes in land property and in the economic environment. They inherit the former organizational and production arrangements and develop them taking into account choices of the new members [S. Batchvarova, 1994].

2.5.3 Development of individual farms

At the beginning of 1994, there were about 1.9 million private farms, averaging 0.6 hectares each (see Annex 2.2). It is necessary to distinguish the household plot farms from the bigger units. Household plot farms constitute the bulk of the private farms (up to 1.5 - 1.8 millions) and oscillate between being "garden units" for on-farm consumption needs, for instance for workers who have been dismissed after liquidation of state controlled cooperatives, and "additional revenue units", for instance, for people having jobs in new cooperatives or for pensioners. Bigger units could be described as the family farms emerging from the reform, even if they remain small farms, mainly ranking from one to 8 ha, because the share of households with more then 8 ha is insignificant, and renting possibilities are restricted. There are only limited examples of individual farms sizing 20-50 ha, i.e. having an average size as in the European Union. Data do not exist for classifying agricultural households depending on size, production, intensity and revenue, but it is still likely that the current number of private farms which could be considered as profitable full-time farming units is fairly limited. The inertia of farming household plots and participating in producer cooperatives discourages the owners from more long-term thinking. They thus do not foresee strong necessity of the lease and land markets. Plans of land owners are in general connected with a part-time agriculture in order to generate additional income."The dualistic structure (former big state controlled cooperatives - small household plots) has strongly influenced the behaviour and preferences of people engaged in agriculture in the period following reform. They are actively seeking ways to improve their income by retaining a similar combination of certainty of employment with some scope for private activity"[S. Davidova & A. Buckwell, 1994].

The idea of creating an individual farm and to have farming as a main activity is not very widespread34. Small size of holdings, which does not create expectations for generating enough income for living, and second, relatively high age of owners are the main handicaps. Whether individual farms could extend in the mid-term or not will depend greatly on the evolution of the general economy and on government policies, as farmers lack capital, training and need credit access and technical assistance. Therefore, the general inclination of farmers towards cooperatives is a normal process, as the development of a family farm (Western type) is quite difficult in the short run [S. Batchvarova, 1994]. There are also exceptions to this general trend, like few examples of entrepreneurs who have developed profitable activities.

---

34 Except for ethnic Turks. In the regions with a high density of ethnic Turks, particularly in the southern part of Bulgaria near the border with Turkey, family farms could be expected to be the main farming structure emerging from the land reform.
Farming Structures in Bulgaria, 1994-1995

Small scale farms: household plots and other private family farms.
It could be assumed that a first group (see Annex 2.1), up to one hectare, includes gardens and household plots. They number 1.6 million. This happens to be the same as the number of household plots reported pre-reform in 1989. A second group, which is composed of 358,000 units ranging from 1 to 10 ha, could be classified as individual farms. The last group is likely to include informal partnerships or associations, because few owners possess more than 10 ha. The relative importance of these individual farms in the output has steadily grown since 1989. Since most of the livestock of the former state controlled cooperatives have been distributed, in small numbers, to individual owners, most milk and meat production is concentrated on these farms.

Cooperatives:
The post-reform jargon often uses the name 'new cooperatives', or 'private cooperatives'. This is an attempt to draw a line between the pre- and the post-reform producer cooperatives. The latter are expected to be collectively managed by the members, but without central control and to act as independent market agents. The legal basis for the creation of cooperatives is the Cooperative Law (1991). The statistics classify cooperatives into four groups:

Agricultural production cooperatives. These cooperatives are registered under the Cooperative Law. These structures can be registered if more than seven people (land owners) associate themselves. This registration entitles them to access to credit facilities.

Agricultural production and consumer cooperatives. These cooperatives are established in order to avoid the requirement that the members should have their land ownership finalised by a land reallocation plan. In practice there is no difference in the activities between them and the production cooperatives.

Informal associations. There are many informal associations of farmers to cultivate land. They combine their efforts to farm the land putting together machines, equipment, animals, whatever capital they have and labour.

Others. Three types of cooperatives are included in this group: service cooperatives, labour production cooperatives (TPK) and regional consumers cooperatives (RPK). Some of them existed already in the pre-reform period. They are not very typical for the agricultural sector.

Farming Companies:
There are four main types of companies which can be registered by private capital. However, in these categories there are also public companies:

Joint-Stock company. Most of the joint-stock companies in Bulgarian agriculture are in the livestock sector (many of them are public).

Companies with limited liability. They are mainly state-owned. Their activity is mostly in intensive livestock production of pigs and poultry. They also cultivate public land, about 1% of the arable land of the country but their importance for agricultural production is larger, as they are involved in intensive livestock production. They were established under the Decree 56 (1987). Post-reform, they had to re-register under the Commercial Law as limited liability companies. This has been a necessary step towards changing the management structure and preparing the companies for future privatisation. Legally, a limited liability company can be formed by one or more persons who are liable for the obligations of the company up to the amount of their contribution to the capital. There are two types of limited liability companies: Limited Liability Company and Sole Proprietorship Ltd.
Farming structures in Bulgaria, 1994-1995
(continued)

Sole trader. Any adult, resident in Bulgaria, may register as a Sole trader once they respect certain legal requirements. Agricultural Sole traders are generally farmers who are at the same time purchasers of agricultural products for resale, processing or export.

General Partnership. These are formed by two or more persons under a common trade name.

Associations:
School and University farms. These farms are managed by agricultural schools and universities. Generally they operate on public land although sometimes they operate on land on which there are claims for restitution. In these latter cases the Land Law provides procedures for compensation of eligible owners.

Church farms. They are based on land owned by the church. Recently the church has started to lease out some of its land.

State Farms and State Companies:
Experimental Stations and Bases. These are specialised farms in animal breeding and testing new varieties of crops. They are treated as development organisations. They produce high quality seeds and planting material. Selection centres are concerned with livestock breeding. All these farms cultivate public land. They are expected to continue to exist.

Forest farms. Less than one percent (0.8%) of arable land is farmed by 138 farms attached to forest enterprises. They are located in mountainous and semi-mountainous areas. The owner of the land is the State.

Agro-business companies. These structures are state-owned and their origin is also a Decree 56 (1987). They too had to re-register and change their name and legal form according to the Commercial Law. However, the National Statistics Institute (NSI) still count them under the old name. There are only 13 of them covering 0.6% of the arable land. The main distinction from the other farming companies with public capital (e.g. companies with limited liability) is that these companies are not only engaged in farming but also in trade of agricultural products.

Others. This group includes farms attached to different types of state organisations and institutions: homes for people with mental and other disabilities, retirement homes, and auxiliary farms of various non-agricultural state companies.

Municipal firms
These are registered under the Commercial Law. The land that they cultivate is from the municipal land reserve. The expectations are that a significant part of this land will be allocated to the landless farm workers under the scheme of the land settlement provided by the Land Law.

Organisations Under Liquidation
The NSI devises four farming structures under liquidation. All emerged when the APKs were broken up. These are labour agricultural co-operatives (TKZS), collective farms (KZS), Agro-industrial complexes (APKs), and agricultural brigades. APKs were abolished in 1989. However, the NSI still treats two of these organisations under liquidation as APKs.
2.5.4 CONCLUSIONS: FORESEEABLE MID-TERM EVOLUTION OF FARM STRUCTURES

Theoretically, gains in productivity could be obtained quickly both from the change of small plot farms into small family farms and from the decrease in the size of cooperatives and their transformation into genuine private, voluntary structures. In fact, considering the difficulties of the transition process and policy directions, the dominant farming structure for the coming years will be the new cooperatives. Nevertheless small individual farms will still have an important role to play. However, as many emerging structures are currently not registered and as some middle size structures also begin to appear, there is scope for many different scenarios for the future development. In addition, the following considerations should be taken into account concerning the evolution of farming structures and its relation to production:

- the importance attached to household plots will decrease if the general economic situation improves. This will allow swaps and merging of plots between family members or neighbours, and an increase in the size of family farms; elderly people and city dwellers without work will however still produce vegetables and fruit on their small plots for themselves and for the local market; on-farm consumption will remain a significant phenomenon during the coming years;

- small farms may continue to produce mainly, fruit, vegetables and animal products$^{35}$; they may remain the biggest suppliers of animal products if the production in bigger units does not recover quickly because of further delays in the privatization process. Their productivity is, however, low and a decrease in animal production might then persist, if no additional services are put at the disposal of those individual farmers;

- cooperative structures may need further stabilization (size, members, statutes..). They will keep on producing mainly arable crops like wheat or sunflower, in the short term, bearing in mind the lack of capital, the security offered by massive state purchases of these products and the disruptions existing in other types of crop production (irrigated crops, orchards, glasshouses) or the need for more stability and organization to develop animal production. A distinction between the interests of landowners involved in the activities of the cooperative and the others will become. In the mid-term, if the situation improves, it is possible to see the ownership of cooperatives becoming vested in the hands of a few shareholders, adopting statutes similar to private companies;

$^{35}$ A study carried out by the Institute of Agricultural Economics, financed by the World Bank, showed that the most profitable activity for small family farms is animal husbandry combined with fodder cropping. Specialization in animal husbandry without land does not give good financial results.
some large farms (500-1000 ha) may start developing (with private money coming from outside the agricultural sector), on a leasing base, for producing arable crops with their own machines and storage facilities; further developments will depend on government attitudes and land leasing possibilities;

some agricultural entrepreneurs, who made some profits in the late eighties, are also ready to develop speculative crops, like early vegetables for export, or to start developing service activities such as machinery leasing;

state control will remain for some specific activities, such as the selection and breeding of high quality herds, the production of rose oil and other scents for the cosmetic sector, or, for the time being for forestry and mountain pastures.
3. AGRICULTURAL ECONOMY

3.1 THE IMPORTANCE OF AGRICULTURE IN THE ECONOMY

Even if Bulgaria has become an industrial country, with less than 10% of GDP accounted for the agricultural sector, agriculture is considered as a priority, mainly for its contribution to social and structural equilibrium, food security and agrofood exports. The transition to a market economy has been marked by a substantial contraction in production, which has eroded the agricultural sector in particular. The contraction was less significant at the beginning of the transition for the agricultural sector, compared to the industrial sector, but this trend has since then been reversed. There is a marked decline in all the agricultural indicators. The reasons for this are the following:

- the deep crisis in the whole economy, causing the fall of domestic demand and of financial resources for agriculture (lack of individual capital, scarcity of credit and limited possibilities for subsidies);
- the fall in external demand, caused mainly by the collapse in trade with other former CMEA countries;
- the failure to coordinate the process of land restitution with the liquidation of state controlled cooperatives, and the slow pace of land restitution;
- the bottlenecks in the upstream and downstream sectors.

Table 3.1

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Gross Domestic Product</td>
<td>% var.</td>
<td>-9.1</td>
<td>-11.7</td>
<td>-5.8</td>
<td>-4.2</td>
<td>0.2</td>
</tr>
<tr>
<td>Gross Agriculture Product</td>
<td>% var.</td>
<td>-3.7</td>
<td>7.7</td>
<td>-7.7</td>
<td>-9.0</td>
<td>-5.0</td>
</tr>
<tr>
<td>Share of agriculture</td>
<td>%</td>
<td>18</td>
<td>15</td>
<td>11</td>
<td>10</td>
<td>9</td>
</tr>
<tr>
<td>Share of food industry</td>
<td>%</td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>na</td>
</tr>
<tr>
<td>Employment</td>
<td>% var.</td>
<td>18</td>
<td>19</td>
<td>21</td>
<td>22</td>
<td>na</td>
</tr>
<tr>
<td>Share of agriculture</td>
<td>%</td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>na</td>
</tr>
<tr>
<td>Share of food industry</td>
<td>%</td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>na</td>
</tr>
<tr>
<td>Gross Agricultural Output b/</td>
<td>% var.</td>
<td>-6.0</td>
<td>-0.3</td>
<td>-12.0</td>
<td>-18.2</td>
<td>4.0</td>
</tr>
<tr>
<td>Total</td>
<td>% var.</td>
<td>-7.4</td>
<td>18.6</td>
<td>-12.8</td>
<td>-21.0</td>
<td>23.0</td>
</tr>
<tr>
<td>Crops</td>
<td>% var.</td>
<td>-4.6</td>
<td>-18.6</td>
<td>-10.7</td>
<td>-18.0</td>
<td>-15.0</td>
</tr>
<tr>
<td>Livestock</td>
<td>%</td>
<td>45.6</td>
<td>54.3</td>
<td>53.8</td>
<td>51.9</td>
<td>61.5</td>
</tr>
<tr>
<td>Share of crops</td>
<td>% b/</td>
<td>54.4</td>
<td>45.7</td>
<td>46.2</td>
<td>48.1</td>
<td>38.5</td>
</tr>
<tr>
<td>Share of livestock</td>
<td>% b/</td>
<td>54.4</td>
<td>45.7</td>
<td>46.2</td>
<td>48.1</td>
<td>38.5</td>
</tr>
<tr>
<td>Price index</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agric. input prices</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agric. producer prices</td>
<td>in</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agric. food prices</td>
<td>1990</td>
<td>100</td>
<td>100</td>
<td>571</td>
<td>916</td>
<td>1480</td>
</tr>
<tr>
<td></td>
<td></td>
<td>100</td>
<td>273</td>
<td>373</td>
<td>589</td>
<td>868</td>
</tr>
<tr>
<td></td>
<td></td>
<td>100</td>
<td>476</td>
<td>812</td>
<td>1263</td>
<td>2208</td>
</tr>
</tbody>
</table>

a/ preliminary  b/ in real terms
Note: Figures must be treated cautiously. The authors have found significant differences between different sources. DG II and OECD sources have been selected in this table to facilitate comparison with other countries under the assumption that they have used the same methodology over the period.
Gross agricultural product has decreased by 17.2% since 1989 (cf Table 1.2). Because the recession in GDP has been more accentuated than that in GAP, the share of agriculture in GDP has experienced fluctuations, with a peak in 1990 and a decrease since then, reaching 10 per cent in 1993 and 9% in 1994. This share is considered adequate for the agricultural sector in Bulgaria in current circumstances. A general economic recovery would, however, imply a further decrease of the share of agriculture in the whole economy.

Crop production faced better than animal production, although sectors like tobacco or vegetables have been strongly hit. This crisis, from which the agricultural sector is suffering, has its roots in the prereform period. This is shown by output evolution in the Eighties (see box on "Bulgarian agriculture performances during the pre-reform period" below in this Chapter). The apparent contradiction, between the different levels of decrease of crops and livestock gross agricultural output and the stable relationship of shares of these two in the period 1991-1993 (table 3.1), results from the sharp increase of the animal-crops price ratio.

The evolution of the crop sector has been negative over the period 1990-1993 (except in 1991). This is mainly the result of the cumulative decline in productivity for the main crops and the decline suffered by intensive crops. Some meteorological fluctuations have also influenced negatively this evolution in 1992 and 1993. A recovery has occurred in 1994 due to the good weather conditions for arable crops. During the same period, a disintegration of the livestock sector took place as a consequence of the process of liquidating the state controlled cooperatives and the state entreprises (the big livestock units). In 1994, this process of dismantlement continued. This more pronounced decrease in the livestock sector is partly due to the fact that this sector was artificially boosted in the centrally planned economy. The cost-price squeeze, the changes in support policy and in the animal-crops price ratio have had an immediate negative effect on production and consumption, the latter being exacerbated by the fall in purchasing power of the population. On the structural side, one can also stress that livestock production, especially intensive units, was more sensitive to disruptions than arable crops, due to the major changes taking place in farming structures. This statement takes also into account the big changes which have occurred in consumption patterns.

Since the start of the transition period, the output per employed person in agriculture fell with the drop in production. It is however difficult to get a clear updated picture because privatisation is still going on. The actual number of people working in the new types of cooperative is difficult to assess because of the rapid evolution of these structures and because, in reality, the members of these structures may simply be owners of plots who are not involved in daily work. In addition, a significant part of the production of the small scale farms is dedicated to on-farm consumption, and thus probably not accounted.
3.2 DOMESTIC CONSUMPTION

Since 1989, food consumption patterns have noticeably changed, because of the general loss of purchasing power and the high share of incomes dedicated to food. In 1994, the share of incomes dedicated to food was, on average, 38.8% of household expenditure; 45% if adjusted for food produced and consumed in households. Consumption patterns shifted to a staple diet based on cheap basic food, of which bread and other cereals products are one of the main elements.

Official figures (see box on "Bulgarian agriculture performances during the pre-reform period", below in this Chapter) show however a decrease in the consumption of bread and bread products, which fell to 180 kg per person after 1989. In fact, the high consumptions figures of the pre-reform period includes bread used for feeding animals on household plots. This was a common feature in many Central and Eastern European countries, because bread, which was subsidized, happened to be cheaper than raw cereals. At present, it is assumed, on the contrary, that human consumption of bread and bread products has increased since 1989.

In 1992, as far as other products are concerned, the official figures for human consumption give the following levels, most of them having decreased when compared with pre-reform figures: rice 2.3 kg, meat 64.5 kg\(^{36}\), fish 2.3 kg, fats 16.4 kg, milk 176 lt, eggs 180, sugar 17.5 kg, vegetables 100 kg, alcoholic drinks 11.4 lt (processed volume for an equivalent of 50° alcohol content), of which 16,6 lt of wine. Only fruit consumption has increased, to a level of 90kg.

At the request of the Bulgarian authorities, emergency food aid was delivered by the Union in June 91, under the PHARE programme. It is likely that the shortage of food in this period resulted mainly from the changes and disorganization of the state-run agrofood and distribution channels, rather than from insufficient production. In addition a certain amount of hoarding, occurred at that time, in expectation of price increases. It is possible to state that, considering the demand reduction, mainly for animal products, the present level of food production, even if it is at a low level as a result of the recession and the changes in farming structures, can match the supply needs of all the population. This is possible, to a great extent, thanks to household plot production. However, further contraction in production would necessitate agrofood import flows.

\(^{36}\) It is assumed that this is a carcass weight value, corresponding to a net weight of meat of 48 kg. See annex 3.10 .
Output evolution

The general picture of Bulgarian agricultural production at beginning of the eighties, based on official output and productivity figures, was generally satisfactory. Per capita production and yields in many products were also satisfactory [Wallden, 1991]. However, after a general growth in the years 1950-80, figures evolution for agricultural production gave grounds for concern, mainly in the second half of the eighties: crop production stagnated or dropped, particularly in industrial crops, maize and fruit. Animal stock presented clear signs of decline after 1985, despite important increases during the early eighties.

Total agricultural production value in 1989 was 7.9 billion Leva at 1982 prices. This level was 3% above 1980. Animal production accounted for 54% of total agricultural production in 1989 but there have been considerable yearly fluctuations. The share of animal production rose by 14% from 1971 to 1989 while the share of crop production rose by 5% over the same period. This reflects the tendency, commonly followed by the former socialist countries since the mid-seventies, to increase substantially the importance of livestock production and to boost consumption of meat. This was considered to represent an increase in living standards (the target was to reach a per capita consumption of 80 kgs/year).

Cereals (14% of total value), industrial crops (9.5%), vegetables (8.2%), fruit (7%) and fodder (3.8%) were the most important groups in Bulgarian crop production in 1988. In animal production, the most important group were cattle products (20.3% of total agricultural output in 1988) followed by sheep and goat products (14.3%), pig products (12.6%) and poultry (7.7%).

Output per employed person in agriculture rose by an average annual rate of 5.8% in 1965-70, 5.1% in 1970-80 and 2.9% in 1980-87. This decreasing trend was more accentuated in Bulgaria than in other Central and Eastern European country, showing thus the bigger inefficiencies brought about by the excessive concentration of production units and central planning.

Patterns of food consumption

Per capita calorie consumption of crop products (2739 in 1986-88) was 18% above the European average. Per capita calorie consumption of animal products (911 in 1986-88) lay at 80% of the European average. The share of animal products in total calorie consumption in Bulgaria rose from 14% in 1961-63, 21% in 1979-81, to 25% in 1986-88. During the Eighties, per capita consumption rose considerably in eggs (+31%), meat (+27%), fish (+20%), vegetables (+19%), fats (+15%) and milk (+12%). On the other hand, consumption of bread and fruit dropped by 8 and 12%, respectively. Immediately before the reforms, in 1989, Bulgarians consumed on average per capita per year: 192 kg of bread and bread products, 4.2 kg of rice, 78 kg of meat, 7.8 kg of fish, 23.4 kg of fats, 193 lt of milk, 100 eggs, 34.0 kg of sugar, 117 kg of vegetables, and 84.8 kg of fruits. The consumption of alcoholic drinks transformed into 50° alcohol content, was 14.6 litres per capita per year.

Comparison with other PECOs

A general picture of Bulgarian agricultural performance compared to other Central and East European countries, using western estimates and methodology, reveals that agricultural performances in Bulgaria are above the average level of other PECOs, mainly in respect of per capita output and product per person employed in agriculture [Lazarcik, 1989]. These estimates allow us to understand why Bulgarian agriculture was presented as an example in the socialist world. Nevertheless, the trends, during the Eighties, of output per area of cultivated land were considered by Western experts as an early sign of deterioration of the production system in the agricultural sector.
3.3 LAND USE

3.3.1 Distribution of uses

According to available data (Table 3.2), total utilised agricultural area (arable land, permanent crops and pastures) in 1993 was 6.1 millions hectares or 55% of the country's area. 75% of this land was cultivated, the remaining 25% being grassland. Since the fifties, total utilised agricultural area has increased by half a million hectares. The current total utilised agricultural area appears to be a maximum figure considering the natural features of Bulgaria. The former centrally planned system with its objective to maximize output, brought marginal land into cultivation. It is likely that marginal agricultural land will not present such an interest in the future and will be progressively abandoned. From a total of 6.1 million hectares of agricultural land in 1992, 65% were arable, 5% were permanent crops, while the remaining areas were permanent pastures\(^{37}\). More than half of the arable land is covered by cereals.

3.3.2 Irrigated land

In the Eighties around 1.25 million hectares, 27% of total cultivated land, was irrigated which is considered high by international standards. This percentage rose from 14% in 1960 and 21% in 1970. However, this percentage conceals the very bad state of the irrigation system and statistics do not give an adequate picture of the situation. This was already the view of some experts in the eighties but the situation has worsened since then. Whilst the land restitution process continues, there is only very limited maintenance of the irrigation networks and a large part of them are not functioning properly or at all. In some cases, this is due to vandalism or theft (part of pumps, sprinklers, pipes are believed to be stolen and sold as scrap metal). In other cases, land claimants destroyed or damaged the systems in order to escape payment for re-purchasing the installations on the lands claimed. The land restitution itself impedes the full irrigation of previously large sized plots. With the fragmentation into small sized fields, only the plots alongside irrigation networks can be irrigated by gravity. There is no provision to allow water to flow to plots further away. Irrigated land in 94 is officially estimated at 670 thousand hectares, but could be even less. This explains the drop in yields of maize and vegetables. Land which cannot benefit from irrigation is used for winter crops such as wheat or barley. This shift explains the stability of the production of winter cereals in spite of lower inputs. It is not yet clear how the irrigation networks are going to be privatized.

\(^{37}\) Temporary pastures have almost vanished during the transition process. This explain the decrease of "permanent and temporary pastures" data.
Table 3.2
Land use ('000 ha)

|---------------------|-------|-------|-------|-------|-------|-------|-------
| Arable land         | 3810  | 3848  | 3856  | 3864  | 4047  | 4063  | 4100  |
| of which:           |       |       |       |       |       |       |       |
| - cereals           | 2001  | 2150  | 2037  | 2236  | 2208  | 2246  | 2282  |
| - oilseeds b/       | 267   | 240   | 280   | 270   | 476   | 469   | 496   |
| - vegetables        | 170   | 102   | 93    | 90    | 74    | 55    | 63    |
| - fodder            | 1088  | 918   | 1034  | 852   | 812   | na    | na    |
| Permanent crops c/  | 320   | 294   | 296   | 293   | 279   | 209   | 205   |
| of which:           |       |       |       |       |       |       |       |
| - fruits            | 121   | 90    | 90    | 91    | 90    | 95    | 54    |
| - wine grapes       | 148   | 127   | 127   | 124   | 121   | 105   | 101   |
| Perm. & temp. pastures | 2039  | 2026  | 2007  | 2002  | 1833  | 1816  | 1802  |
| Agricultural area   | 6169  | 6168  | 6159  | 6159  | 6159  | 6159d/| 6159d/|
| Wooded area         | 3871  | 3871  | 3871  | 3874  | 3874  | 3874  | 3874  |
| Other               | 1051  | 1052  | 1061  | 1058  | 1058  | 1058  | 1058  |
| TOTAL AREA          | 11091 | 11091 | 11091 | 11091 | 11091 | 11091 | 11091 |

a/ Provisional
b/ only sunflower seed
c/ Permanent crops include uncropped orchards or vineyards.
d/ No land survey has been carried out since 1990. The Council of Ministers decided that land use aggregates figures should be given as they were on 1st July 1990 (according to Act N° 286/2.7.1992 of the Council of Ministers).


3.3.3 Fallow land

Part of the agricultural land is currently not cultivated. This does not appear in official data on land use and it is difficult to perceive to what extent it does happen. Estimates which circulate range from 10% to 30% of the arable land for this agricultural campaign. The problem of not cultivated causes a political debate in Bulgaria about responsibilities of the phenomenon, confirming in a way the existence of such a problem. In our opinion, several factors may induce land set-aside:

- the decrease in domestic demand, as a consequence of the fall of the purchasing power, the difficulties to export for some agricultural products, due to the loss of traditional markets or to the restrictions put by the Government (see Chapter 5).
Moreover the low level of agricultural prices and the delay in payments in a situation of high inflation slow down motivation for producing;
the majority of the present production structures have not enough upfront money to buy seeds, fertilizers or pesticides, because the small scale farms are limited by their size and most of the present cooperatives are temporary structures, lacking managerial strategies and accountancy approach, and because agricultural prices are depressed (see Chapter 5), preventing them from building up their own capital. The subsidiation of the campaign with credit facilities is an important element of governement policy (see Chapter 5);

- the general lack of capital and the difficult access to investment credit. The banking sector offers only short term loans for limited amounts, because the possibilities of guarantee are limited by the problems of property titles and the absence of a land market;

- the incompletion of the land restitution process, raising uncertainties about ownership of the land and impeding the emergence of a land market or stable land lease. It seems that the new owners are afraid to rent out land for which they have not yet full guarantees of ownership. It is estimated that half of the total number of households with land did not make use of it in any form during those recent years and showed no interest in renting it out.

Therefore, data on surfaces and yield must be considered with some caution. This can explain part of the difficulties encountered in the interpretation of balance sheets per product (see following).

3.4 CROPS

Crops have been affected by several specific factors which have had a large negative impact throughout the period 1989 to 1994, excepted for some basic arable crops (wheat and sunflower seeds). These factors can be summarized as follows:

1) Successive droughts which affected the country during recent years. This, combined with a lack of water use arrangements during transition, had a significant effect on yields of summer crops.

2) The scarcity of working capital, which, together with the low opportunity cost of labour, encourage the substitution of labour for capital in agricultural tasks, where this is feasible (mainly in small-scale farms).

3) The input/output price squeeze resulted in a decrease of profitability and has also much contributed to the decreased use of inputs. Lack of an appropriate institutional legal framework brought about the fact that private producers did not invest in intensive or pluriannual activities

These factors have resulted in a lack of confidence in the agricultural sector.
### TABLE 3.3
Evolution of the main crops

<table>
<thead>
<tr>
<th>Crops</th>
<th>Area (000 ha)</th>
<th>Yield (t/ha)</th>
<th>Production (000 t)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cereals (grain)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>average 87-89</td>
<td>2068</td>
<td>3.94</td>
<td>8161</td>
</tr>
<tr>
<td>average 92-94</td>
<td>2246</td>
<td>2.79</td>
<td>6274</td>
</tr>
<tr>
<td>% variation</td>
<td>+8.9</td>
<td>-29.0</td>
<td>-23.1</td>
</tr>
<tr>
<td>Oilseeds a/</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>average 87-89</td>
<td>248</td>
<td>1.67</td>
<td>414</td>
</tr>
<tr>
<td>average 92-94</td>
<td>480</td>
<td>1.13</td>
<td>544</td>
</tr>
<tr>
<td>% variation</td>
<td>+93.7</td>
<td>-32.5</td>
<td>+31.3</td>
</tr>
<tr>
<td>Fruits</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>average 87-89</td>
<td>96</td>
<td></td>
<td>1050</td>
</tr>
<tr>
<td>average 92-94</td>
<td>79</td>
<td></td>
<td>470</td>
</tr>
<tr>
<td>% variation</td>
<td>-17.7</td>
<td></td>
<td>-54.5</td>
</tr>
<tr>
<td>Vegetables</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>average 87-89</td>
<td>102</td>
<td>1.31</td>
<td>1662</td>
</tr>
<tr>
<td>average 92-94</td>
<td>64</td>
<td>1.22</td>
<td>984</td>
</tr>
<tr>
<td>% variation</td>
<td>-36.6</td>
<td></td>
<td>-40.7</td>
</tr>
<tr>
<td>Tobacco</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>average 87-89</td>
<td>83</td>
<td>1.31</td>
<td>110</td>
</tr>
<tr>
<td>average 92-94</td>
<td>39</td>
<td>1.22</td>
<td>48</td>
</tr>
<tr>
<td>% variation</td>
<td>-53.35</td>
<td>-6.7</td>
<td>-56.5</td>
</tr>
<tr>
<td>Wine</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>average 87-89</td>
<td>138</td>
<td>0.47</td>
<td>322</td>
</tr>
<tr>
<td>average 92-94</td>
<td>127</td>
<td>0.39</td>
<td>175</td>
</tr>
<tr>
<td>% variation</td>
<td>-8.1</td>
<td>-16.9</td>
<td>-45.5</td>
</tr>
</tbody>
</table>

a/ only sunflower seeds

Source: Own calculations from FAO data and OECD Feb-1995

### 3.4.1. Cereals (Annex 3.1)

Cereals are the most important group in Bulgarian crop production. The main cereal crops are wheat, barley and maize. The area under cereals has increased since 1989, as it benefits from the temporary use of land allocated within the framework of the land restitution process. In 1994 the area under cereals is estimated at 2.3 million hectares (+9% compared to 1989). This tendency to favour cereals cultivation will continue beyond 1994, mainly due to the fact that winter cereals -wheat and barley- are well adapted to the current agro-economic conditions of Bulgaria. For maize, the outlook is not very optimistic, because of the present difficulties of the irrigation network. Nevertheless, it is possible to grow maize without irrigation in part of Bulgaria but yields are erratic.

Yields have decreased in recent years for both weather (drought) and economic reasons (decreased use of inputs). Yields dropped by 32% when compared with 1989. Lack of credit and liquidity have served to reduce inputs, the use of chemicals and the quality of seeds. A recovery of the yields in the medium term is unlikely without an improvement in the financial situation of farmers.
In average, cereal production has decreased during the transition period. However, yearly differences are important. There was a peak in 1991 (9 million tonnes) before bottoming in 1993 (5.9 million tonnes). This increase in yearly variation is partly a consequence of the lower input level. In 1994 cereals production is estimated at 7 million tonnes, of which wheat accounts for 57%, maize 25% and barley 17%.

Officially, there is an overall equilibrium of the cereals balance, with a slight tendency to surpluses, mainly for wheat. The recession in livestock production has provoked a significant reduction of animal consumption, that has, until now, overcompensated the decline in cereals production. In addition, the comparison between the reduction in total domestic cereals consumption (-33%, on table 3.4) is bigger than the one calculated for animal consumption (-29%). One can expect that there might be better efficiency in the use of cereals for animal feeding.

<table>
<thead>
<tr>
<th>Table 3.4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cereals consumption ('000t)</td>
</tr>
<tr>
<td><strong>Average</strong></td>
</tr>
<tr>
<td><strong>87-89</strong></td>
</tr>
<tr>
<td>Total disappearance of cereals (a)</td>
</tr>
<tr>
<td>Animal consumption of cereals (b)</td>
</tr>
<tr>
<td>Share of animal consumption (a/b)</td>
</tr>
</tbody>
</table>

Source: Own calculations from FAO data

The balance sheets elaborated on the basis of available data show, however, high disappearance figures, for which we have no explanation. Considering the fact that grain prices have remained below the world market level in recent years, to circumventing the ban on export has become an attractive option. Questions have been arised about the real level of grain export. On the other hand, production might be overestimated, because of unaccounted fallow land. Elements like private storage, for which there is no specific data, inefficient feed use on household plots, where there might be more animals than registered, or losses in grain procurement, storage and processing could also be underestimated. Caution is therefore necessary before drawing any conclusions from present figures.

---

38 In Bulgaria, data show, in 1994, a per capita disappearance of $810 \text{ kg/year}$ of cereals (rice excluded), of which 437 kg correspond to wheat. Fifty nine per cent of wheat is used for animal feeding. It is assumed that 250 000t of wheat seeds are necessary for the following campaign. It remains 226 kg/year of wheat disappearance, which has mainly to be compared with a human consumption of bread and bread products of $180\text{ kg p.c./year}$. Same figures for the European Union, showed in 1993 a total per capita cereals utilization of $410 \text{ kg p.c./year}$ (rice excluded). This figure includes animal feeding, seeds, human consumption, industrial use and waste. Utilization for animal feeding accounts for 58% of this total. Human consumption of cereals is $78.9 \text{ kg p.c./year}$, of which 73.4 kg of wheat (the highest figure being for Italy, with $107\text{ kg p.c./year}$).
3.3.2 Sunflower seed (Annex 3.2)

Traditionally, the main oilseed crop in Bulgaria is sunflower seed. This crop finds good cultivation conditions in Bulgaria. Rapeseed and soya bean cultivation are marginal. As for cereals, growing sunflower seeds is attractive for the new cooperatives as a yearly crop. The export regime, however, limits trade of seeds because the government favours the export of processed products, i.e. oil, although external demand is more for seeds. There is also strong lobbying from the processors to maintain this policy and more or less 90 percent of sunflower seed production is crushed in Bulgaria. The domestic production of sunflower oil is practically all consumed internally, little is exported.

The area under sunflower seeds in 1994 (495 thousand ha.) has practically doubled since 1989. Yields have declined in recent years, being affected by the same constraints as for cereals. Yields oscillate between 1.0 and 1.4 tonnes per hectare. The production of sunflower seed (657 thousand tonnes in 1994) has risen since 1989, but at a lower pace than area. Despite the existence of several policy induced impediments to export, i.e. export bans and export tax, it is likely that sunflower seed exporters discovered means of trading externally, considering the high disappearance figures (cf. balance sheets). This, in our opinion, is the main reason for the recent expansion in the area.

As for oilcakes, Bulgaria experienced protein shortages in the past and needed to import feedingstuffs. The collapse of the livestock sector has relieved this necessity for the time being. The future situation will also depend on the improvement of the purchasing power. This may contribute to an increase in the consumption of vegetable oils, mainly sunflower oil.

3.4.3. Sugar beet and sugar (Annex 3.3)

Sugar beet area has dramatically decreased in Bulgaria (8 thousand ha in 1994 from an annual average of 40 thousand in the period 86-90). In parallel, the production of sugar fell sharply from 966,000 tonnes in 1989 to 150 thousand in 1994. The drop in area and production of sugar beet can be linked to insufficient irrigation and massive inefficiencies at all production and processing levels. The domestic production yield (2 t/ha in 1992) cannot compete with imports of raw cane sugar. Bulgaria used to be a net importer of sugar under CMEA arrangements. Despite the fact that the production of sugar beet has been targeted for protection in the draft Law of financing the agricultural sector (see Chapter 5) the interests of refiners might also be better defended than those of sugar beet producers.
3.4.4. Tobacco (Annex 3.4)

Bulgaria used to produce a high share of the cigarettes marketed in CMEA countries. Tobacco still plays an important role in the country, even if the production has been severely hit by the collapse of traditional markets. It keeps the biggest share of agricultural exports in terms of value (41% as an average for 1986-89, reduced to 32% in 1992 and 1993), even if the quantitative drop is dramatic. Cigarettes accounted for 5% of total Bulgarian exports in 1993 and crude tobacco for 1.6%. Its trade has been essential for a positive trade balance in agriculture. Tobacco is also a politically sensitive product because it is associated with the ethnic Turks (see Chapter 1) and is the main product of the rural areas with mixed populations. The first sector for which a public management regime was introduced is tobacco. It is now the most regulated crop. However, approved regulatory measures have not always been fully implemented, due to the lack of financial resources and administrative capacities.

In 1994, the area dedicated to tobacco production was 27 thousand ha (-63% on 1989). The drop in area and production started with the massive departure of ethnic Turks in 1989. At the same time, other factors, firstly the reduction of the Russian market, have accelerated the downward tendency in the area devoted to this product. Future recovery for this sector requires the reactivation of exports, particularly to Russia, and changes in the varieties produced (oriental and virginia) in order to adapt to the changes in consumer preferences and to compete with western products.

3.4.5. Fruit (Annex 3.5)

Fruit is an export oriented product (until 1990 it was the second agricultural export, after tobacco); domestic demand is insufficient to absorb the pre-reform level of production, especially for some commodities, such as cherries and plums.

Fruit production was traditionally oriented towards CMEA markets. From 1989, it tried to find other export markets, mainly Western Europe. It has been adversely hit by the difficulties encountered on these international markets, i.e. strong competition and high quality standards requirements. The viability of the production chain is now in question. This has been worsened by the difficulties brought about by the land restitution process. Temporary use of land is unsuited to perennial productions and orchards suffered from a serious lack of care and from the collapse of irrigation arrangements. Rational exploitation implies also the maintenance of correctly sized plots and grouping of producers. Restitution of orchards has been linked to the payment of fees to the state, to cover the value of plantings carried out during the pre-reform period which produced negative reactions from the claimants (see chapter 2). This situation might be eased, however, by the recent amendments to the Land Law, as new provisions oblige the owners to maintain orchards and to allow collective production, until the depreciation of the plantation. At the beginning of 1995, 30% to 40% of the orchards are estimated to be uncropped, some of them already abandoned for a few years and no longer suitable for production.

Altogether, area and production have dropped 44% and 75%, respectively, when compared with 1989. The main fruits produced are apples (30%), plums (22%), cherries and peaches (15%).
3.4.6. Vegetables (Annex 3.6)

Vegetables have also been particularly dependent on external markets, in particular, Russia. Part of the area under vegetables before 1989 is now under arable crops like sunflower seeds or wheat, partly because of the allocation of land for temporary use, partly because of marketing difficulties due to the chain restructuration and the need to compete on other markets. The vegetable sector is totally liberalised, as is the fruit sector.

The area in 1994 is estimated around 65 thousand ha (-38% on 1989). Main vegetable products are tomatoes (40% of the total), peppers (20%) and onions (10%). In recent years, Bulgarian producers exported significant amounts of vegetables to the European Union. Bulgaria represented, for instance, a significant share of EU imports of cucumbers in 1991. Since then, this trade flow has diminished, even if Central and Eastern European countries keep a major share of this market.

**Table 3.5**

Bulgarian exports to the European Union of some vegetables

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cucumbers and gherkins</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bulgaria (a)</td>
<td>1.200</td>
<td>5.143</td>
<td>16.860</td>
<td>6.583</td>
<td>1.969</td>
<td>3.787</td>
<td></td>
</tr>
<tr>
<td>CEECs (b)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>25.602</td>
</tr>
<tr>
<td>total imp. (c)</td>
<td>43.904</td>
<td>58.786</td>
<td>89.553</td>
<td>63.140</td>
<td>42.303</td>
<td>63.994</td>
<td></td>
</tr>
<tr>
<td>ratio (a/c)</td>
<td>2.7%</td>
<td>8.7%</td>
<td>18.8%</td>
<td>10.4%</td>
<td>4.6%</td>
<td>5.9%</td>
<td></td>
</tr>
<tr>
<td><strong>Peppers</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bulgaria (a)</td>
<td>178</td>
<td>320</td>
<td>1.836</td>
<td>1.710</td>
<td>502</td>
<td>861</td>
<td></td>
</tr>
<tr>
<td>CEECs (b)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>14.631</td>
</tr>
<tr>
<td>total imp. (c)</td>
<td>35.627</td>
<td>39.954</td>
<td>45.376</td>
<td>48.810</td>
<td>43.270</td>
<td>47.757</td>
<td></td>
</tr>
<tr>
<td>ratio (a/c)</td>
<td>-</td>
<td>0.8%</td>
<td>4%</td>
<td>3.5%</td>
<td>1%</td>
<td>1.8%</td>
<td></td>
</tr>
<tr>
<td><strong>Tomatoes</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bulgaria (a)</td>
<td>178</td>
<td>142</td>
<td>2.046</td>
<td>389</td>
<td>149</td>
<td>52</td>
<td></td>
</tr>
<tr>
<td>CEECs (b)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>310</td>
</tr>
<tr>
<td>total imp. (c)</td>
<td>255983</td>
<td>288287</td>
<td>350488</td>
<td>356602</td>
<td>391471</td>
<td>464141</td>
<td></td>
</tr>
</tbody>
</table>

Sources: European Commission

3.4.7 Potatoes (Annex 3.7)

Potato area and production have followed different trends between 1989 and 1994. Production stagnated (553,000 tonnes in 1989, 550,000 in 1994), while area increased over the same period (from 40,000 ha in 1989 to 47,000 in 1994). Only in 1993 did area, production and yield all drop considerably. There is however scope for recovery and development, considering the increase in domestic prices for potatoes, the suitability of this production for household plots and the growing interest that the emerging processing industry shows in buying it.
Vineyards, table grapes and wine (Annex 3.8)

Vineyards covered about 145,000 ha. in 1993, showing thus only a slight decline in the level of plantations, when compared to pre-reform data. It is however likely that part of the vineyards are not harvested, as can be deduced from the big drop in production, of around 50%. For 1993, figures show that, young plantations (0-3 years) represent 5% of the vineyard, which fits with a normal turnover ratio. Plantations dedicated to table grape production represent 13% of the vineyard and table grape production 13% of the total figure for grape harvest. Present Bulgarian potential of production of table grapes is thus comparable to around half of that of Greece. Considering that the usual differences of yield between table grape production and wine production are not expressed by these data, this could indicate a drop in input and a lack of irrigation for the production of table grapes, thus, perhaps, causing difficulties for ensuring an export flow. As far as wine production is concerned, Bulgarian potential is more important than the one of Greece but present production is more or less half of the Greek production. Wine production in 1994 has been estimated at 1.4 Mio hl, lower than the 1993 level of 2 Mio hl. Average yield for the past decade has oscillated around 30 hl/ha. This low figure is in line with the dry climatic conditions of the country. No indication is available on the share of vineyard area which used to benefit from irrigation facilities. One can estimate that the present level of yield of the producing vineyards remains comparable to its previous value and, therefore, that around half of the declared vineyards have probably not been harvested during the last two crop years. It is furthermore likely that a significant part of this non harvested vineyard has no longer any production potential.

Reasons can be found in the land restitution problems and in trade difficulties. As far as land restitution is concerned, the reasons advanced for fruit and vegetables also apply to vineyards. As for trade, dependence on exports was very high for wine, principally to Russia, Poland and former East-Germany. Bulgaria traditionally exported more than 50% of its wine production. The disorganisation of some marketing channels and the drop of these traditional CMEA markets, mainly for table wines, brought up disruption. The lost of part of these markets threatens the sector. Some recovery of this trade is however expected, as the reputation of Bulgarian wines is well established in Central and Eastern Europe. However, this recovery will happen under increased competition and maybe also changes in consumer behaviour, preferring wines of varieties like Cabernet or Merlot. This would then mean the need of restructuration of a big part of the Bulgarian vineyard.

Quality vineyards could account for an estimated 20% of the plantations, although such data are currently not available. Since the eighties, wines with a good quality/price ratio have been exported with succes to western Europe, particularly to the U.K., and, to some extent, to U.S.A. This trade flow seems to have little suffered from the transition shock, except in 1991, and is likely to develop. Wine is one of the agricultural products for which Bulgaria has comparative advantages.
3.5 LIVESTOCK

3.5.1. Inventories (Annex 3.9)

The livestock sector has experienced a stronger contraction over recent years than crop production. Livestock numbers in Bulgaria have decreased by 20-40% since the beginning of the reform period. As already mentioned (see § 3.1), there are several reasons for this decline. In the case of livestock, they are aggravated by the chaotic elimination of the production structures which operated in Bulgaria during recent decades.

The Bulgarian livestock sector was highly concentrated, in large state controlled cooperatives and in intensive livestock complexes. At the end of 1989, the relative share of cattle in state hands was about 82%, 80% for pigs, 70% for sheep and 62% for poultry. The remaining shares depended on household plots activities.

| Table 3.6 |
| Livestock numbers |

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Cattle, of which</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- cows</td>
<td>1615</td>
<td>1577</td>
<td>1457</td>
<td>1310</td>
<td>974</td>
<td>750</td>
<td>638</td>
<td>-60.5</td>
</tr>
<tr>
<td>Pigs</td>
<td>4132</td>
<td>4352</td>
<td>4187</td>
<td>3140</td>
<td>2680</td>
<td>2071</td>
<td>1986</td>
<td>-51.9</td>
</tr>
<tr>
<td>Sheep and goats</td>
<td>9045</td>
<td>8563</td>
<td>8436</td>
<td>7256</td>
<td>5425</td>
<td>4439</td>
<td>4193</td>
<td>-53.6</td>
</tr>
<tr>
<td>Poultry</td>
<td>41805</td>
<td>36339</td>
<td>27998</td>
<td>21707</td>
<td>19872</td>
<td>18211</td>
<td>19126</td>
<td>-54.2</td>
</tr>
</tbody>
</table>

Figures at 1st of January
Source: FAO in general and National Statistical Institute for 1995

In the process of liquidation of state controlled cooperatives, animals were first to be distributed among beneficiaries, for coping with the immediate needs of care and feeding. This led to a dramatic decrease in the number of animals, partly because the new owners, mainly household plots farmers, had limited housing and feeding capacities. In the same time, compound feed was relatively expensive, the access to agricultural land (land market or long term lease) was blocked and these private farmers were desperately looking for capital. Therefore the liquidation process corresponded to a decapitalization phenomenon, marked by massive exports of live animals in 1992. At the same time, the process blocked the reconstitution of herds in the new private farming structures and limited the scope for adaptation in the remaining state livestock complexes. The fact that new cooperatives are temporary structures (lack of property titles), discourages investment in collective livestock operations.
At the time of writing, livestock production has disappeared from collective farms under liquidation and is absent in the newly created producer cooperatives. Allocation of animal stocks, as part of the liquidation process, is completed. However, privatization of state livestock complexes has still to come. During the recent months, the decapitalisation trend has slowed down and seems even reversed now, except for cattle (following official figures and Ministry of Agriculture declarations). The largest part of livestock in 1994 was held by private small-scale farms, mainly the household plot farms (68 per cent of cattle, 77 per cent of cows, 88 per cent of sheeps 53 per cent of pigs and 69 per cent of poultry). The rest of the livestock remains in state livestock complexes (Annex 3.12).

It is likely that the livestock kept in large scale units will continue to decrease, following present downward trend, at least in the one-two coming years, until some more stable management structures will appear. The reconstitution of livestock numbers appears now to be only possible in the private sector. Until now, the livestock in the private sector is not developing quickly enough to compensate for losses in the public sector (see graphics, Annex 3.12).

3.5.2. Meat production (Annex 3.10)

Table 3.7
Production of principal meats

<table>
<thead>
<tr>
<th></th>
<th>Beef &amp; veal</th>
<th>Pigmeat</th>
<th>Sheepmeat</th>
<th>Poultrymeat</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Avera. 87-89</td>
<td>Avera. 92-94</td>
<td>Avera. 87-89</td>
<td>Avera. 92-94</td>
</tr>
<tr>
<td>Production (000 t)</td>
<td>123</td>
<td>117</td>
<td>392</td>
<td>264</td>
</tr>
<tr>
<td>Imports (000 t)</td>
<td>15</td>
<td>9</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Exports (000 t)</td>
<td>8</td>
<td>2</td>
<td>6</td>
<td>2</td>
</tr>
<tr>
<td>Domestic disappearance (000 t)</td>
<td>124</td>
<td>124</td>
<td>390</td>
<td>264</td>
</tr>
<tr>
<td>Disapp. p.c. (kg)*</td>
<td>11</td>
<td>11</td>
<td>33</td>
<td>24</td>
</tr>
</tbody>
</table>

If not otherwise mentioned, figures are on a carcass weight basis.

*: per capita disappearance in net weight (boneless)

Source: FAO

In 1994 total production of beef and veal, pigmeat, sheep and goat meat and poultry meat was 432,000 tonnes (47 % less than in 1989). With trade reduced to small quantities in recent years, meat production in Bulgaria is only enough to cover domestic demand. Consumption follows a restrictive tendency caused by the contraction of both in real incomes abnd domestic supply at affordable prices.

As for the trade situation, Bulgaria has traditionally been considered a net exporter of live animals, meat and offal. Live animal exports made up, in value terms, 5 % of total agricultural exports in 1993 after a record year in 1992 (14%). Meat and offal exports made up almost 6% of the total in 1993 compared with 10-12 per cent in the second half of the eighties. The difficulties in the livestock sector will continue to play a restrictive role in the recovery of export performance.
3.5.3. Other main animal products (Annex 3.11)

The table above gives a summary of the current situation as compared with 1989.

Milk, butter and cheese have been traditionally produced in a major part by state cooperatives. With the disappearance of state cooperatives, this production is now mainly achieved in private farms (about 70% for milk).

As can be seen the decreasing trend in livestock has had a negative impact on the production of livestock products. During the period 89-94, production of milk, dairy products and eggs declined considerably. The drop in milk and egg output mainly reflected the decrease in the number of dairy cows and laying hens. Production in the private sector has increased but at a slow pace. The production of processed dairy products also decreased substantially, in quantity and quality. At present, the milk processing industry is shared between the still powerful state industry and the new emerging private dairies. In most cases, the latter has a only small capacity which covers only local markets but applies more rational practices.

Producer prices of livestock products have experimented relatives increases, mainly in 1993 and 1994, when prices were boosted by supply shortage. This could mean a stabilisation or even a slow recovery of production within one to two years.

3.6 FORESTRY

Forests cover about 35% of the land area or about 3.8 million ha. A third of this are conifers. Annual afforestation has declined in recent years, from 36000 ha in 1990 to 21000 ha in 1991 and 1992 and 17000 ha in 1993, but total forest area increased by around 6000 ha over the same period because of the decrease in felling. Around 4.5 million of cubic meters of timber was felled in 1993.
4. UPSTREAM AND DOWNSTREAM SECTORS

Delays in privatization, lack of competition on the domestic market and the low efficiency level of the processing sector constitute undesirably one of the factors blocking improvement of the present situation of the agro-food sector and, to some extent, of the general economic situation of the country.

4.1 THE CURRENT SITUATION

Before 1989, consumer goods, basic productive inputs, machinery and services were supplied to farmers almost exclusively by state enterprises. On the other hand the state purchased practically the whole production of industrial crops and animal production, and an important part of other production. Most of the decisions about the number and size of processing enterprises were centrally taken. Processing of all raw materials was monopolised by state trusts, under centralised control (examples: "Rodopa" for meat, "Rastitelni masla" for vegetable oil, etc). All the state plants were administrative monopsonies. The influence of these plants in price fixing, within the margin left by the central pricing authorities (see Chapter 5), and in terms of delivery was very strong. Competition between state processing plants was almost non-existent. Retail distribution of food products was realized mainly through state channels controlled by the Ministries: by the Central Cooperative Union and by sectoral Unions.

With the arrival of the winds of change in 1990, from a legal framework the de-monopolisation and privatisation process resulted in the following:

- removal of central planning and obligatory output and sale targets for state cooperatives and agricultural processing state enterprises;
- liberalisation of prices with the exception of basic food products (see Chapter 5);
- legal measures on abolition of the monopoly of the state trusts;\(^{39}\)
- legislation on transformation and privatisation of state-owned and municipal owned enterprises (commonly called "privatisation act").

All these measures were oriented to force a change in the behaviour of those engaged in agricultural markets and processing industries. However the expected changes in behaviour have not been very pronounced because of the slow rate of land restitution (Chapter 2), decrease in agricultural production (Chapter 3), the overestimation of the value of state enterprises put up for sale that lowered the interest of private investors, some manoeuvres of state-owned companies to delay the privatisation process and bureaucratic impediments in implementing and applying legislation. A situation of blockage has appeared in the sector.

The financial situation of the agro-food sector is a serious constraint (see Annex 4.2). "Chain

\(^{39}\) Decree N° 110 of the Council of Ministers for decentralisation and demonopolisation. 14 November 1990.
in this industry has created big difficulties. The total indebtedness of publicly-owned food processing enterprises was 37 billion leva (575 MECU) on 30 September 1994. Of that, more than 50% consists of debt to suppliers, workers and state budget. Agricultural producers are the main suppliers to food processing enterprises and are, in effect, creditors. Despite all these reported losses, cases of bankruptcy and liquidation of state enterprises have been rare. This reflects the absence of a bankruptcy law and a reliable jurisdiction for securing payments and recovering debts as well as lack budgetary discipline. Thus is the main cause of the delay in restructuring these sectors.

One of the strategies followed by state enterprises, in order to counteract present difficulties is to try to integrate vertically and to join together agricultural production, processing, wholesaling and retailing. With this strategy state enterprises aim better sales opportunities for agricultural producers and regular supply of raw agricultural materials (case of Montana of Michailovgrad) (Mishev, 1993).

The privatisation process in upstream and downstream industries and services is introducing two levels of scale. On one hand there still exist some former large state controlled cooperatives on the production side, together with limited large-scale processing, wholesaling and retailing (for example, "Hranitelni stoki"). On the other hand, there are many small scale farmers, processing units, wholesaling and retailing firms operating in the private sector. The result is a very varied structure of marketing of agricultural products.

Annex 4.1 shows the situation of the privatisation process in these sectors at 31 December 1994. According to official sources, 9% of the total number of enterprises for the agriculture and food industry, have now been privatized. There is, however, no figure available on the corresponding market shares per product.

---

40 Enterprises in the production chain owing money to suppliers, workers and the state budget. This occurs in successive steps of the product channel, creating a cumulative process of losses.
4.2 OUTLOOK

Despite the changes in the legal framework established to proceed to demonopolisation and privatisation, a series of impediments remain which hold back changes in market structures for different agricultural services and processing industries:

- the decreasing trend in agricultural production discourages new entrants and increases the uncertainty of processing activities; overcapacity is currently a problem;

- the need to invest large amounts of capital in existing processing industries\(^{41}\) creates a barrier against foreign and native investors;

- the slow implementation of the privatization process by the administration (see Annex 4.1).

One can also mention the fact that the absence of a bankruptcy law induces the following effects: a) it gives a short term advantage to the public sector, thus slowing down private investment, b) on the long run though, the competitiveness of state enterprises is undermined and their capacity to adapt is lowered. The consequences of persisting in this situation has been very well summarised by Mishev 1993, "if privatisation does not take place soon, new private firms with new equipment and management will enter and a time will come when some of the state enterprises will be redundant together".

4.3 AGRICULTURAL MACHINERY

The production capacity of this sector has declined considerably since the transition. The reduction of domestic demand as a consequence of the contraction in agricultural production and of the liquidation of collective farms has resulted in a drastic cut back in domestic machinery production. The number of combines produced in Bulgaria have been reduced to some units and tractor production fell by 59% in the period 1989-92.

Agricultural machinery and farm equipment numbers also decreased in both private and non-private farms (-5 to -10% in 3 years). The machine park is obsolete, and probably to a large extent out of use.

\(^{41}\) The needs of large investments in the state agri-processing plants have been raised by SATEC's report by the identification of common features of this sector in Bulgaria: low and irregular quality of the products; lack of maintenance of the production tools; inefficient labour force; poor financial situation (see Annex 4.2); absence of financial control. (Technical assistance to the Agricultural processing sector, SATEC, October 1992).
4.4 FERTILISERS AND PESTICIDES

These sectors have suffered with particular severity from the restructuring process. In fact, production and use of fertilisers and pesticides practically collapsed over a short period of time. Fertiliser production dropped more than 50% between 1989 and 1993 (nitrogenous, -51% and phosphates, -70%), plant protection chemical production dropped by 56% in the same period. The table below compares the use of fertilisers and pesticides between 1985 and 1992.

To some extent this decrease is a rational response of farms to changes of input-output price ratios and to the lack of financial means. Indeed the decline of fertilizer use has so far been more drastic than the drop in agricultural production. As in other CEECs, the previous levels of utilisation of fertilisers and plant protection chemicals were reached as a result of planned over-intensification and administrative misallocations coupled with weak budgetary constraints and artificially favourable price ratios. On the other hand, the new extensive practices may deteriorate -in the mid term- soil fertility and the sanitary situation of the fields, if they were not consistently and carefully kept under review as regards economic and agro-ecological points of view. For instance, they call for a re-definition of crop rotations, for more organic fertilizers, and some changes in used seeds. It has been noted that, since 1989, within different types of fertilizers, use of those with short-term effects (nitrogenous) has been preferred. Moreover, the low and erratic yields that result from these practices tend to raise the fixed costs per unit of product. So, in the mid and long term, they are not necessary favourable to improving the international competitiveness of the products concerned.

Table 4.1
Use of fertilisers and pesticides in nutrient units

<table>
<thead>
<tr>
<th></th>
<th>1985</th>
<th>1990</th>
<th>1992</th>
<th>%var 92/85</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total use of fertilisers (000t)</td>
<td>865</td>
<td>750</td>
<td>284</td>
<td>-67</td>
</tr>
<tr>
<td>Use per ha of cultivated land (kg)</td>
<td>186</td>
<td>161</td>
<td>61</td>
<td></td>
</tr>
<tr>
<td>of which:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nitrogenous (%)</td>
<td>58</td>
<td>69</td>
<td>78</td>
<td></td>
</tr>
<tr>
<td>Phosphate (%)</td>
<td>31</td>
<td>18</td>
<td>14</td>
<td></td>
</tr>
<tr>
<td>Potash (%)</td>
<td>11</td>
<td>13</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Total use of pesticides (000t)</td>
<td>36</td>
<td>17</td>
<td>5</td>
<td>-86</td>
</tr>
<tr>
<td>Use per ha of cultivated land (kg)</td>
<td>8</td>
<td>4</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>of which:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Herbicides (%)</td>
<td>30</td>
<td>28</td>
<td>37</td>
<td></td>
</tr>
</tbody>
</table>

Source: Statistic Yearbook, 1993
4.5 BANKING SYSTEM

The banking system in Bulgaria is a two-tier system. The National Bank, as a State bank, empowered for currency issue, is on one level. On the second level we find the commercial banks. Banking reform has established a financial and credit system operating on a commercial basis. The Bulgarian National Bank Act (1991) and the Bank and Lending Act (1992) are the Laws that introduced reform of the banking system and that provided for the independance of central and commercial banks from the Government.

In 1990 all the regional branches (about 60) of the Bulgarian National Bank were transformed into commercial banks, each with the status of a joint-stock company. The first private banks with foreign capital were founded in 1990 and 1992. The direction of the reform, strongly required by the World Bank, is to reduce the number of commercial banks to 7 or 8 large and financially strong entities. The Bank Consolidation Company was founded to organise this process.

Currently there are no restrictions on sales and purchases of foreign currency and exchange rates used are freely negotiated.

There is no specific banking system working with the agricultural sector. In this context the numerous difficulties encountered in financing agricultural activities have to be kept in mind. At the beginning of 1992 the government established the "Agriculture Credit Centre" (ACC) as a specialized credit institution acting in the agricultural sector to prevent decapitalization of the sector and to supply start-up capital to private farmers and new-style cooperatives. The main shareholder is a public agency. The Centre provides medium-term and long-term investment outside the commercial banking system, charging interest lower rates than the commercial banks but adjusting the principal payments to changes in the exchange rate. This policy has effectively resulted in credit subsidies due to the dynamics of inflation, the nominal interest rate and the exchange rate. In the opinion of experts [Petranov, Russinov, 1994] the Centre will face problems in the future because of this link with the exchange rate, its small scale of operation and its small number of branches. It is unlikely that the ACC will provide a sustainable solution to the problems of financing the agricultural sector.

International experts in the framework of the PHARE programme are working on a project for the creation of agricultural mutual societies. The establishment of these societies will support the development of specialized agricultural lending for Bulgarian farmers.
5. AGRICULTURAL POLICY

As mentioned in previous chapters, the decrease in agricultural output started before 1989, because of the growing inefficiency provoked by central planning. This trend dramatically worsened after 1989, mainly because of the radical land reform, the collapse of export markets and the weakened general economic situation which led to a lowering of purchasing power and falls and shifts in consumption. Price policy should also be considered in this context. The degree to which price policy has had an effect on production trends has been underestimated by policymakers until now. Intensive political debates still take place about food security and the protection of consumers. These issues enjoy first priority when food pricing or agricultural trade policies are considered and the result is a general depreciation in the price of agricultural products. Nevertheless, some market regimes and other measures intended to protect producer prices or incomes have progressively been introduced into the legislation, without specific results until now. New support measures are under preparation. One of the major constraints to the fine tuning role of agricultural policies is the lack of macroeconomic stability. The latter undermines the efficiency of agricultural policy instruments. On the whole, and in connection with other elements such as tight credit policy, these have produced negative effects on producers' behaviour, under-investment in the sector, the need for subsidized campaign credits, and have emphasized the negative production trend.

Transition to a real market economy now stands more or less at the half way. There is, on the one hand, a liberalized retailing sector and some competition exists in distribution, but, on the other hand, the bulk of privatization has still to be carried out, for the intensive livestock complexes and for the agrofood sector, and the land reform process remains a major constraint on production. The global stability of the previous system has been destroyed but no equilibrium is yet appearing as the reforms remain incomplete. The various governments, since 1989, have been struggling to cope with immediate difficulties, delaying the implementation of long-term changes. Some of these measures have contradictory effects or do not bring the expected results. A certain degree of mistrust in market economy mechanisms encourage decision-makers to go for cautious steps or to opt for measures analogous to pre-reform schemes.

5.1 SITUATION BEFORE THE TRANSITION PERIOD

The communist regime used to set production targets through central planning (with directives to state cooperatives and state enterprises), to completely manage commodity supplies and trade flows, and to administratively fix prices (by the central price agency) throughout production, processing and marketing. Prices were usually calculated by a "cost-plus method", i.e. adding a fixed margin to inclusive production costs. Some decentralized regulation of this centrally managed system occurred by more or less rational adaptations and administrative feedbacks to the shortages [J. Kornai, 1980]. As prices and quantities were fixed, shortages were perceptible under various forms (queuing, hierarchical proceeding and pressures, etc), thus showing imbalances between supplies and demands and calling for corrective feedbacks. From time to time, it became clear that consumer prices were too far out of line from socialist production costs, and they were increased by decree. The main objectives of the state were, firstly, to ensure food security, by a national balance of production and low prices for consumers, secondly to provide an export flow in the framework of CMEA arrangements, and to provide a supply flow with adequate quality for export against hard currencies.
In addition to price fixing, price intervention in the food chain was performed in the following way:

- low input prices for agricultural production (fertilizers, fuel) and in some cases direct support (bonuses on prices) to compensate cooperatives for low farm gate prices. This last system was particularly used for livestock and ensured that cooperatives could cope with the low level of fixed farm-gate prices. Direct subsidies were also given to compensate natural handicaps in semi-mountainous or mountainous regions;

- cheap raw material for the processing sector, which benefitted from agricultural products at low farm gate prices. When bonuses were paid to cooperatives, it meant subsidized raw material for the processing sector. Processing plants benefitted also from other cheap input prices such as energy;

- low retail prices and in some cases subsidiation of consumer prices, via market prices set lower than factory-gate prices, after having been in public storage.

This tight control of prices, in a market without competition, had perverse effects. As the administration tended to set prices at a low level, buying-out prices were often set under production costs for units, many of which bore debts. As the government regularly cancelled the debts of state cooperatives or enterprises, these bodies did not control their production costs but, on the contrary, tended to increase them so as to be able to claim higher buying-out prices. Agricultural units became accustomed to working under so called "soft-budget constraints" (i.e. constraints which do not carry penalties if breached). Therefore they progressively tended to waste inputs and lose efficiency. Investment decisions were centrally made. Chairmen of state cooperatives and processing enterprises had to lobby with central planners for allocation of public resources for investment. The agricultural sector in general has not been very successful in this process and, at least during the eighties, there was not enough investment in modern equipment.

This pressure on agricultural prices had depressing effects for the agricultural sector. It may be interpreted as having been a tool for industrialization and urbanization of the country. "A difficult and as yet unresolved issue is whether pre-reform agriculture was subsidized or taxed. The physical evidence, the institutional structure in place, and indeed the performance of agriculture, lend weight to the hypothesis that the sector was taxed, and perhaps heavily. However, the massive transfers in the form of subsidized fuel and fertilizers, the high degree of mechanization, and the frequent cancellation of debt, suggest the opposite conclusion. Data are not easily available to resolve this question". "These policies, in the hand of political planners, ultimately starved agriculture of needed facilities and equipment and created an urbanized society second only to Czechoslovakia in central and eastern Europe" [S. Davidova & A. Buckwell, 1994]. "The farm sector was taxed rather than subsidized under the old regime as well as under the newer reform measures. Thus, agriculture needed substantial added investment when reform started" [K. Moulton, A. Schmitz, A. Buckwell & R. Trendafilov, 1994]. Some Bulgarian experts estimated that the agricultural economy operated at loss during the eighties and calculated that the agricultural sector subsidized the rest of the economy by an annual transfer of around one billion LEV (1988 prices) [Wallden, 1991].
5.2 CHANGES BROUGHT ABOUT DURING THE TRANSITION

The main issue in Bulgarian agricultural policy is land reform, as developed in Chapter 2, and the production sector has been widely exposed to restructuring pressures. This has not been the case for upstream and downstream sectors, still largely in public ownership and operating mainly in non competitive conditions, which distorts price formation and disrupts the whole reform process. The importance of this privatization process should grow from now on. Agricultural trade went through major problems, due to the collapse of traditional markets and to the internal state of production. Trade policy could play a bigger role in the future, boosting agricultural production for export markets, but, for the time being, priority is being given to the domestic market. Production is principally meant to ensure the internal needs of the processing industry and of consumers. Border measures are in place mainly in accordance with this approach. In this context of food security, the question of price liberalization has been one of the major disagreements in the political debate since the beginning of the reform process. Socialists, mainly, insisted on prolonged controls on some basic producer and retail prices, in order to secure affordable prices for the mass of consumers.

The agricultural policy of Bulgaria during the transition period is also characterized by short-term measures aimed at ensuring production in the turmoil of land reform. Therefore, a substantial part of budgetary resources has been allocated to cancelling debts of state controlled cooperatives and to granting campaign credits to these latter.

5.3 PRICE POLICY

Price liberalization started in February 1990 with the retail prices of most vegetables and fruit, of which supply increased promptly but at high prices. Some low income groups decreased fruit consumption sharply although this is a typical part of the Bulgarian diet. In March 1990, agricultural farm gate prices were raised considerably and a new price system was introduced, freeing the prices of many products but limiting prices of the basic agricultural products; meanwhile, a ceiling was set for retail prices of basic goods such as bread, meat and meat products, milk and dairy products, sugar, vegetable oil and children's food. By the end of 1990, only 14% of marketed volume had free prices. The Popov government implemented a general macroeconomic reform, in February 1991, freeing most prices, which involved substantial price adjustments. However, prices of 13 essential food products were monitored and remained somewhat controlled by a mechanism called "projected price".

---

42 The prices of the main agricultural products almost doubled at that time and then increased more slowly. The increase, however, did not compensate for rises in input prices and prices of agricultural services (average price of fuel, plant protection chemicals and fertilizers have risen by factors of 3 to 10 from 1990-91 and then again by factors of 1.5 to 2.75 between 1991-92). Food prices at retail level went through dramatic adjustments (February 91, increases from 2 to 10 times), provoking falls in consumption and some shifts, mainly from meat and dairy products to bread.
Projected prices are based on minimum purchasing prices of farm products (producer prices) and normative profit margins\(^4\) through the downstream sector. The main difference to the previous system is that there is no pre-determined price ceiling which traders and processors have to respect. They have only to comply with the normative profit margins which they can add to their own costs and to purchasing prices of raw materials. This intervention was initially viewed as a temporary measure that would be withdrawn after the increase of domestic supplies. It was also foreseen as a control of monopsonistic and monopolistic forces in the processing and marketing area before completion of the privatization, and also as a way to depress prices of raw materials used by domestic industries, in order to maintain competitiveness of the latter.

Recorded prices showed fluctuations around projected prices rising from 6% in 1991 to 36% in 1992, thus suggesting that the system became quickly inoperative. With few exceptions, increases in the price of monitored goods were larger than of non monitored goods. This could be due to the fact that the prices of monitored goods were, before the reform, more heavily subsidized (directly or indirectly), at each level of the food chain, including retail, leading, therefore to some price distortions. The system was changed in March 1993, when the government approved new rules for monitoring the prices of basic food through the imposition of maximum prices. Government agencies did not determine and publish projected prices, but, instead, maintained basically the old system whereby profit margins throughout the food chain and an attempt was made to control these normative margins. Profit margins for producers and processors were fixed, at that period, at 12% of costs and at 10% for traders. Following the sharp increase in food prices in April 1994, the list of monitored products was expanded (see Annex 5.1). The new government is also attached to maintaining a control on prices for consumer protection, in the framework of food security and social stability. A draft law having this objective is currently under discussion.

In fact, the possibilities of controls by the administration on production costs or on retail prices are limited. The implementation of the system was never correctly applied throughout the food chain. Due to partial price liberalization and to the upsetting of previous balances, price adjustments are inevitable anyway. However, other elements worked towards price depreciation, mainly the export control measures of the government and, of course, the weakened domestic demand. On the whole however, price control maintains the undesirable features of the pre-reform cost-plus pricing, i.e. continuing to provide disincentives for cuts in costs, whenever possible in the processing industry. The public sector, under the slow process of privatization, is thus inclined to continue producing debts and waiting for state refunds as in the past. Regulatory measures on bankruptcy would be needed to stop this process. The continuation of this soft-budget constraint, with the chain indebtedness, contributes largely to the current inflation, as this state balancing of the debts of the public sector corresponds to an arbitrary increase of the money supply. It is also noticeable that, in 1994, the general increase in consumer prices was due mainly to an increase in food prices.

\(^4\) The authorized margin was a percentage of production costs. These percentages were regularly changed.
Data show that, in 1994, the producer prices index reached 868 (1990=100, table 3.1), whereas the input prices index reached 2342 and the retail prices index 2208. It is thus clear that price policies and other related measures have a depressing effect on producer prices but not on retailer prices. The massive price adjustments, resulting from price liberalization, also adversely affected agricultural input-output price relations, inducing negative profit margins for producers. Input prices have more or less reached world prices, with basic agricultural products remaining below, but the gap is narrowing.

5.4 PRODUCTION COSTS AND SECTORAL TRANSFERS

Assessment of production costs is difficult at present because of lack of information. In any case, it would not be relevant at present to draw conclusions from calculations, as farming structures are in rapid evolution, assets of state cooperatives still in liquidation and many of these assets have no market value as yet. It is, nevertheless, very likely that, in general, capital costs and fixed costs are not correctly included for the time being in the producer price and that, as a consequence, it does not allow for the future replacement of these factors. As for variable costs and labour costs, one can assume that the producer price covers them, however the following have to be taken into account: farmers on small plots do not charge their working hours; agricultural practices have changed because of high input costs; use of fertilizers or pesticides have dropped dramatically and animal traction reappeared. The major changes occurred in livestock production, where there has been decapitalization through the sale of breeding stock and where sales have taken place at less than production costs, provoking an acceleration in the decline of the sector.

Producer Subsidy Equivalents, calculated for the period 1990-92 for the main agricultural products [N. Ivanova, 1993], are negative (except for pig meat), showing that the large negative trade and market elements far outweigh the beneficial effects of direct or indirect support measures for farmers. In other words, government policy and the macroeconomic situation have induced, since 1990, a net transfer from producers to processors, retailers, traders and - more doubtfully and less and less - to consumers. As a result, there is a lack of capital stock and this has brought about urgent demands for subsidized campaign credits for starting sowings. Bulgarian agriculture has been consuming capital since the mid-1980s. Lack of capital is a bottleneck and future agricultural development will imply massive investments and maybe more effective credit supports (e.g. partial credit guarantees, in order to share the risk), as well as a recovery of the production activity.

44 This gap in information have not really been filled by specific studies in the framework of "demonstration farm projects" financed by the PHARE programme. These projects have concentrated efforts in calculating variable costs for some productions, without intentions of being representative for the country. Fixed costs remain in data darkness.

45 Farmers benefited from many services (e.g. water for irrigation, cheap energy), without putting a price on it, even for their personal use on small private plots (e.g. machinery available free of charge). They have just begun to give a value for the cropping land, because of the new land-leasing market (the rate of rent varies from 2 to 3 thousand LEV/ha for the 94/95 crop year) or for machinery services (tillage, harvest, ...), with the emergence of machine cooperatives or companies. They will definitely need time to get used to notions such as working capital, cash-flow or replacement-cost for depreciation. There is still a tendency to mix the notions of receipts and revenues, partly because it is not usually differentiated in the common Bulgarian language.
5.5 BORDER MEASURES

Generally speaking, the transition developed in parallel with trade liberalization. The state monopoly on foreign trade was removed and the licence regime for products has been broadly abolished. Exports and imports mainly take place on the basis of customs declarations.

Bulgaria used to display its good capacity for agricultural exports and still does. However, current border measures show the contrary that agricultural exports have slowed down and that, in fact, the agricultural trade regime is restrictive:

Exports have been regulated through automatic and non-automatic licensing, minimal export prices, export taxes, quotas and bans for some products;

Imports have been regulated through automatic and non-automatic licensing, minimal import prices, taxes and quotas.

Export limitations are the result of official concern for food security, i.e. ensuring supply of the domestic market at low costs. This the case mainly for wheat and sunflower seeds. If national storage capacities are fully utilized, then some licenses are granted to traders. The import regime is controlled through customs duties and minimal specific duties. Most imported agricultural commodities are taxed. Some duty free imports, within quotas, are included, mainly protein for animals, agricultural machinery and equipment. Higher seasonal import duties are introduced for: potatoes, tomatoes, cucumbers, peppers, apples, melons, peaches, cabbages, onions and grapes. In case of shortage of some basic products, the trade regime is adjusted and duty free import quotas are introduced. Therefore, the regime might be subject to changes during the year. Frequent changes occurred in recent years. The yearly regime for 1995 (introduced by Decree N° 307 of the Council of Ministers) provides that, the agricultural products and agricultural inputs which are subject to special regulations are the following:

- Automatic licencing (registration):

  - Exports:  
    - live animals: pigs up to 50 Kg and poultry
    - meat for consumption
    - dairy products
    - rye
    - oats
    - soya bean
    - processed tobacco and tobacco products
    - black oil-bearing sunflower
    - refined and crude sunflower seed oil
    - grain-based compound feed

  - Imports:  
    - meat
    - dairy products
    - wine
    - beer
Non-automatic licencing:

- Export:
  - some live animals
  - grain seeds
  - flour

- Imports:
  - processed tobacco and tobacco products
  - powdered milk
  - plant protection chemicals

Quotas:

- Export:
  - wheat
  - barley
  - lamb (under voluntary export restriction agreement with EU)

- Import:
  - ice cream

Export tax:

- some live animals
- grain seeds
- flour
- black oil bearing sunflower
- refined and crude sunflower oil
- soya meal and cake
- raw hides
- wool

Temporary export ban:

- maize
- malting barley

The exports of raw agricultural products are currently more strictly limited than those of end products, while it is generally the opposite for the imports. A careful examination of this trade regime, and first of all of its concrete implementation, suggests that beyond its official objective of food security at low price for the urban population, it actually tends to secure the monopolistic position (and incomes) of the remaining state processing enterprises, vis-à-vis the domestic agricultural suppliers and consumers. Thus, these enterprises and channels are protected from any strong necessity of restructuring themselves efficiently.

5.6 MARKET REGIMES

During 1992, minimum guaranteed prices were introduced for some basic agricultural commodities but abandoned some months later. Lack of means and intervention mechanism convert these minimum prices into some kind of target prices. However, the government is still engaging in massive purchases for storing grain. In this case, the market price corresponds to the minimum prices.
Tobacco is the product for which there is the most political concern. Centrally fixed prices are applied for tobacco and tobacco products (imported and domestically produced, both at producer and wholesale levels). In the Code for Implementation of the Law on Tobacco, which was approved in 1994, a detailed normative procedure for setting up the minimum guaranteed producer prices is included. It is based on a "cost plus" approach. In practice, the real evolution of this price, taking into account the delays of payment by the processors, has been highly unfavourable to tobacco growers and can rather be interpreted as a taxation of the sector. Considering the big drop in the market, there was, in any case, not enough public funding available to support this crop. This policy could not prevent the collapse of tobacco production.

5.7 SUPPORT MEASURES AND BUDGETARY OUTLAY

During the transition period, substantial changes in support programmes have been made. As prices have been liberalised, there has been a gradual removal of bonuses or farmgate prices for milk and meat products (a major part of the pre-reform agricultural budget), of bonuses for less favoured zones and of export subsidies, up until their total disappearance in 1992. These amounts were in any case not adjusted for inflation. Their decrease hit the production of poultry, lamb and ewe's milk badly. Direct subsidies on inputs have also been dropped. Most inputs are now set at world prices, as they can be imported duty-free.

During the period 1990-1994, about seven billion LEV have been spent by the State for the agricultural sector. Half of this has been dedicated to cover a portion of credit interests, in order to provide working capital for the production units\(^46\). A major part of the other half has been used for repaying the debts of the cooperatives and of the agrofood plants. A small part went towards covering extra expenses of the liquidation committees. A small amount remained for other measures, which are as follows:

- support for the State Grain Agencies, to pay higher than the minimum price for purchasing bread wheat from the 1991, 1992 and 1993 harvest (240, 187 and 127 million LV, respectively);

\(^{46}\) Several schemes for subsidized interest rates (between 40 and 60%) were implemented during this period:

- the first one in autumn 1992, by decree of the Council of Ministers (400 million LEV were allocated, but only 60 million LEV were effectively used);
- the second credit subsidy was allocated in 1993 by law, by the Parliament (1,000 mio LEV);
- in May 1994, a new law for financing the autumn and spring campaign was approved by the Parliament. With this law were provided 987 million LEV for subsidizing interest rates for working capitals credit.
- at the end of 1994, a decree of the Council of Ministers provided a further 700 million LEV for covering 50% of the interests on loans subscribed for working capital in agriculture.

Lastly, the governement approved in March 1995, a 2.5 billion LEV loan to back spring sowing costs. This amount will allow a subsidy for 50 per cent of the total amount of interest running on crop year loans offered by commercial banks (central interest rate, currently set at 72 percent, plus three percent premium for the bank).
- funds from the State budget for the tobacco fund to compensate buyers for the administratively set prices for tobacco (600 million LEV for 1994);

- funds for animal health, maintenance of irrigation systems, agrochemical services and agricultural science (considerably lower in comparison with pre-reform figures).

For the land reform, funds came from an extra-budget account.

5.8 FISCAL CONSIDERATIONS

The main supporting programmes in this area are:

- exemption of co-operatives and farming companies from profit tax, and individual farmers from tax on income generated by agricultural activities for 5 years after taking possession of their own land;

- partial conversion of bad debts of collective farms in liquidation and state processing plants into state debts (until 1992);

- VAT exemption for some basic foodstuffs (bread, milk, rice and beans); VAT was introduced in April 1994 and the general rate is 18%.

5.9 OUTLOOK

The Ministry of Agriculture is well aware that it is not possible to continue to subsidise crop years credits in this way, because they are not compatible with the IMF or World Bank requirements and furthermore because they utilize a large part of the agricultural budget, for which better use could be made. Nevertheless, it is a necessary political gesture for the Government to give what is seen as a strong positive impulse to immediate production. Under the previous regime, state controlled cooperatives were not allowed to have their own working capital. They had to rely on bank control and planning measures. Therefore, farmers are still used to depending on this type of state intervention. As for writing off debts, the intention of the government is to phase out this burden on the State budget.
At the time of publication of this report, it is foreseeable that a new "Law for state protection of agricultural producers" will be adopted by the National Assembly. The adoption of such a Law is envisaged in view of closer links with VISEGRAD countries and of gradual convergence with the CAP. The objectives pursued by the Government are the followings:

- ensuring a better support to the agricultural production, thanks to price regulation, mainly by a system of market intervention, managed by government agencies;
- sustaining investments, thanks to credit subsidies, for improving the structures of the newly settled farms;
- compensating natural handicaps by specific support for the semi-mountainous and mountainous zones;
- promoting exports, probably by export subsidies;
- monitoring agricultural prices and markets, through the AMIS agency (the "Agricultural Market Information System")

The draft Law provides for the creation of a State Agriculture Fund as a legal entity. Some of the financial sources for the Fund are annual outlays from the State Budget; some other sources are specified, like part of the collected export tax or of import duties collected on agricultural products, part of the receipts from privatisation or from renting out or selling state land, etc... Its effects will depend greatly on the available budgetary allocation. The wish of the Ministry of Agriculture is to reach resources equivalent to 10-15% of the total agricultural output value.

The main support measures included are the so called "protective purchasing prices", for some basic agricultural products. Basic products such as wheat, maize, sugar beet, milk and meat are included. The protective purchasing prices are supposed to contribute to the supply of the necessary quantities for the 'national balances'. The prices will be defined on the basis of average production costs of representative farms from different farm structure groups, plus a profit margin on the costs (5 to 20%). The government agencies or traders under contracts would be obliged to purchase at these prices up to pre-contracted quantities. In case that the market price falls for a month at a certain level below the protective purchasing price, the government agencies have to start purchasing quantities without ceiling, i.e. not restricted by contracts and 'national balance' considerations. It seems that the law may increase the role of the State in purchasing these products, which could bring contradiction to the creation of competitive markets in the downstream sector. For other agricultural products, a system of "target prices" could be implemented, based on regular monitoring of market prices, but which would not engage unlimited intervention schemes. There is question of creating a link between this monitoring and the foreign trade regime.
6. AGRICULTURAL TRADE

6.1 AGRICULTURAL TRADE BEFORE THE TRANSITION

Traditionally, Bulgaria was a net exporter of agro-food products. However, this trend changed significantly during the Eighties, having started to shift some years before towards a more balanced trade, but also towards less participation in international trade. In this respect, Bulgaria seemed to be following a general pattern for CMEA countries (Segre, 1988).

The foreign trade regime in force in Bulgaria until the late eighties was typical of a centrally planned economy. This implied state monopoly of foreign trade (limited number of state-owned foreign trade organizations), the isolation of domestic markets from international markets and an internal price structure that was radically different from that of the world market. The consequences of this situation are still being faced in Bulgaria.

Bulgarian exports were geared to the other CMEA countries where competitiveness and quality were not priorities. Prices in intra-CMEA trade differed from world prices. In addition, CMEA multilateral specialization schemes influenced trade flows. A kind of implicit principle of CMEA preference was applied, usually related to currency constraints. Producers and even foreign trade organizations had reasons to prefer socialist clients, since their accounts were automatically credited for the deliveries and the so-called premiums covered the difference between domestic and export prices.

Bulgarian relations with the former USSR were, unique among CMEA countries, especially as regards the agricultural sector. In this respect interdependence in the farm sector was often very pronounced, mainly from the Bulgarian point of view.

The reasons for these developments can be summarized as follows:

1) Since the early eighties, for food security reasons, CMEA countries had become increasingly interested in achieving a higher degree of food self-sufficiency. But the achievement of this goal provoked, at the same time, distortions in dependent sectors, i.e., the rapid growth of the animal sector increased the needs of fodder imports from the West. On the export side, Bulgarian products became increasingly non-competitive on international markets. Falling demand in oil-producing countries (Middle-East) after 1985, contributed also to aggravate the situation.

2) Intra-CMEA integration contributed in some cases to increase agro-food flows. For example, Bulgaria abandoned its cotton production, in favour of imports from the USSR, and reduced its sugar production, resorting partially to imports from Cuba.

Wallden, 1991 underlines the fact that Bulgaria at the end of the eighties, although a net agricultural exporter, ran at the same time an important hard currency deficit in agricultural trade, since its exports were oriented towards non convertible markets, while its imports originated mainly from the world market.
6.2 THE AGRICULTURAL TRADE REGIME DURING THE TRANSITION

The vagueness in agricultural strategy followed by governments during the post-communist period is visible in the foreign trade regime. The border measures applied in Bulgaria and their restrictive effects on exports have been noted in the previous chapter. In this respect, the foreign trade measures adopted to achieve the different goals that can be pursued through trade policy have had, in most cases, the opposite effect. Bulgarian foreign trade policy in agriculture has lacked continuity, clarity about the priorities to be satisfied and on assessing the cost of the chosen policies to the different actors in the economic process (consumers, producers, etc.). At the same time, the political and economic shocks suffered by the rest of the CEECs caused a shrinkage of markets and reduced the possibilities to export. Measurement of this collapse in trade may vary widely depending on values employed for the so-called "transferable Roubles" used within the bloc of former CMEA countries (Jackson-Swinnen, 1994).

<table>
<thead>
<tr>
<th>Table 6.1</th>
<th>Agricultural trade*</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Thousand USD</strong></td>
<td></td>
</tr>
<tr>
<td>Total value of exports</td>
<td>16413</td>
</tr>
<tr>
<td>Value of agric. exports</td>
<td>1781</td>
</tr>
<tr>
<td>Value of agric. exports a/</td>
<td>1119</td>
</tr>
<tr>
<td>Total value of imports</td>
<td>15198</td>
</tr>
<tr>
<td>Value of agric. imports</td>
<td>1116</td>
</tr>
<tr>
<td>Value of agric. imports a/</td>
<td>767</td>
</tr>
<tr>
<td>Trade balance (total)</td>
<td>+1215</td>
</tr>
<tr>
<td>Trade balance (agriculture)</td>
<td>+665</td>
</tr>
<tr>
<td>% over total</td>
<td></td>
</tr>
<tr>
<td>Share of agric. exports</td>
<td>10.8</td>
</tr>
<tr>
<td>Share of agric. imports</td>
<td>7.3</td>
</tr>
</tbody>
</table>

* Since 1st January 1992 Exports is reported in FOB prices and Imports in CIF prices.
Note: data (from the Foreign Trade Institute) include 24 chapters, except chapter 3 (Fish and fish products)
a/ alternative based on more depreciate Rouble/dollar rates (Jackson-Swinnen, 1994)
Sources: National Statistical Institute, OECD and FAO.

6.2.1 Exports of main agricultural products

The disappearance of state monopolies and the liberalisation of trade gave more flexibility in exports to Western countries which rose between 1985 to 1994. As shown in table 6.1, exports of agricultural products accounted for 11% of total exports in 1989. In 1994 it stood at 20 per cent, having maintained this share on average since 1991. Despite the periods of undervaluing of the Bulgarian currency against the dollar and the other main hard currencies, exports have recorded a severe decline since 1989. Bulgaria exports a wide range of crops and animal products. The most important export-oriented products of Bulgarian agriculture in term of value are: tobacco, wine, processed vegetables, fruit and live animals (see Annex 6.2). Their share in exports have been around 65 % of total agricultural exports in recent years.
Table 6.2
Breakdown of agricultural and food exports under the main agricultural headings (000 USD)

<table>
<thead>
<tr>
<th>1993</th>
<th>1994</th>
<th>% var 94/93</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Value</td>
<td>%</td>
</tr>
<tr>
<td>TOTAL, of which</td>
<td>715</td>
<td>100</td>
</tr>
<tr>
<td>Tobacco and prod. a/</td>
<td>236</td>
<td>33.0</td>
</tr>
<tr>
<td>Wine &amp; Beverages</td>
<td>121</td>
<td>16.9</td>
</tr>
<tr>
<td>Processed Fruit &amp; veg.</td>
<td>60</td>
<td>8.4</td>
</tr>
<tr>
<td>Dairy, eggs, honey</td>
<td>44</td>
<td>6.1</td>
</tr>
<tr>
<td>Fresh and chilled fruit</td>
<td>20</td>
<td>2.8</td>
</tr>
<tr>
<td>Live animals</td>
<td>42</td>
<td>5.9</td>
</tr>
</tbody>
</table>

Other chapters less than 5 % each in 1994

a/ includes manufactured tobacco and substitutes
See comments to this table in Annex 6.2
Source: FAO and National Statistical Institute

6.2.2 Imports of main agricultural products

The process of liberalisation of foreign trade and the decreasing role of state monopolies has also had an impact on imports. Agricultural imports accounted in 1985 for about 6% of total imports, but since 1991, the agricultural share has increased. In 1994 it was almost 10% of total imports. The increase consisted partly of seasonal imports and other items needed to cover domestic demand for a larger range of foodstuffs. After a fall in imports from 1989 to 1991, there has since been a decline in production of agricultural products which has created the need for increased imports, though these are limited because of restricted domestic demand. As regards table 6.3 two elements have to be underlined: the significant decrease in imports of tobacco and manufactured tobacco substitutes and the increase in Dairy and dairy product mainly due to the import of milk powder used in dairy processing industries.

Table 6.3
Breakdown of agricultural and food imports under the main agricultural headings (000 USD)

<table>
<thead>
<tr>
<th>1993</th>
<th>1994</th>
<th>% var 94/93</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Value</td>
<td>%</td>
</tr>
<tr>
<td>TOTAL, of which</td>
<td>423</td>
<td>100</td>
</tr>
<tr>
<td>Sugar &amp; confect.</td>
<td>71</td>
<td>16.9</td>
</tr>
<tr>
<td>Fresh fruit</td>
<td>33</td>
<td>7.7</td>
</tr>
<tr>
<td>Tobacco and prod.</td>
<td>102</td>
<td>24.1</td>
</tr>
<tr>
<td>Meat &amp; offal</td>
<td>19</td>
<td>4.4</td>
</tr>
<tr>
<td>Wine &amp; Beverages</td>
<td>23</td>
<td>5.4</td>
</tr>
<tr>
<td>Dairy, eggs,honey</td>
<td>9</td>
<td>4.1</td>
</tr>
</tbody>
</table>

Other chapters less than 5 per cent each in 1994

Source: FAO and National Statistical Institute
6.2.3 Exports and imports by main partners

The political and economic shocks suffered by Bulgaria and the former socialist countries caused a shrinkage of markets for Bulgarian agricultural products. However, as already mentioned above, the use of different exchange rates for the trade made in "transferable Rouble" shows different results in the regional breakdown. An illustration of this problem is Table 6.4, although it has to be conceded that Bulgaria is an extreme case.

Table 6.4
Estimates of distortion in Bulgarian agricultural trade with former CMEA Countries

<table>
<thead>
<tr>
<th>Year</th>
<th>Share of trade with CMEA Countries as % of total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Official</td>
</tr>
<tr>
<td>1987</td>
<td>81.5</td>
</tr>
<tr>
<td>1988</td>
<td>82.6</td>
</tr>
<tr>
<td>1989</td>
<td>84.0</td>
</tr>
<tr>
<td>1990</td>
<td>77.6</td>
</tr>
<tr>
<td>1991</td>
<td>55.1</td>
</tr>
</tbody>
</table>

Source: Jackson-Swinenn, 1994
ECE: Economic Commission for Europe

A detailed analysis of trade flows reveals, in any case, significant changes in the volumes exported to different markets. According to the same source, Jackson-Swinenn, 1994, the trade with CMEA countries was, at least 70% lower compared with 1987.

Table 6.5
Bulgarian agricultural trade, regional breakdown (%)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>EXPORTS, destinations</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EUR-12</td>
<td>6.2</td>
<td>8.4</td>
<td>16.0</td>
<td>21.9</td>
<td>21.9</td>
<td>20.5</td>
</tr>
<tr>
<td>EFTA</td>
<td>1.7</td>
<td>1.9</td>
<td>3.0</td>
<td>3.7</td>
<td>3.6</td>
<td>4.0</td>
</tr>
<tr>
<td>Former CMEA</td>
<td>79.0</td>
<td>77.5</td>
<td>57.0</td>
<td>39.4</td>
<td>39.9</td>
<td>43.0</td>
</tr>
<tr>
<td>OTHER dest.</td>
<td>13.1</td>
<td>12.2</td>
<td>24.0</td>
<td>35.0</td>
<td>34.6</td>
<td>32.5</td>
</tr>
<tr>
<td><strong>IMPORTS, origin</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EUR-12</td>
<td>17.8</td>
<td>19.4</td>
<td>28.3</td>
<td>54.1</td>
<td>49.9</td>
<td>28.9</td>
</tr>
<tr>
<td>EFTA</td>
<td>4.7</td>
<td>7.6</td>
<td>1.1</td>
<td>8.2</td>
<td>13.5</td>
<td>2.1</td>
</tr>
<tr>
<td>Former CMEA</td>
<td>35.2</td>
<td>41.0</td>
<td>14.4</td>
<td>14.3</td>
<td>14.2</td>
<td>29.1</td>
</tr>
<tr>
<td>OTHER origin</td>
<td>42.3</td>
<td>32.0</td>
<td>56.2</td>
<td>23.4</td>
<td>22.4</td>
<td>39.9</td>
</tr>
</tbody>
</table>

Source: National Statistics and OECD 1995, Policy Advisory Unit, Ministry of Agriculture
Until 1991, the most significant market outlets for Bulgarian agricultural produce were CMEA countries. Since 1992, European Union and other OECD countries increased their importance in trading with Bulgaria.

But the situation changed in 1994. Recent figures show an increase in the importance of the former CMEA countries in Bulgarian agricultural trade. This recovery creates a better outlook for Bulgarian exporters, who obviously have not succeeded in benefiting from the European Agreement with the European Union. The data on the regional breakdown of trade are, however, not totally accurate, because of the existence of a significant undeclared trade flow, especially with CMEA and Serbia, due to smuggling or insufficient custom controls, in order to bypass the trade embargo or export restrictions. Undervalued exports could also serve as a tool for the export of capital.

6.2.4 Regional breakdown

There are potential intensive trade flows between neighboring countries. However, the unstable political situation in the region and some national political interests have slowed this process down. Since 1991, trade with neighboring countries has increased. Exports have become active especially with Turkey. Bulgarian agricultural exports to Turkey are mainly meat, cigarettes and some dairy products. The import flows consist of molasses, fruit and olives. At the same time, there are initial steps to establish a free trade zone in the region. Several rounds of high level talks have taken place, which have outlined the scope for future economic co-operation. The idea of creating a Bank for Black Sea Economic Co-operation has been discussed at government level but without any result so far.

6.3 TRADE WITH THE EUROPEAN UNION. THE ASSOCIATION AGREEMENT

Bulgarian trade with the European Union has developed a particular significance in recent years (see Table 6.6 and Annex 6.1). Because of the economic shock suffered by the other countries of Central and Eastern Europe and the former Soviet Union, Bulgaria faced a lack of markets. This has been one of the major constraints on the development of Bulgarian agriculture, coupled with a drop in domestic food demand because of falling incomes. To turn to Western markets was the most obvious solution and the European Union responded to this, in the first instance, through the creation of a "free trade zone" (with "partial liberalisation" in the agricultural sector) between the EU and each of the CEECs: the Association Agreements (AA).

The Agreement with Bulgaria came into force on 31 December 1993. Concessions granted by the EU are based on the average annual volumes traded during the three year period (1989-91) preceding the year of negotiation (1992) and consist, mainly, in reduced tariffs or levies combined with tariff quotas for some basic products (managed in the framework of the Common Market Organizations). Trade concessions were agreed for products which had a significant volume traded in the reference period. The concessions cover, approximately, 79% of Bulgarian exports to the European Union (including wine, which is object of a different agreement than the Association Agreement).
The concessions granted by Bulgaria to the EU consist of lower tariffs and the removal of some non-tariffs restrictions on imports from the EU, both within specific quotas. The concessions cover at least 40% of agricultural imports from the Union in 1991. The potential benefit for Bulgaria from preferential treatment is estimated at 6.5 million Ecu (Haynes, Buckwell, Curboin, 1994) and should double in 1996 (Sukova-Tosheva, 1993) if tariffs quotas are fully utilised.

### Table 6.6

**Agricultural and food trade* between Bulgaria and the EU**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>EU. Exports to Bulgaria</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agricultural &amp; food products</td>
<td>86.2</td>
<td>155.2</td>
<td>125.0</td>
<td>221.9</td>
<td>228.2</td>
</tr>
<tr>
<td>Total EU exports</td>
<td>903.5</td>
<td>1030.0</td>
<td>1111.6</td>
<td>1346.1</td>
<td>1702.1</td>
</tr>
<tr>
<td>Share agriculture &amp; food</td>
<td>9.5</td>
<td>15.3</td>
<td>11.2</td>
<td>16.5</td>
<td>13.4</td>
</tr>
<tr>
<td><strong>EU. Imports from Bulgaria</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agricultural &amp; food products</td>
<td>151.9</td>
<td>191.7</td>
<td>184.0</td>
<td>175.2</td>
<td>198.7</td>
</tr>
<tr>
<td>Total EU imports</td>
<td>582.9</td>
<td>751.8</td>
<td>897.7</td>
<td>950.1</td>
<td>1342.4</td>
</tr>
<tr>
<td>Share agriculture &amp; food</td>
<td>26.1</td>
<td>25.5</td>
<td>20.5</td>
<td>18.4</td>
<td>14.8</td>
</tr>
<tr>
<td><strong>EU. Balance</strong></td>
<td>-68.6</td>
<td>-36.6</td>
<td>-59.0</td>
<td>46.7</td>
<td>29.5</td>
</tr>
<tr>
<td>Agricultural &amp; food products</td>
<td>-21.6</td>
<td>-13.0</td>
<td>-27.6</td>
<td>11.8</td>
<td>8.2</td>
</tr>
<tr>
<td>Total EU trade</td>
<td>317.6</td>
<td>280.8</td>
<td>213.9</td>
<td>396.0</td>
<td>359.7</td>
</tr>
</tbody>
</table>

* including chapter 03 Fish and crustaceans.
Source: European Commission.

As regards the Association Agreement two criticisms have been voiced in some Bulgarian circles. First, the benefits from the AA for Bulgaria are lower than the benefits for other CEECs. The second has been the consequence of the trends developed in two-way trade. Agricultural exports to the EU declined and the EU's share in Bulgarian agricultural exports also decreased, while the opposite occurred in the case of imports. The first analyses of the take-up of the preferential tariff quotas for 1994 show that these have not been fully utilised (see Annex II). There are numerous reasons for this. There is a general feeling in Bulgaria that the application of the principle of using the volume and commodity structure of past trade as a basis for trade concessions for the next five years, is not realistic. There are several reasons for supposing that past trade performance did not reflect comparative advantage, for example, the lack of market mechanism, the way in which foreign trade was regulated in the past, etc. Other possible factors contributing to the less than total take-up of quotas are administrative formalities, lack of up-to-date information about the degree of quota utilisation, and lack of good information to exporters about how to use the preferential quotas. But these reasons should not hide other more important and deep rooted causes in the agricultural and food processing sectors due to the lack of energy in implementing the process of reform already seen in previous Chapters.
Table 6.7
Different schemes of the Association Agreement with Bulgaria

<table>
<thead>
<tr>
<th></th>
<th>levy reductions (50%)</th>
<th>within the limits of stated annual quotas</th>
<th>ducks, geese</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>duty reductions</td>
<td>without quota limitations</td>
<td>game meat, natural honey, flowers, shrubs, some vegetable and fruits, apple juice</td>
</tr>
<tr>
<td>3</td>
<td>levy and duty reductions:</td>
<td>annual quota</td>
<td>meat of bovine animals, meat of sheep and goats and of do,estic swine, chickens, drid whole eggs, common wheat, millet, animal fodder</td>
</tr>
<tr>
<td></td>
<td>20% first year</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>40% second year</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>60% third year</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>duty reductions:</td>
<td>within the limits of quotas</td>
<td>fruit and vegetables, raw tobacco, sunflower oil, lard</td>
</tr>
<tr>
<td></td>
<td>20% first year</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>40% second year</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>60% third year</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: DG VI

6.4 AGREEMENT WITH THE EFTA COUNTRIES

Bulgaria concluded negotiations with the EFTA countries in February 1993. A Free Trade Agreement (FTA) was signed and entered into force on 1st July 1993. It provides for free trade in industrial goods and in processed agricultural goods, as well as in fish and marine products. Arrangements for trade in agricultural products were negotiated bilaterally, and the concessions granted are included in bilateral protocols. EFTA countries agreed on asymmetrical concessions in accordance with the principles of GATT and covered issues such as competition, intellectual property rights.

According to the protocol with EFTA countries, Bulgaria will progressively reduce its import duties on vegetable juices and extracts, animal and vegetable fats and oils, chocolate and other food preparations containing cocoa and pasta in accordance with a timetable to be established at two-yearly intervals by the Joint Committee in 1996. Bulgaria and the EFTA states shall review the development of trade in these processed foodstuffs.

As far as processed products are concerned all EFTA members, except Iceland, agreed to apply only a variable tariff component. This applies to buttermilk, curdled milk, yoghurt, preserved vegetables, sugar confectionery, products containing cocoa, pasta, bread products, nuts, coffee, tea, yeasts, sauces, soups, food preparations, waters, beers and vermouths. Imports of some products are free of the variable component in EFTA countries, e.g. tapioca, roasted chicory, inactive yeasts, vermouth.
6.5 ACCESSION TO THE GATT AND WTO

Although Bulgaria announced in the eighties its intention to join the GATT, political and economic impediments frustrated this aim. Some were due to the foreign trade regulations under the centrally planned system. Later in 1991 a second official application was made but again political reasons disrupted negotiations. A third time, in January 1995, a new application was introduced for membership of GATT and WTO which is still under multilateral negotiations.

6.6 OUTLOOK

At present it is uncertain what will be the outcome of these negotiations and what will be the final agreement but it is clear that further integration into the world economy means that agricultural reform has to be accelerated and competitiveness in agriculture improved. It also means that Bulgarian agriculture and trade policy should eliminate constraints and barriers that remain for the most important Bulgarian agri-food export sectors:

**Tobacco:** The state monopoly of tobacco exports has still not been dismantled, thus no private sector export of tobacco is allowed. Bulgartabac holding controls all exports and prices are set centrally according to the Law of tobacco.

**Live animals:** Quotas limiting the exports of some live animals have been introduced since 1993. An import licence and health certificate are required from the authorities. The main problem to trade in live animals relates to controls imposed by importing countries in the field of animal health and disease control.

**Meat and meat products:** Export licence and hygiene certificate are required for export. As for live animals the main problem to trade in meats and meat products is in the field of sanitary requirements.

**Cereals:** Up until the 91/92 marketing year, all exports of cereals were controlled by the government. From the summer of 1992, exports of cereals by the private sector have been allowed. This was initially controlled by quota, but from September 1992 this was converted to an export tax (12% for wheat). This tax was raised in December 1992 and in December 1993, a complete ban on grain exports was introduced and remains in force.
7. OUTLOOK FOR THE MAIN AGRICULTURAL COMMODITIES

In this chapter, the preceding findings are integrated in order to summarize the context in which Bulgarian agriculture finds itself and, under the assumption that the conditions necessary for a recovery of the agro-food sector appear by the end of the century, to present some tentative balance sheets for the main agricultural products.

The margin of error of such balance sheets is very high because of the numerous uncertainties imposed by the spectacular social, political and economic changes. Another limitation to the accuracy of these results comes from the data: the data needed to estimate future production and consumption are simply not all available. Equations that could be calculated on the basis of time-series data would not be valid to forecast the future due to such abrupt changes in policies. Their evolution since 1989-90 is something totally new, depriving the traditional econometric instruments of their basis; moreover, it is impossible to assume the continuation of current policies (as is usual in this type of exercise) because of their rapidly changing nature and because the policies carried out until now have had to be modified, sometimes with radical changes. This exercise is then merely an attempt to evaluate how the country's agriculture may recover after the transition disruption and to assess its adaptation to the socio-economic environment that is being created. Due to the slow pace of the reform in Bulgaria in recent years, the time horizon of the exercise, five years ahead, makes the exercise fragile and the expected developments, based on qualitative analysis and experts' judgment, must therefore be treated very cautiously. Figures will be given but they matter less than the hypotheses they convey.

7.1 THE GENERAL CONTEXT

The return to growth of agricultural production in Bulgaria is basically conditional on the removal of the following constraints:

- the low purchasing power of the population;
- lack of investment in the sector, also taking into account the investment needs created by the deteriorations which occurred during the transition and by the changes in production structures;
- delays and shortcomings in building and applying the institutional framework needed for efficient restructuring of the sector.

The first two constraints can not be removed without a global recovery and monetary stabilisation. Therefore a crucial point for the future is economic recovery.
Where there is little or no growth in GDP and restructuring of the agro-food sector continues to be slow, the scenario would lead to:

- a modest development of intensive production in small scale farms;
- large scale and extensive production of grain and oilseeds in the new cooperatives;
- limited development of small private enterprises in the downstream sector, which would hardly benefit from economies of scale and modern technologies;
- to the deterioration of most of the remaining public entreprises, mainly due to the lack of investment and of competition, and to the soft budgetary constraints, causing also chain indebtedness.

Such a scenario would correspond to a stagnation of agro-food production at a low level.

A second and more optimistic scenario would imply the removal of the above mentioned constraints and a shift to economic growth. At agricultural production level this would notably imply:

1°) Quick completion of the restitution of land and assets, and of farm restructuring;
2°) Quick completion and actual enforcement of the legislation:
   a) on contracts, facilitating the necessary development of integrated producers and processors organizations (western type), and ensuring the payment for purchases and sales;
   b) on leasing (land and assets) giving the necessary security to investors (lessees) and to lessors.
3°) Facilities by the State to encourage investments, e.g. State guarantee on loans granted by commercial banks to farms, along the lines recently experienced in other CEECs.

At up and downstream levels this would mean:

1°) Designing and applying an active policy of genuine privatisation.
2°) Elaboration or completion and actual enforcement of legislation on bankruptcy and commercial contracts.
3°) Gradual elimination of the price "monitoring" system that has failed to achieve its aims of protecting consumers' and producers' interests.

Progress on items 2) and 3) -which are crucial for any mid to long term recovery- calls for strong and carefully designed accompanying economic and social measures (e.g. social safety net, compensation for non recoverable debts,...).
7.2 LAND USE OUTLOOK

Working within the last and more optimistic scenario, land use in year 2000 may be predicted as shown in Table 1.

The main assumption behind the prediction is stabilization in the principal sectors. Agricultural area will remain at around 6.1 or 6.2 million hectares with permanent pasture area stabilized at 1.8 million hectares. Temporary pastures have been practically reduced to a minimum and no recovery is expected in the coming 4-5 years, as cattle recovery will be limited. Within arable land, cereals and sunflower seeds will continue, to some extent, to increase in area, along with the land restitution process.

The difficulties for some specific crops, such as tobacco or sugar beet (cf Chapter 3) in the period 1990-1994 have resulted in a shift in the use of this land to arable crops. These changes have not been very significant in absolute terms, but they have resulted in an increase of land under other cultures such as cereals and oilseeds (mainly sunflower seeds). We assume the definitive consolidation of those areas as arable land in the forecasted period.

Table 7.1
Tentative projection for Land Area

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Arable land</td>
<td>3848</td>
<td>3922</td>
<td>4100</td>
<td>4145</td>
</tr>
<tr>
<td>o.w. cereals</td>
<td>2150</td>
<td>2182</td>
<td>2282</td>
<td>2300</td>
</tr>
<tr>
<td>sunflower seeds</td>
<td>240</td>
<td>374</td>
<td>496</td>
<td>600</td>
</tr>
<tr>
<td>Perm. crops</td>
<td>294</td>
<td>269</td>
<td>205</td>
<td>215</td>
</tr>
<tr>
<td>Perm. pastures</td>
<td>2026</td>
<td>1915</td>
<td>1816</td>
<td>1800</td>
</tr>
<tr>
<td>Agric. area</td>
<td>6168</td>
<td>6138</td>
<td>6159</td>
<td>6160</td>
</tr>
<tr>
<td>Wooded area</td>
<td>3871</td>
<td>3873</td>
<td>3874</td>
<td>3875</td>
</tr>
<tr>
<td>Other</td>
<td>1052</td>
<td>1059</td>
<td>1058</td>
<td>1060</td>
</tr>
<tr>
<td>TOTAL AREA</td>
<td>11091</td>
<td>11091</td>
<td>11091</td>
<td>11091</td>
</tr>
</tbody>
</table>
7.3 PER COMMODITY ANALYSIS

Only the main commodities will be presented in the present paragraph.

7.3.1 Cereals

In addition to what has been said previously for the country's agriculture as a whole the future of Bulgaria's grain sector depends on several factors:

- the production cost of wheat relative to the cost of production of competing crops (e.g. sunflower seeds);
- the direction of domestic grain policy, in terms both of the intermittent control on exports practised in the recent years (cf Chapter 6) and the reorganization of grain marketing, including policies towards the privatisation of specialised storage (the capacity of storage is now of 7.5 million tonnes, but 5 millions are held by state owned firms and 2.5 million belong to a single company, Sofia Zarno, Ltd).

The present evolution seems to play in favour of increasing the share of wheat in the long-term [Schmits, Bojnec, Cochrane, 1994] to the detriment of other cultures. The uncertainties brought about by the domestic grain policy act, however, as a break against a quick extension of the areas destined to grow grains. In a pessimistic scenario this last element could contribute to reducing the share of the grain sector in the overall agricultural economy. The alternative scenario would propose a stabilisation in the year 2000 of the areas destined to grow grains, but production will follow a better pattern shown by a gradual recovery of yields. This latter due to the beneficial effects of the restitution of land that would assure producers the use of the land as a production factor, stabilisation of farming structures and a future conclusion of the GATT agreement that might increase world cereal prices.

Table 7.2
Tentative cereals outlook for 2000

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>area 000 ha</td>
<td>2150</td>
<td>2182</td>
<td>2282</td>
<td>2300</td>
</tr>
<tr>
<td>yield t/ha</td>
<td>4.41</td>
<td>3.37</td>
<td>3.03</td>
<td>4.0</td>
</tr>
<tr>
<td>production 000 t</td>
<td>9484</td>
<td>7327</td>
<td>6919</td>
<td>9200</td>
</tr>
<tr>
<td>net trade 000 t</td>
<td>1197</td>
<td>61 (Export)</td>
<td>16 (Export)</td>
<td>2300</td>
</tr>
<tr>
<td>disappearance 000 t</td>
<td>10681</td>
<td>7266</td>
<td>6902*</td>
<td>6902*</td>
</tr>
<tr>
<td>- o.w. feed use 000 t</td>
<td>6008</td>
<td>4699</td>
<td>3725</td>
<td>5000</td>
</tr>
<tr>
<td>self-sufficiency %</td>
<td>89</td>
<td>101</td>
<td>100</td>
<td>133</td>
</tr>
</tbody>
</table>

* NB: see §3.4.1

47 The capacity of storage is now of 7.5 million tonnes; 5 millions are held by state owned firms and 2.5 million belong to a single company, Sofia Zarno Ltd.
Main assumptions:

- stabilisation in area, justified by the recent evolution;
- increasing yield to 4.0 tonnes per hectare by the year 2000; this is mainly due to a certain recovery in the utilisation of fertilizers and chemicals; constraints due to the climatic conditions (rainfall and temperatures), and to irrigation problems for maize, will continue to be a limitation for further increasing on yields;
- other uses will be stable as far as feed consumption will be limited by a slow recovery in the livestock, with some improvement of feed conversion ratios that means to export the surpluses which would be competitive in the world market, as regard of Bulgarian prices.

7.3.2 Oilseeds (Sunflower seeds)

| Table 7.3 |
| Hypothetical Sunflower seeds outlook for 2000 |

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>area 000 ha</td>
<td>240</td>
<td>374</td>
<td>496</td>
<td>600</td>
</tr>
<tr>
<td>yield t/ha</td>
<td>1.91</td>
<td>1.29</td>
<td>1.20</td>
<td>1.7</td>
</tr>
<tr>
<td>production 000 t</td>
<td>458</td>
<td>465</td>
<td>595</td>
<td>1020</td>
</tr>
<tr>
<td>net trade 000 t</td>
<td>(31</td>
<td>(62</td>
<td>(100</td>
<td>(525</td>
</tr>
<tr>
<td>(import)</td>
<td></td>
<td>(Export)</td>
<td>(Export)</td>
<td></td>
</tr>
<tr>
<td>disappearance 000 t</td>
<td>489</td>
<td>403</td>
<td>495*</td>
<td>495*</td>
</tr>
<tr>
<td>self-sufficiency %</td>
<td>93</td>
<td>115</td>
<td>120</td>
<td>146</td>
</tr>
</tbody>
</table>

* NB: see § 3.4.1

Main assumptions :

- the importance of other minor oilseeds (rapeseed, soyabean) will continue to be negligible;
- favorable conditions in international markets should encourage an increasing sunflower seeds area. This crop seems quite suited to Bulgarian agronomic conditions. Stabilisation could occur around 600 thousand hectares by 2000;
- increasing yield in comparison with the post-reform period, up to around 1.7 t/ha (average 86-89);
- the domestic consumption of sunflower oil may increase in the case of economic recovery, but there will remain surpluses to be exported probably in the form of sunflower seeds under the assumption that Bulgarian prices would remain on international markets.
7.3.3 Sugar

<table>
<thead>
<tr>
<th>Table 7.4</th>
<th>Tentative sugar outlook for 2000</th>
</tr>
</thead>
<tbody>
<tr>
<td>area 000 ha</td>
<td>40</td>
</tr>
<tr>
<td>sugar beet yield t/ha</td>
<td>23.9</td>
</tr>
<tr>
<td>production 000 t</td>
<td>966</td>
</tr>
<tr>
<td>Transformation 000 t</td>
<td>912</td>
</tr>
<tr>
<td>sugar yield %</td>
<td>8</td>
</tr>
<tr>
<td>sugar production 000 t</td>
<td>74</td>
</tr>
<tr>
<td>net trade 000 t</td>
<td>307 import</td>
</tr>
<tr>
<td>disappearance 000 t</td>
<td>381</td>
</tr>
<tr>
<td>self-sufficiency %</td>
<td>19</td>
</tr>
</tbody>
</table>

Main assumptions:

- Despite the deep crisis in which this sector is plunged, new laws might introduce the possibility to set up some border protection, to subsidize the production of sugar beet or to provide other types of support. Under the assumption that these policy instruments are correctly used, sugar beet and sugar production may recover to pre-reform levels.

7.3.4 Other crops

Vegetables

The market is rather disorganised and the major share of production comes from household plots. Rain shortages in July and August, combined with the present irrigation difficulties, and lack of mechanization are other limiting factors. However, considering the natural potentialities and the skills of the producers, internal demand should be satisfied with fresh vegetables, along with the development of local markets. Raw materials (mainly tomatoes) should also be steadily produced for the processing industry, as it brings revenue security for the producers. There is also scope for development of speculative production, like early vegetables for exports, but it is assumed that such operations would be limited to moderate quantities, as currently there are only a few entrepreneurs who have enough capacities to invest, to comply with international standards and to compete efficiently on international markets. An average annual increase of vegetable production of 2-3% may then be expected.
Fruits

The abrupt decrease of the area of perennial crops and the lack of investment are a major consideration in the forecast for the following 5 years. It is not expected that the total area of perennial crop plantations will significantly increase. A yearly average increase of 1-2% may be expected as a maximum in the short term.

Wine

The big drop in production which occurred in the previous years raises questions about the state on the vines. It is assumed that a significant part of them can no longer produce and would have to be replanted. Nevertheless, a partial recovery of some of the vines which have not been harvested, depending on their phytosanitary condition, will permit an increase of the present level of production. It is estimated that production of wine can more or less recover to the level of 1990. This will depend also on the ability of Bulgarian exporters to regain market shares in former CMEA countries. It is assumed that present exports of quality wines to Western Europe will continue and boost the sector. On the whole though, this sector would need significant investments, in order to increase its presence on international markets.

7.3.5 Livestock production

At the beginning of 1995, the situation looks as follows:

- The massive slump in cattle (about -54% since 1989) and cow numbers (-23% in 1993; -15% in 1994) shows some signs of slowing down. The same is valid for sheep (-22%; -10%);

- There was a clear deceleration of the drop in pig numbers (-13% in 1993; -4,5% in 1994) and an initial recovery in the case of poultry (-8%; +12,9%).

On the whole, there are convergent reasons to assume that the strong recession of livestock production is very close to or in the course of bottoming out. This would logically start with the less costly meats (poultry and pig meats), the production of which has a quick turnover of capital and can be easily adapted to small scale farms or to bigger private units, the reasons being:

- On the demand side: the average consumption per capita have reached rather low levels for a European country, at about 40 kg of meat in 1994 (46 kg average 1992-94) and 135 to 150 kg litres of milk (including milk products). During the second half of 1994, the decreased supply of meat and milk has provoked a sharp rise in their prices (also in real terms) at retail and farm gate levels, showing thus a recovery of demand, at least for a part of the population;

- On the supply side: new prices may have reached a better level for the producers, after the long period when they were lower than costs, for instance in view of the depressed grain prices.
As a consequence of the massive decapitalisation of big livestock units of the public sector, most of the livestock is now concentrated on small scale units (on January 1st, 1995: 80% of cattle; 83% of cows; 53% of pigs; 71% of poultry; 92% of sheep). The good responsiveness of such private individual farms to price increases probably explains the present bottoming out and beginning of recovery that the Ministry of Agriculture foresees for 1995. The same could also soon become valid for beef and milk, according to these forecasts [EEAF, May 1995]. This good responsiveness is also spurred by the availability of labour on these small scale farms, following the sharp recession of labour intensive production in large scale farms. These workers are now eager for alternative sources of income.

Finally, the private downstream channels have recently much increased their share of the market, offering an increased viable outlet to the producers of animals and milk.

7.3.6 Cow's milk

Table 7.5
Tentative cow's milk outlook for 2000

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of cows (000) on 1st January</td>
<td>606</td>
<td>531</td>
<td>419</td>
<td>450</td>
</tr>
<tr>
<td>Milk yield t/head</td>
<td>3.5</td>
<td>3.2</td>
<td>2.7</td>
<td>3.5</td>
</tr>
<tr>
<td>Production 000 t</td>
<td>2135</td>
<td>1692</td>
<td>1135</td>
<td>1575</td>
</tr>
<tr>
<td></td>
<td>1989 level</td>
<td>1998 level</td>
<td>1999 level</td>
<td>2000 level</td>
</tr>
</tbody>
</table>

Main assumptions:

- number of cows: according to the trends of numbers of animals respectively owned by the private and public sectors (cf. annex), the low-level of 350 000 on 1 January 1995 is expected to be a minimum. The recovery will, however, be slow, because of the limited investment capacity, the fragmentation of the production between many small scale farms and the limited possibilities of development of fodder crops, until the end of the land reform;

-Milk yield: the 1989 level could be recovered under the effect of the rationalisation of the production conditions, taking into account that some technological stagnation is expected on a large number of small scale farms. On-farm and collection investments will also be needed to improve milk quality.

In this scenario, cow numbers and milk production would remain significantly lower in 2000 than in 1989, when this sector was highly subsidised. Domestic demand should increase due to the extremely low levels of demand observed at present. Supply may not react so quickly. It is then foreseeable that imports of dairy products will increase with the global recovery. In this case, a certain import protection may be imposed for preserving domestic production. There exists also some expansion possibilities for sheep's milk and goat's milk.
7.3.7 Beef and veal

Table 7.6
Tentative beef and veal outlook for 2000

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Cattle number (000 head)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>on 1st January</td>
<td>1613</td>
<td>1329</td>
<td>750</td>
<td>750</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>638 in 1995</td>
<td></td>
</tr>
<tr>
<td>production 000 t</td>
<td>123</td>
<td>120</td>
<td>97</td>
<td>97</td>
</tr>
<tr>
<td>net trade 000 t</td>
<td>15</td>
<td>5</td>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>(import)</td>
<td>(import)</td>
<td>(import)</td>
<td>(import)</td>
</tr>
<tr>
<td>disappearance 000 t</td>
<td>138</td>
<td>125</td>
<td>106</td>
<td>106</td>
</tr>
<tr>
<td>per capita disappear. kg</td>
<td>12</td>
<td>11</td>
<td>10</td>
<td>10</td>
</tr>
</tbody>
</table>

N.B. This balance deals only with beef at a 1st processing level; it covers neither the trade of live animals, nor further processed products. Per capita disappearance is in net weight.

Main assumptions:

- The decapitalisation trend is still at work though slowing down and approaching the bottom (likely in 1995 or 1996), mainly owing to price increases of milk. Moreover, the share of beef and veal in total meat consumption still continues to decrease, when compared to poultry and pig meats. This is due to low incomes per capita. Additionally, the small size and lack of capital of private farms disadvantage this production, relatively to pig and poultry. The recovery of cattle numbers and production up to the modest levels of 1994, will only happen at a slower rate than for milk cows, because of the time lag between increase of milk production and meat production. The current decapitalisation will have ceased to feed any significant exports and a certain import protection will probably be needed.
7.3.8 Pigmeat

Table 7.7
Tentative pigmeat outlook for 2000

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Pigs number (000 head) on 1st January</td>
<td>4119</td>
<td>3590</td>
<td>2071 (1986 in 1995)</td>
<td>2500</td>
</tr>
<tr>
<td>production 000 t</td>
<td>412</td>
<td>336</td>
<td>214</td>
<td>280</td>
</tr>
<tr>
<td>net trade 000 t</td>
<td></td>
<td></td>
<td>3 (import)</td>
<td>0</td>
</tr>
<tr>
<td>(export)</td>
<td>2</td>
<td>5 (export)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>disappearance 000 t</td>
<td>409</td>
<td>331</td>
<td>217</td>
<td>280</td>
</tr>
<tr>
<td>Per capita disappearance kg</td>
<td>35</td>
<td>29</td>
<td>20</td>
<td>26</td>
</tr>
</tbody>
</table>

N.B. This balance deals only with pig at a 1st processing level; it covers neither the trade of live animals, nor further processed products. Per capita disappearance is in net weight.

Main assumptions:

- pig numbers: the recovery seems to have started around January 1995. Our year 2000 assumption is cautiously 26% higher than this minimum while the 1990 number was 118% higher. This is in view of the poor state of the feed and meat industries, of the highly fragmented new private supply, and of the lack of capital;

- production: pig rearing is likely to improve its efficiency slowly (better feed conversion; shorter cycles; lower mortality, etc...). So, we assume a production growth 15% higher than the pig number increase, by the year 2000;

- pig meat disappearance: after having halved since 1989 an increase of 30% by the year 2000 compared to 1994, seems consistent with the expected partial recovery of living standards;

- export competitiveness is dubious in the years to come.
7.3.9 Poultrymeat

Table 7.8
Tentative poultrymeat outlook for 2000

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Poultry numbers (000)</td>
<td>41805</td>
<td>26479</td>
<td>18211</td>
<td>27317</td>
</tr>
<tr>
<td>on 1st January</td>
<td></td>
<td>(19126 in 1995)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>production 000 t</td>
<td>188</td>
<td>111</td>
<td>74</td>
<td>131</td>
</tr>
<tr>
<td>net trade 000 t</td>
<td>35</td>
<td>11(export)</td>
<td>6(export)</td>
<td>0(export)</td>
</tr>
<tr>
<td>disappearance 000 t</td>
<td>153</td>
<td>100</td>
<td>80</td>
<td>131</td>
</tr>
<tr>
<td>Per capita disappear. kg</td>
<td>12</td>
<td>8</td>
<td>7</td>
<td>11</td>
</tr>
</tbody>
</table>

N.B. This balance deals only with poultrymeat at a 1st processing level; it covers neither the trade of live animals, nor further processed products. Per capita disappearance is in net weight.

Main assumptions:

- poultry numbers: the minimum was reached in 1994 and a recovery has now started. We assume at least a 70% increase by year 2000. It is the cheapest meat and its consumption might be the first to increase with a global economic improvement. Its production can be rapidly and easily expanded, either on small scale farms or in big units;

- disappearance: the increased real incomes (in kind and in money) can easily spur the consumption up to this level;

- there are indeed some possibilities of development of export orientated production, as the privatization will give opportunities of investments in big poultry buildings and as the price of cereals remains below world prices. Considering the strong competition on the international market and the present difficulties in Bulgaria, it would be, however, highly speculative to base a hypothesis of development of this sector on exports for the short term. A "zero" net trade figure does not mean, however, that trade flows would not be develop.
7.3.10 Sheep and goat meat

Table 7.9
Tentative sheep meat outlook for 2000

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Sheep number (000) on 1st January</td>
<td>8609</td>
<td>6896</td>
<td>3763</td>
<td>3900</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>3398 in 1995</td>
<td></td>
</tr>
<tr>
<td>production 000 t</td>
<td>67</td>
<td>61</td>
<td>48</td>
<td>55</td>
</tr>
<tr>
<td>net trade 000 t</td>
<td>9 (export)</td>
<td>4 (export)</td>
<td>3 (export)</td>
<td>3 (export)</td>
</tr>
<tr>
<td>disappearance 000 t</td>
<td>58</td>
<td>57</td>
<td>45</td>
<td>52</td>
</tr>
<tr>
<td>per capita disappear. kg</td>
<td>4</td>
<td>4</td>
<td>3.5</td>
<td>4</td>
</tr>
</tbody>
</table>

N.B. This balance deals only with poultry meat at a 1st processing level; it covers neither the trade of live animals, nor further processed products. Per capita disappearance is in net weight.

Main assumption:

- the number of sheep probably bottomed in 1995 and a recovery should be observed from 1996 onwards. In contrast, the number of goats has increased since 1993. All goats are on private farms. An increase of 15% over the total period may be a reasonable assumption;

- the production of sheepmeat should slowly increase, mostly in mountain and semi-mountain regions, where natural conditions are well suited to an extensive production of these animals. There are also some possibilities for the recovery of sheep's milk production;

- disappearance: it may also expand over the forecasted period, keeping in mind, however, that sheep's cheese is relatively expensive in Bulgaria. The increase in real incomes is a necessary condition for an increase of domestic demand and a solid recovery in the coming years.
LIST OF TABLES

Table 1.1  Parties in the Bulgarian National Assembly, p. 6
Table 1.2  Main economic indicators, p. 8

Table 3.1  Main agricultural indicators, p.28
Table 3.2  Land use ('000 ha), p. 33
Table 3.3  Evolution of the main crops, p. 35
Table 3.4  Cereals consumption ('000 tonnes), p. 36
Table 3.5  Bulgarian exports to the EU of some vegetables, p. 39
Table 3.6  Livestock numbers, p. 41
Table 3.7  Production of principal meats, p. 42
Table 3.8  Main animal products, p. 42

Table 4.1  Use of fertilisers and pesticides in nutrients units, p. 41

Table 6.1  Agricultural trade, p. 60
Table 6.2  Breakdown of agricultural and food exports under the main agricultural headings, p. 61
Table 6.3  Breakdown of agricultural and food imports under the main agricultural headings, p. 61
Table 6.4  Estimates of distortion in Bulgarian agricultural trade with former CMEA Countries, p. 62
Table 6.5  Bulgarian agricultural trade, regional breakdown (%), p. 62
Table 6.6  Agricultural and food trade between Bulgaria and the EU, p. 64
Table 6.7  Different schemes of the Association Agreement with Bulgaria, p. 65

Table 7.1  Tentative projection for Land Area, p. 69
Table 7.2  Tentative cereals outlook for 2000, p. 70
Table 7.3  Tentative Sunflower seeds outlook for 2000, p. 71
Table 7.4  Tentative sugar outlook for 2000, p. 71
Table 7.5  Tentative cow's milk outlook for 2000, p. 73
Table 7.6  Tentative beef and veal outlook for 2000, p. 74
Table 7.7  Tentative pigmeat outlook for 2000, p. 75
Table 7.8  Tentative poultrymeat outlook for 2000, p. 76
Table 7.9  Tentative sheepmeat outlook for 2000, p. 77

LIST OF TEXT BOXES

Chapter 1  Historical background, p. 3
Ethnic Groups and Religions, p. 5

Historical view of farming structures, p. 13-14
Successive stages of the land restitution process, p. 16
Main amendments to the Land Law, May 1995, p. 19
Liquidation of state-controlled cooperatives, p. 21
Farming structures in Bulgaria, 1994-1995, p. 24-25

Chapter 3  Bulgarian agriculture performance during the pre-reform period, p. 31
BIBLIOGRAPHY

BATCHAVAROVA, S. Economic Frms in Agriculture and Development of Family Farms Agriculture in Bulgaria. Sofia. 1995
KORNAL, J., Economics of shortage. North Holland. 1980
MISHEV, P. and GERova, V. Credit policies and practice in agriculture. PHARE programme, Policy Advisory Unit, Boyana Seminar, 1995
PHARE Programme, Boyana Seminar, January 1995
SUKOVA-TOSHEVA, A. Role of agriculture in the Bulgarian economy and trade. PHARE programme. 1993.

80
Achevé d'imprimer en juillet 1995
dans les ateliers de la Commission Européenne