

**REPUBLIC OF BULGARIA**

**NATIONAL AGRICULTURE AND RURAL DEVELOPMENT  
PLAN  
over the 2000 – 2006 period  
UNDER THE EU SPECIAL ACCESSION PROGRAM FOR  
AGRICULTURE AND RURAL DEVELOPMENT  
(SAPARD)**

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## LIST OF ABBREVIATIONS

<b>AA</b>	Agricultural Academy
<b>ACFS</b>	Agricultural Capital Fund Scheme
<b>AMIS</b>	Agricultural Market Information Service
<b>APAU</b>	Policy Analysis Unit
<b>BANSIC</b>	Bulgarian Agri-statistical Centre
<b>BGL/BGN</b>	Bulgarian Lev
<b>CAP</b>	Common Agricultural Policy
<b>CEEC</b>	Central and Eastern European Countries
<b>CEFTA</b>	Central European Free Trade Agreement
<b>CIS</b>	Community of Independent States
<b>CMEA</b>	Council for Mutual Economic Assistance
<b>EAD</b>	Form of Legal Entity – meaning “PLC”
<b>EFTA</b>	European Free Trade Agreement
<b>EU</b>	European Union
<b>FAO</b>	Food and Agricultural Organization
<b>FRYOM</b>	Former Yugoslavian Republic of Macedonia
<b>GAV</b>	Gross Added Value
<b>GDP</b>	Gross Domestic Product
<b>LAOs</b>	Local Advisory Services
<b>LDRR</b>	Less Developed Rural Regions
<b>LOUAL</b>	Law on the Ownership and Use of Agricultural Lands
<b>LTA</b>	Long Term Assets
<b>MAF</b>	Ministry of Agriculture and Forestry
<b>MEW</b>	Ministry of Environment and Waters
<b>MI</b>	Ministry of Industry
<b>MLCs</b>	Municipal Land Commissions
<b>MRDPW</b>	Ministry of Regional Development and Public Works
<b>MTT</b>	Ministry of Trade and Tourism
<b>NAAS</b>	National Agricultural Advisory Service
<b>NDP</b>	National Development Plan
<b>NOTIS</b>	Notary Information System
<b>NPAA</b>	National Program for Adoption of the Acquis
<b>NPRD</b>	National Plan for Regional Development
<b>NSI</b>	National Statistics Institute
<b>NSPPQAC</b>	National Service for Plant Protection, Quarantine and Agro-Chemistry
<b>NVS</b>	National Veterinary Service
<b>OECD</b>	Organization for Economic Cooperation and Development
<b>OIE</b>	Office International des Epizooties
<b>PAPAU</b>	Policy Analysis and Pre-accession Unit
<b>PILIS</b>	Pilot Project for an Integrated Land Information System,
<b>PMRCAs</b>	Private Mutual Rural Credit Associations
<b>PMU</b>	Program Management Unit
<b>RDP</b>	Rural Development Plan
<b>SAPARD</b>	Special Accession Program for Agricultural and Rural Development
<b>SAPI</b>	Agricultural Market Information Service
<b>SARA</b>	Structural Adjustment and Reform Assistance
<b>SFA</b>	State Fund Agriculture
<b>SOEs</b>	State Owned Enterprises
<b>SVCS</b>	State Veterinary Control Service
<b>SVSCA</b>	State Veterinary and Sanitary Control Agency
<b>TA</b>	Technical Assistance
<b>WGs</b>	Working Groups
<b>WTO</b>	World Trade Organization
<b>HACCP</b>	Hazard Analysis Critical Control Point
<b>ISO</b>	International Standard Organisation

## FOREWORD

The 2000-2006 National Agriculture and Rural Development Plan (NARDP) of the Republic of Bulgaria under the EU Special Accession Program for Agriculture and Rural Development (SAPARD) has been prepared in compliance with the requirements of EU Council Regulation EC 1268/1999 of June 21<sup>st</sup> 1999 on the extension of EU financial aid for the implementation of agricultural and rural development measures in CEE applicant countries in the pre-accession period (SAPARD Regulation).

This Plan was adopted by the Council of Ministers by the Government Decision 726 of November 22, 1999. The main objectives, key policy priorities and measures have been laid down by the National Economic Development Plan of Bulgaria over the 2000-2006.

The NARDP has become possible thanks to the endeavours of an intra-governmental Working Group under the Ministry of Agriculture and Forestry, including representatives of the Ministry of Industry, the Ministry of Environment and Water Resources and the Ministry of Regional Development and Public Works, supported by members of farmer associations, producer organisations in the food industry as well as regional development agencies and NGOs. The agricultural and rural development strategy has been discussed at a meeting of the Central Co-ordination Unit of the SPP. Two rounds of public discussions on the plan's priorities and measures have been held to achieve greater transparency of the drafting process. Led by the principle of partnership, the discussions were attended by representatives of the European Commission as well.

*The main objectives of the Plan are as follows:*

- **Improvement of agricultural production efficiency and promotion of a competitive food-processing sector by better market and technological infrastructure and strategic investment policies ultimately aimed at reaching EU standards.**
- **Sustainable rural development consistent with the best environmental practices by introducing alternative employment, diversification of economic activity and establishment of the necessary infrastructure. This in turn will improve the living conditions and standards of rural communities, generate fairer income and open up employment opportunities.**

Investment support to farmers that will help them bring production practices into line with EU requirements is a key mechanism for the achievement of the plan's objectives. The improvement of market structures is of crucial importance for the development of the country's agricultural sector. The establishment of competitive structures and enterprises in the food processing industry as well as in the area of marketing will only reinforce and increase the sector's share in the market.

Rural living and working conditions are closely related to rural heritage protection, recreation facilities and hence the quality of life in rural areas. The integrated rural development approach, i.e. the implementation of common economic, infra-structural, environmental and cultural policies in all rural areas, is a guarantee for the achievement of rural policy goals.

The two main objectives of the Rural Development Plan over the 2000-2006 period will be achieved on the basis of investment support in the following priority areas:

- 1. Improvement of the production, processing and marketing of agricultural and forestry products as well as the processing and marketing of fishery products in compliance with EU acquis; promotion of environmentally-friendly farming and environmental protection.***
- 2. Integrated rural development aimed at protecting and strengthening rural economies and communities***
- 3. Investment in human resources – vocational training for agricultural producers and other persons working in the agricultural sector, involved in the agricultural production, forestry and diversification of activities in the rural areas***
- 4. Technical assistance;***

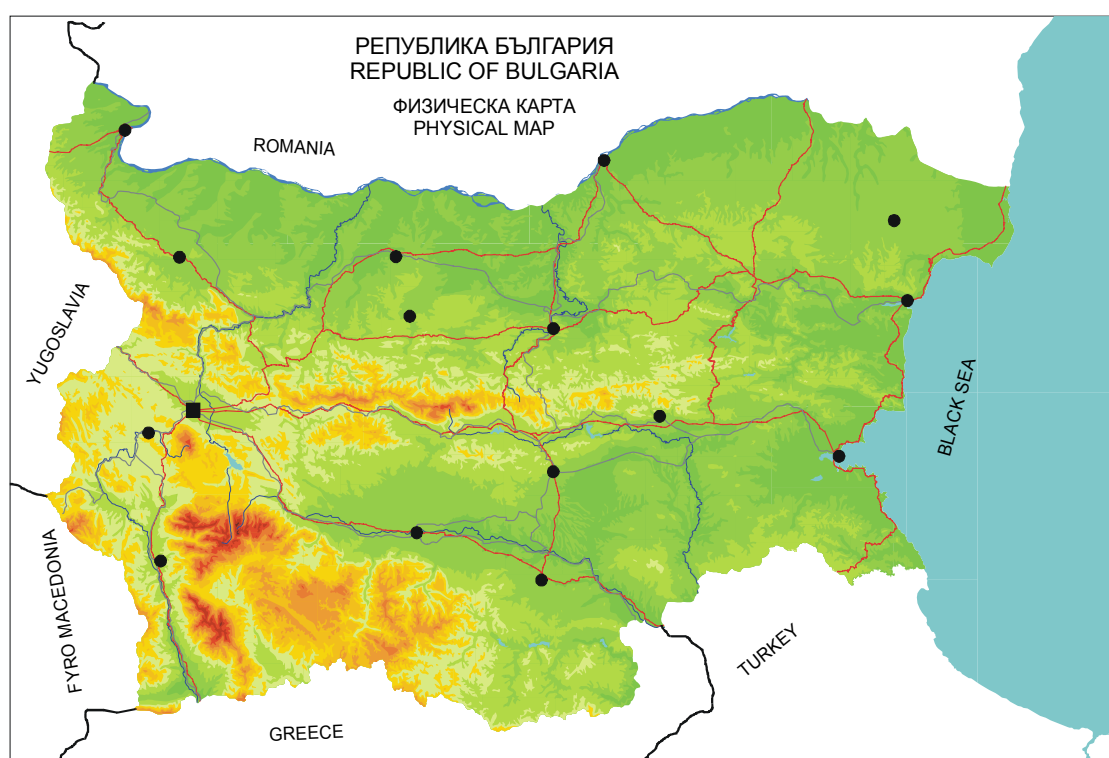
## 1.CURRENT DEVELOPMENT OF AGRICULTURE AND RURAL AREAS

### 1.1.General Description

#### 1.1.1.Bulgaria's Geographical Location in Europe

The territory of Bulgaria covers a total area of 110.910 km<sup>2</sup>. It is situated in the North Eastern part of the Balkan Peninsula, sharing borders with Romania to the North, Serbia and FYROM to the West, Greece and Turkey to the South and the Black Sea to the East.

**Figure 1** Location of Bulgaria in Europe



Bulgaria boasts a varied relief: mountainous and semi-mountainous regions cover about one third of the country. The geological development clearly divides the country into four areas: The Danube plains, the Stara Planina mountain area, the Transitional area, and the Rhodope and Pirin Mountains area.

The climate, with well-defined seasons, is moderate continental in the North and of a Mediterranean type in the South, with the exception of the mountainous regions. Average year temperature is 13°C. Snowfall for the most part of the country is in the period from December to March and for the mountainous regions from December to June.

The country's moderate climate and its physical relief, are decisive to the development of agriculture and tourism. These climatic and geographical features also allow for year-round tourism and agricultural produce of wide variety.



### 1.1.2. Population and Administrative Division

Bulgaria has a population of 8.23 million people with an average density of 74.2 people per km<sup>2</sup>, which is well below the EU average (115.5 people per km<sup>2</sup>).

**Table 1** Distribution of population in Bulgaria in 1998\*

	Population		Municipalities	Land Area		Population Density Persons/km <sup>2</sup>
	Thousand	%		km <sup>2</sup>	%	
Bulgaria	8,230.4	100	262	110,910	100	74.2
Rural areas	3,612.8	43.6	229	90,371	81.4	40
Less-Developed Rural Areas	1,008.9	12.2	77	27,000	24.3	37.4

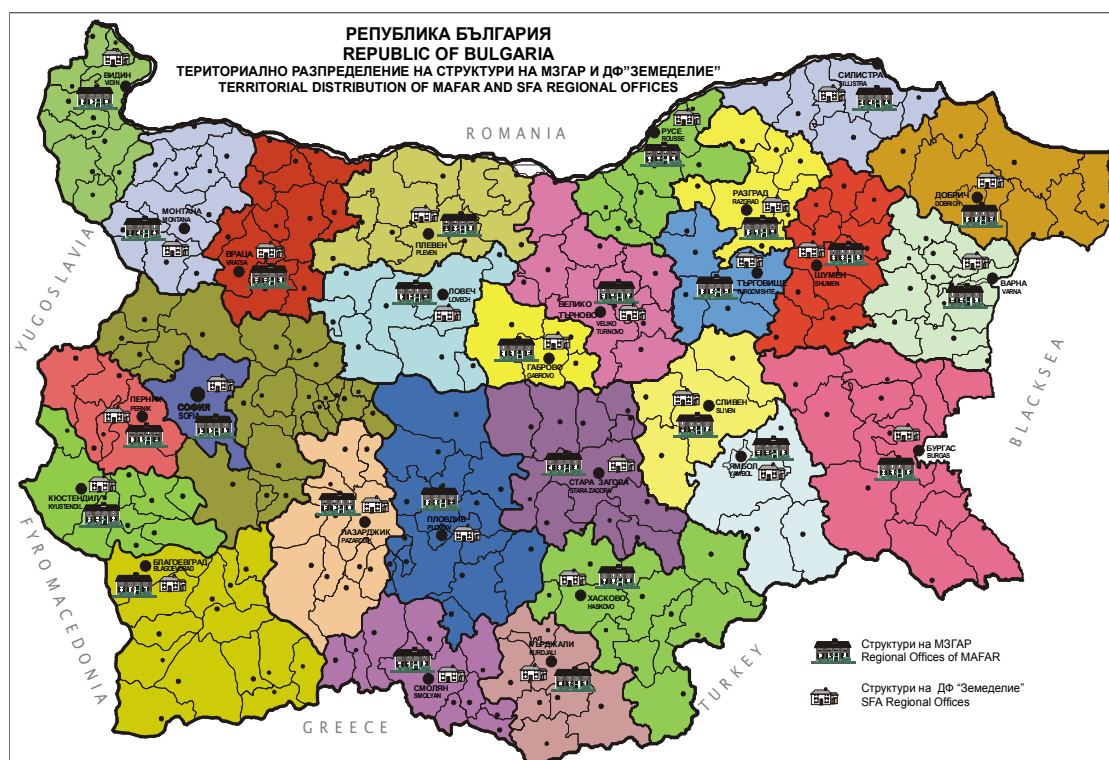
*Source:* The data are prepared on the base of the NSI data and the data from National Centre for Territorial Development and Housing Policy

\* The data for 1998 are preliminary

Bulgaria has been divided into six planning regions, which are classified as NUTS II regions. It is at this level that regional planning for Structural Funds purposes is taking place.

There are 28 administrative districts in Bulgaria, which correspond to the EU-classification NUTS III level. There are regional offices of the Agriculture Ministry and the State Agriculture Fund located in each district. The country is further divided into 262 administrative centres called municipalities, which correspond to NUTS IV level.

**Figure 2** Territorial Distribution of MAF and SFA Regional Offices



### 1.1.3. Macroeconomic Situation

The economic reforms in Bulgaria started in 1991 based on a comprehensive program aimed at price and trade liberalisation, dismantling of state monopolies, privatisation of state-owned enterprises, land and ownership restitution. The shock of the reform, along with the collapse of some main export markets, resulted in a drastic GDP slump. Over the 1989 –1993 period, GDP had declined by 24% while agricultural output stepped down by more than 30%.

**Table 2 Bulgaria: Main Economic Indicators**

Year	1993	1994	1995	1996	1997	1998*
GDP at current prices (Million BGL)	298,934	525,552	880,322	1,748,701	17,055,205	21,577,020
GDP (Million EUR)	9,233	8,145	10,020	7,833	8,971	10,958
GDP per capita (EUR)	1,090	965	1,192	937	1,079	1,327
GDP growth rate (%)	-1.5	1.8	2.9	-10.1	-7.0	3.5
Average yearly exchange rate (BGL per EUR)	32.38	64.53	87.86	223.25	1901.22	1969.13
Budget deficit (% of GDP)	-13.6	-6.5	-6.6	-11	-3.1	0.9
Annual inflation rate (CPI, %)	63.9	121.9	32.9	410.8	578.6	0.96
Unemployment	626,141	488,422	423,773	478,770	523,507	465,202
Unemployment rate (%)	16.0	12.8	11.1	12.5	13.7	12.2

Source: NSI.

\* The data for 1998 are preliminary

1994 and 1995 witnessed a rather fragile recovery and slightly positive GDP growth rates of 1.8% and 2.6% respectively. Fueled by an expansionist monetary policy, short-term capital inflow and debt forgiveness for some large state-owned enterprises, the recovery was to be a short-lived revival, delaying the structural adjustment of the Bulgarian economy and allowing for distortions to build up.

As the economy bottomed out in 1996, GDP contracted by 10.1% and in end-year inflation was running at double-digit monthly rates. Confidence in the banking system was undermined followed up by cash-run on banks resulting in the chain failure of 15 banks.

The early-1997 social unrest and political upheavals forced the then socialist-led government to resign. Appointed in February 1997, a caretaker government undertook immediate and emergency stabilisation measures. The Union of Democratic Forces won the April'97 elections and its government backed up by a stable parliamentary majority initiated a stabilisation and reform package supported by the IMF and the WB. The structural reforms undertaken by the government focused on:

- Reform of the banking system – privatisation of banks, improved supervision and capital adequacy requirements.
- Fast privatisation and liquidation of loss making state-owned enterprises;



Data concerning employment division by gender is presented in the following table.

**Table 2b Employed persons according to their sex (1995-1999)**

	November 1995	November 1996	November 1997	November 1998	November 1999
Total	3031.5	3085.4	3030.1	2920.7	2811.0
Men	1609.7	1637.0	1616.2	1553.5	1500.0
Women	1421.8	1448.4	1413.9	1367.2	1311.0

Source :NSI

### 1.1.4.Rural Area Characteristics

To make the most of the limited resources available, support under the EU Structural Funds should focus on rural areas.

For the purposes of the this plan, rural areas<sup>2</sup> in Bulgaria have been defined as rural municipalities, which biggest town has population of less than 30,000 inhabitants, and population density of less than 150 people per square km<sup>3</sup>. Out of 262 municipalities, 229 are to found in rural areas. The number of settlements in rural areas totals 5,307. Rural areas rely basically on farming as a major form of economic activity, forestry, craftsmanship and rural tourism.

**Table 3 Distribution of Population by Type of Settlement**

Type of settlement	Number of settlements	Population		Area		Population density Persons/km <sup>2</sup>
		number	%	km <sup>2</sup>	%	
Less than 30,000 inhabitants	5,307	3,612,794	43.6	90,371	81.4	40
More than 30,000 inhabitants	33	4,670,406	56.4	20,622	18.6	226.5

Source: The data are prepared on the base of the NSI data and the data from National Centre for Territorial Development and Housing Policy

Rural areas cover a territory of 90,371 sq. km, or 81.4% of the country's total area. Rural population amounts to 3 612 974 people, accounting for 43.6% of the country's total population. The density of rural population amounts to 40 people per sq. km against the country's average of 74.6 people per sq. km. The average density of rural settlements in Bulgaria is 3.75 villages per 100 sq km.

Rural areas have traditionally had an important share in the Bulgarian economy and population.

### **Land Resources**

The farm land in rural areas amounts to 5,133 thousands ha and accounts for 82.7% of total agricultural land. The forest land covers 3 160 thousands ha and represents 83.2% of the country's total forest area.

<sup>2</sup> The typology of rural areas and their in depth analysis will be developed and elaborated in the framework of EC Regulation 1257/99, together with the progress made in the Bulgarian rural and agricultural statistics.

<sup>3</sup> According to OECD definition.

### ***Demographic Profile of Rural Population***

Working age population in rural areas amounts to 1 931 079 or 51.6% of rural population. Some 28% of the population is above working age.

Natural growth in rural areas runs negative at -9.6% due both to the higher death rate and lower birth rate compared to the country's average. Over the 1994 – 1997 period the rate of migration from towns to villages ran positive as a result of expectations of improved living conditions in villages, which in turn largely offset the deteriorating demographic indicators there. Although the upward trend was not sustained in 1998, it may be expected that the completion of land restitution and the development of a land market in Bulgaria will boost backward migration to villages. 1992 census data indicate that the share of people with a higher level of education (university degree, college, technical schools and secondary education) was rather high, though indeed lower than the country's average.

### ***Employment in Rural Areas***

According to NSI data unemployment rate in villages (20.1%) as of November 1998 is higher than the relevant one in towns (14.6%) and the average for the country (16.0%). NSI does not take into special consideration the unemployment rate in rural areas, but accumulates data for the unemployment rates in the towns, the villages and the average for the country. This unemployment is derived from the decline of employment in state-operated agricultural farms, from the significant decline of public service sector and of the state owned and operated industries. According to NSI data and National service on Employment it is visible that rural areas have much higher rates of unemployment compared to the national average (See Appendix 1B). Employment in rural areas will be strictly monitored during the implementation of the Plan with the progress made in the Bulgarian regional (rural) and agricultural statistics.

### ***Rural Municipality Structure***

Rural municipalities are identified as well-defined systems of settlements/villages clustered around a municipality centre, which may be a bigger village or a small town. The number of villages in one municipality may vary between 134 and 1. Villages in Bulgaria are classified as very small, small, medium, large, and very large.

**Table 4            Distribution of Villages By Number of Inhabitants**

<b>Village type</b>	<b>Inhabitants</b>	<b>Total number of villages</b>
Small <sup>4</sup>	Up to 500	1,285
Medium	501-1000	619
Large	1001 – 5000	215
very large	Above 5000	7

Source: *Rural Area Studies*. National Centre for Territorial Development and Housing Policy.

There is a notable difference between Bulgarian villages and villages across Europe. The Bulgarian village is a compact settlement entity where dwellings are grouped in neighbourhoods, sharing a common water and electricity, sewage, road and telephone network. There are back yards in almost every village house where people grow fruit, berries and vegetables and/or keep animals for their own use. Rural population live in

<sup>4</sup> (1/4 of total villages are with population below 150)

communities based on age-old strong family bonds. There are about 37 000 monuments of local cultural heritage.

### ***Social Infrastructure***

As for public services, education is at best developed, with nurseries, kindergartens and schools in almost every rural settlement provided there is a minimum number of children. There is also a well-developed health care infrastructure relying mostly on primary and pre-hospital care units as a main form of health care. There are cultural and public facilities as well, e.g. community centres, public libraries, clubs, etc.

**Table 5 Social Infrastructure in Rural Areas (1996)**

Type	Total	In rural areas	% of settlements in rural areas
Kinder-gardens	3,713	2,274	43%
Small community centres, public facilities	4,223	3,296	62%

*Source:* The data are prepared on the base of the NSI data and the data from National Centre for Territorial Development and Housing Policy

Rural social care services have to cope with problems having to do with the enormous number of public facilities that have been underused or abandoned as a result of the drastic decline in young rural population rather than a shortage of facilities or underdeveloped infrastructure.

In general, rural social infrastructure is well developed but needs further support for renovation and upkeep.

### ***Technical Infrastructure***

The municipality system in Bulgaria relies on solid technical infrastructure of all kinds (water and electricity supply, road network, etc.)

#### ***Water supply***

There is a water supply network in Bulgaria providing water to 98% of the country's population. The number of settlements with water supply networks amounts to 4 529 and accounts for 85% of all settlements. The share of villages with central water supply is 81.32%. The quality of water supplied is "good for drinking" according to the Bulgarian State Standard. Asbestos water pipes account for 81% of all pipes. Seventy per cent of the asbestos pipes has been overexploited for more than 20 years and are currently in a poor physical condition causing enormous losses of drinking water.

Rural settlements need investment support for the renovation of the water supply network and replacement of asbestos pipes.

#### ***Road infrastructure***

##### ***Automobile Road Network***

As transport services in less developed rural areas rely mainly on automobile transport, road infrastructure development is particularly important for them.

The current fourth-class road network located predominantly in rural areas is 23 614 km long and accounts for 63.3% of the republican road network. However other classes of roads are also to be found in rural areas, e.g. motorways, I class roads, II class roads and III class roads. The density of rural road network approximates the country's average of 0.3 km per sq. km.

There are less first-class roads in rural areas than in other regions of Bulgaria, which is however compensated for by more third-class roads.

There is an essential difference in the level of road network development in the different rural areas. The rural areas reporting the lowest density of road network are as follows: Bjala Slatina-Knezha, Elhovo and Pavel Banja.

**Table 6. Fourth-Class and Agricultural Road Network in Rural Areas (1996)**

Type	Length in km	Relative share of total network in %
Fourth class roads	23,614	63.3
Agricultural roads without cover	2,965	7.95

*Source:* The data are prepared on the base of the NSI data and the data from National Centre for Territorial Development and Housing Policy

***Main conclusions:***

- Rural areas are not integrated in international transport corridors. In most cases they are situated away from busy road networks and transit roads;
- There is a notable difference between rural areas in terms of road infrastructure and level of development;
- Its average indicators approximate the country's road network indicators. However, due to the higher relative share of lower-class roads transport services are of poor quality;
- Roads in rural areas are in a poor physical condition. i.e. considerably poorer compared to the international transport corridors and transit roads passing through other regions.. The road network in these areas needs repair and proper upkeep;
- Some of the regions enjoy favourable and advantageous location over other regions and land characteristics, which, however, have not been employed yet to develop an attractive transport infrastructure promoting regional development and integration at a national level.

Significant investment is needed for the renovation and further development of the fourth class road network (agricultural roads and inter-settlement roads).

***Railway network***

Railway transport in the country's less developed rural areas performs complementary functions. In rural areas where there is a well-developed railway network, there are all the

pre-conditions for its effective inclusion into the national railway transport system, at the same time fostering economic integration and co-operation with other rural areas.

### ***Water Transport***

Water transport and port infrastructure in some of the rural areas performs secondary functions. Ports have been built in the areas of Dolna Mitropolija, Tutrakan and General Toshevo. The infrastructure already in place makes these areas suitable for the localisation of freight- and transport-intensive activities.

### ***Electricity Supply***

All rural areas are covered by the country's national electricity supply system and receive 110 kV of electric power transformed into 110/20 kV by regional electricity distribution sub-stations, which are most often located at the centre of the region. The region of Maglzh is the only exception. The main electricity supply network distributing electricity to rural areas, is a medium voltage (MV) one, covering all municipalities in Bulgaria. Electricity supply quality and stability are an important prerequisite for the economic development of rural areas.

In some remote rural areas (South and North West Bulgaria), the electricity supply network is serviced by longer wires, which often cause unstable electricity supply and loss of electricity transfer. This can be identified as restraint on the economic development of the area.

Rural areas in the districts of Dolna Mitropolija and Teteven in Central Northern Bulgaria have better developed electricity supply infrastructures.

Ninety-nine per cent of the country's total area has been electrified on average. Some rural areas in the district of Veliko Tarnovo (94%), Gabrovo (95%), Lovech, Sofia-district, and Targovishte fall well behind the country's average.

Generally speaking, the energy supply capacity of rural areas is sufficient. However, problems may arise over the physical condition of the electricity distribution network in some of the remote areas. This in turn calls for investment support aimed essentially at the renovation of the current country's electricity supply network.

## ***Communications/Telephone/Postal services***

### ***Telephone Network***

**Table 7 Telephone Network in 1998**

<b>Indicators</b>	<b>Bulgaria</b>	<b>EU</b>
Overall density	38.5%	54%
Household density	84.6%	96%
Time needed for subscription/inclusion	18 months	24 hours
Public telephones per 10,000 people – number	18.9	31

Source: National Plan for Economic Development 2000-2006



The infrastructure and the services provided by the sector are relatively good. The rate of digitalisation is fairly fast and constantly growing but still below 10%. However, the building of networks in some sparsely populated regions (Montana and Haskovo and Russe) and border regions is lagging behind.

### ***Postal Services***

The network of rural postal services is being extensively developed. The capacity of the network to service international traffic, however, is insufficient.

**Table 8 Post Office Network**

Indicators	Bulgaria	Portugal	Belgium	Denmark	Greece
Population served by a single postal station	2755	2663	6207	4303	8173
Area serviced by a postal station – sq km	36.1	25.11	18.64	35.11	104.04
Postal stations – number	3161	3693	637	1227	1281
Sorting centres – number	20	10	7	8	6
International exchange centres – number	2	5	6	2	2

Source: 2000-2006 National Economic Development Plan.

### ***Sewerage***

Until 1998, a 7 718 km long of sewerage with 321 983 derivation systems had been built in Bulgaria. There is a central sewerage run in 277 settlements in total, 167 of which are towns.. At the same time, some 20% of the network needs renovation. More than 40% of the network was been built over the 1960-1965 period.

### ***Waste Disposal***

There are 1 172 settlements in Bulgaria where waste is collectively collected and they account for 78%of the country's total population. Nevertheless, waste is currently disposed of at disposal centres and in the vicinities of villages in a rather chaotic manner.

In conclusion, it can be said that there is infrastructure in place in Bulgarian rural areas (social care and public services, water and electricity supply networks) though in a rather poor physical condition. As for the telephone network, it needs further expansion in some sparsely populated and border rural areas.

### ***Economic Development of Rural Areas***

Rural natural resources and climate are an important pre-condition for the promotion of multiple economic activity in rural areas: agriculture, forestry, industry, tourism, etc. In general, the rural industry is of the multi-functional type. Almost all industries were developed prior to the outset of the economic reforms (food-processing, timber, textiles and knitwear, electronics, machine building located in small to medium-sized enterprises). The collapse of the command economy and follow-up radical economic reforms triggered the liquidation of enterprises, which in turn resulted in a drastic reduction in rural employment. Many small private farms have emerged instead, relying on self-sufficiency. Rural household income can be raised only if promoting alternative economic activity.

**The above analysis is indicative of the potentials of rural areas to develop a viable agricultural sector by:**

- Revival of strategically important sub-sectors such as vine growing, perennials (orchards), silkworm breeding, growing of roses and raspberries;
- Economic restructuring, laying emphasis on the light industries (especially the food-processing industry);
- Promotion of alternative economic activity including rural tourism.

### **1.1.5.Characteristics of Less Developed Rural Areas**

It was the Farmer Support Act, art. 2, which defined support to less developed rural areas as a government policy objective for the first time:

“development of agricultural production in areas registering deteriorating socio-economic characteristics or enjoying unfavourable climatic and environmental conditions.”

#### ***Criteria for Less Developed Rural Area Identification***

Less developed rural areas identification is determined with the 1999 Regional Development Act. The objectives of the Act are defined as follows: overcoming regional disparities, reducing the number of municipalities and areas that have reached a critical level of poverty, unemployment, depopulation, environmental pollution, social and ethnic unrest; application of a differentiated regional approach to structural reforms; implementation of projects for participation in EU regional development and cross-border co-operation programs. In pursuance of the provisions under the Regional Development Act, Government Ordinance No 105/02.06.1999 on the criteria of identification of areas for reinforced targeted impact and determination of area boundaries has been adopted. The areas contain parts of the territory of the country, which include municipalities or groups of municipalities, which are object of the Government policy for regional development for the period 2000-2006. Amendments to area boundaries are only allowed in compliance with the update procedure applied to the Regional Development Plan not earlier than 3 years (the only exception being areas with specific problems and priorities for which annual changes are possible).

Four types of areas have been identified according to the Ordinance:

- Areas for Growth,
- Areas for Development,
- Areas for Trans-border Cooperation and Development,
- Areas with Specific Problems. The last type of areas include:
  - Less Developed Rural Areas, and
  - Areas in Industrial Decline.

Areas for Growth include territories surrounding the biggest urban centres of the country – with population above 100,000 people. The Areas for Development include territories surrounding towns with population above 30,000 people. Both of these have predominantly urban characteristics.

“Less developed rural areas cover municipalities or groups of municipalities with a predominant rural way of life, specialised in farming and forestry, characterised by a low level of economic development, technical infrastructure and workforce qualification, suffering acute social consequences such as rampant unemployment, low income and depopulation”. (Ordinance № 105/2.06.1999)

The criteria of less developed rural area identification are as follows:

1. Absence of a big, very big or medium-sized city or town in the area – the biggest town in the area to be populated by no more than 30 000 people;
2. Income per capita in two of the last three years should not surpass 30% of the country's average in the preceding year;
3. Average unemployment rate in two of the last three years should amount to over 50% of the country's average in the preceding year;
4. Population density – below 75% of the country's average;
5. The relative share of farm or forest land should exceed 20% of the country's average;
6. The relative share of employed in farming and forestry within total unemployed should amount to over 20% of the country's average in the preceding year.

Less developed rural area municipalities must meet the requirements under p.1, 2 and 3 as well as at least one of the requirements under p. 4, 5 and 6. Area boundaries shall be mapped out on an annual basis, by Council of Ministers decision.

### **Characteristics**

Total number of less developed rural areas – 34;

Total number of municipalities included in less developed rural area boundaries; 77

Total area – 27001.25 sq. km or 24.3% of the country's total area;

Total population – 1 008 931 people or 12.2% of the country's population.

Municipalities are the core unit of less developed rural areas. In terms of area boundaries, these areas cover 1 to 8 municipalities.

### **Figure 3 Less developed rural areas(Appendix 1A)**

#### ***Land Resources***

**Farm land** – 16 088.7 sq. km. or 25.4% of country's total farm land;

**Forest land** – 23.8% of the country's total forest land;

**The other types of territories:** urbanised (small towns, villages), water (rivers, lakes), and transport (roads, railways) networks, having relative shares that do not show significant deviations are well below the country's average.

### ***Demographic Profile of the Population***

The demographic trend of the population in the less developed rural areas is affected by the area-specific economic and social conditions. Past structural changes are reflected in the current demographic situation in both national and regional aspect.

Demographic development trends and reproduction potential characteristics:

Population fall. The rate of fall is 1,5 – 2 times higher than the country's average.

Negative natural growth rate (–10,8% for 1996). The low birth rate and growing death rate contribute to the negative growth rate.

Migration rate over the last decades ran negative. Following the last census of 1992, migration balances ran positive close to zero at 1.3% in 1992 and 1.1% in 1997.

As for the population structure by degree of education, 1992 census data indicate that the share of the educated population (university degree, technical colleges, etc) is rather high but well below the average for the country.

The demographic parameters of the less developed rural areas are deteriorating against the background of the unfavourable country's demographic development.

The unemployment rate in these areas is reported to have run at 26.68% in 1998, relative to the country's average of 12.2%.

### ***SMEs in the Less Developed Rural Areas***

The Agency for Small and Medium Enterprises presented an Official Report on the SMEs Development in Bulgaria for the period 1996-1999. In this study there is not special information about the SMEs in the rural areas, because of the unavailable statistical data. Only the situation in the Less Developed Rural Areas was observed. The following information has been derived from the Report. The analysis is based on the research conducted into less developed rural regions situated close to one another – the municipalities of Lom, Brusartzi, Medkovetz, Jakimovo, Valchedram (region Montana) and Oriahovo, Kozluduj, Miziiia, Hajredin (region Vratza), that are representative for the less developed areas in Bulgaria. The research is conducted in the period 10.12.1999-10.02.1999. The following economic sectors have been researched – industry, construction, trade, tourist accommodation, transport and communications by means of general questionnaires.

Imbalances have been developed in the Less Developed Rural Areas due to their economic mono-structure, and underdevelopment of the economic infrastructure. The problems there appear as a result of the concentration of employment in small number of companies from the industrial sectors (which have weak growth potential), and the connected with that increase of the structural unemployment and worsened growth rates. The average density of companies and firms per 1,000 people, estimated in these areas is twice as lower as the average for the country, which is predominantly due to the insufficiently developed physical and institutional infrastructure.

The diversification of the local economies per different economic sectors in the less Developed Rural Areas is low. The biggest number of SMEs is concentrated in the agriculture and forestry – 40% of total; industry –24%, trade – 23%. All SMEs operating in other economic sectors, including tourist accommodation, account for 13% of the total number. The share of agriculture in total Gross Added Value accounts for 51% and shows relatively higher productivity for the SMEs operating in this sector. The number of the micro-companies is prevailing, and most of them are family-run businesses. Their productivity rate is lower compared to the country average.

Emerging SMEs are predominantly of the micro type, and as long as they are closely connected with local markets, meet serious impediments for development and expansion in an economic environment characterized by decreasing incomes of the local population. Furthermore, the economic sectors that used to be the traditional domain for the micro enterprises like trade, repair-works and crafts, are heavily saturated by small firms, and are being entered by medium and big companies. This puts the micro firms at strong competition with the new companies, which can offer better quality of the services and gradually take over the market niches of the micro companies.

## 1.2.Sector Analysis

### 1.2.1.Agriculture and Forestry

#### *Importance of the Agricultural Sector in GDP and Employment*

The agricultural sector is of key importance to the successful implementation and the outcome of the structural reform in Bulgaria. It is socially important because it secures food and provides stable income to over 20% of the working age population of Bulgaria.

**Table 9 Share of Agriculture and Forestry in the National Economy in 1998\***

Sector	GDP**			Employment	
	BGL mln	Euro mln	%	Number	%
Total	21,577,020	10 958	100	3,106,169	100
Agriculture, Forestry and Fishing	4,045,375	2 054	18.7	796,813	25.6

Source: NSI

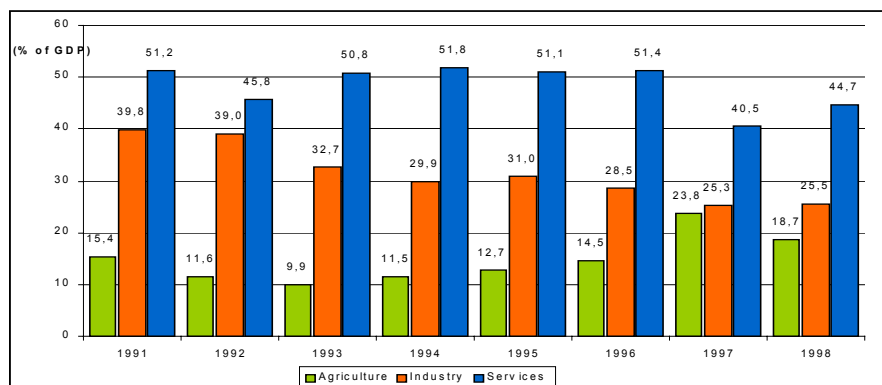
\*The data for 1998 are preliminary

\*\*GDP at current prices

The share of agriculture in GDP varied between 10%-15% over the 1980's. Following 1993, the share of agriculture went on the increase, reaching 18.7% of GDP in 1998 and decrease to 14.8% in 1999. The rising share of agriculture within GDP was due to the modest recovery of the sector and a concurrent clear-cut decline in the share of the manufacturing sector. It is noteworthy that the NSI has introduced a new classification system of sectors based on NACE since 1996. Some of the economic activities that used to be classified under the manufacturing sector have since then been reported under the agricultural sector. The main changes were as follows: unincorporated household activities (homemade and home-processed agricultural products and logging), reported until 1996 under the manufacturing sector were now included in the agricultural sector. The differences between the two classification systems have determined the structural

changes within GDP discerned. It was only in 1996 that value added in agriculture rose by 17.4% (about EURO 170 million) as a result of the new methodology employed by the NSI.

**Figure 4 Gross Added Value by Sectors – (as % of GDP)**

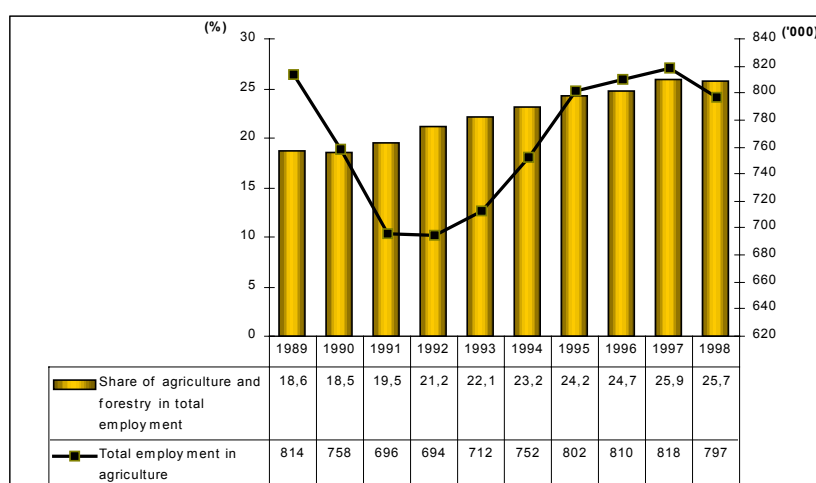


Source: NSI, Main Macroeconomic Indicators.

In 1994, annual income per employee in the agricultural sector amounted to BGL 31,885 or EUR 490, stepping up to EUR 814 in 1995 and further going up to EUR 608 in 1996. In 1997, average income in agriculture reached EUR 1,339, indicating a significant rise compared to previous years<sup>5</sup>.

**Agriculture, forestry and fisheries account for 25,6% of the workforce in Bulgaria.** The 1989-1992 period saw a clear-cut downward trend of agricultural employment. Since 1993 employment in agriculture has been steadily rising to step back at its 1989 level in 1997. However, future modernisation of the agricultural sector will bring about a reduction in employment in the sector, in turn calling for new sources of alternative employment and income generating activities in rural areas.

**Figure 5 Employment in Agriculture and Forestry**



Source: NSI.

<sup>5</sup>1998 Agrarian Report of the Republic of Bulgaria. The figures are derived on the basis of the EU Common Agricultural Account methodology.

**Agricultural employment growth over the past few years has been mainly due to the increasing number of employed in the private sector. In 1998, the private sector accounted for 94.4% of employment in agriculture, forestry and fisheries against 21.2% in 1989.**

**Table 10 Employment in Agriculture (1989-1998)**

Year	Total	Public sector	Private sector
	(thousands)	%	%
1989	789.1	78.8	21.2
1992	676.7	53.1	46.9
1997	768.1	2.5	97.5
1998*	796.8	5.6	94.4

Source: NSI.; \*The data for 1998 is preliminary

Migration to towns has brought about changes and certain distortions in the age structure of rural population. In 1998, people above working age<sup>6</sup> accounted for approximately 35% of the rural population, compared to the 24.6% of country's average.

According to the 1998 PHARE-ACE-supported national representative survey, the average age of private Bulgarian farmers is 61 years. However, the average age of the youngest cohort of private farmers is 44 years. This age group accounts for 37% of total crop production value and 59% of total crop sales<sup>7</sup>. They have significant potentials to make agriculture a really competitive and profitable sector, relying on their education and using new production technologies.

### **Land Resources**

The country's agricultural land amounts to 6,417 thousand ha, which represents 57.9% of Bulgaria's total area. Arable land represents 76.8% of the country's total agricultural land. Areas under perennial crops account for about 2% of total agricultural land while meadows, grasslands and pastures cover more than 12.6%.

**Table 11 Land Use**

Type of land	1990		1995		1998*	
	Thousands ha	%	Thousands ha	%	Thousands ha	%
Total land	11,063	100.0	11,063	100.0	11,091	100
Agricultural land	6,159	55.7	6,164	55.7	6,417	57.9
Arable land	4,643	42.0	4,694	42.4	4,930	44.5
<i>Incl. Perennials</i>	296	2.7	204	1.8	220	2.0
1 Grasslands and pastures	1,516	13.7	1,471	13.3	1,398	12.6

Source: NSI

\*The data for 1998 are preliminary

<sup>6</sup> Population above working age is defined by NSI as male population aged 60 and over and female population aged 55 and over.

<sup>7</sup> Strategy for Agricultural Development and Food Security in Bulgaria, FAO, July 1999.

The share of state and municipal ownership has been gradually decreasing over the years to reach a bare 3.8% in 1998. Private ownership of arable land surpasses 96.2%, with some 40.1% being cultivated by the new co-operatives. As regards grasslands and pastures, the share of public and state ownership is still predominant at 71.3%. Detailed information on 1998 arable land ownership structure is given in Table 12 below.

According to BANSIC data, land plots of over 363,000 ha are not being cultivated.

**Table 12. Agricultural Land by Form of Land Use in 1998\***

	Total	State-and municipally owned	Private	
			Private Total	Of which: Co-operatives
Agricultural land	100.0	19.0	81.0	40.1
Arable land	100.0	3.8	96.2	40.0
Grasslands and pastures	100.0	71.3	28.7	33.0

\*The data for 1998 are preliminary

By end - August 1999, about 94% of agricultural land was restituted to former landowners or their heirs. Land ownership restitution will have been completed by end-1999.

### ***Agricultural Structures***

At present, there is no update of the register of agricultural producers, which makes sector analysis difficult, following the dynamic changes in ownership structure. Ordinance № 3 of the Agriculture Minister of January 29<sup>th</sup> 1999 on the establishment of agricultural producer register was adopted.

In terms of farm structure, private farms and private co-operatives prevail over the sector.

The total number of private farms is estimated at 1 783 495. The vast majority of them have never been officially registered. Most “informal” private farms are small-sized units cultivating small plots of land for household consumption purposes only. In 1997, the number of private companies registered under the Commercial Code amounted to 6 373, including: 6 021 physical persons and 263 legal entities. Some 1/3 of the registered companies did not operate.

**Table 13 Farm Structure and Relevant Land Area under Crops in 1997**

	Number of farms	Land area (in thousands of ha)	Average area in ha
State- and municipally-owned	493	1,259.2	2,554.2
Co-operatives	3,475	2,158.6	621.0
Individual owners and private farms*	1,783,495*	2,758.2	1.6
<b>Total</b>		<b>6,203.0</b>	

\* The number of individual owners and farms is the sum total of individual farmers plus another 6,373 private enterprises registered under the Commercial Code, 1/3 of which have ceased operations.

Source: NSI



The 1997 number of co-operatives totaled 3475. While the bulk of co-operatives are involved in production, there are others that lease storing facilities and equipment, farm machinery as well as provide services and workforce to private firms or smaller co-operatives. The average land area cultivated by co-operatives is 621 ha. The number of co-operative members averages between 300-400, with more than 80% of them being owners of the arable land cultivated by co-operatives. Only a very small number of land-owners do work on a full-time basis for their co-operatives. The viability of private co-operatives is largely dependent on their capacity and ability to operate as production units in a strongly a competitive environment.

In 1997, state- and municipally-owned companies amounted to 493.

Most recent data on the distribution of private farms by plot size date from 1996. In 1996 the arable land cultivated by private agricultural producers was 2675 thousands ha, or 1.5 per owner on average.

**Table 14 Structure of Private Agricultural Holdings by Size of Arable Land in 1996**

Size of arable land	Number of private agricultural holdings	% of the total number	Total size of land in ha	% of the total
Up to 0, 2 ha	915,217	51.5	83,101.7	3.1
Up to 0,5 ha	363,564	20.4	118,412.8	4.4
0,5-1 ha	256,442	14.4	180,535.2	6.7
1-2 ha	156,473	8.8	214,634.0	8.0
2-5 ha	68,474	3.9	205,148.1	7.7
5-10 ha	13,446	0.8	90,299.3	3.4
Above 10 ha	3,506	0.2	1,728,427.0	66.7
Total	1,777,122	100%	2,675,300.0	100%

Source: NSI

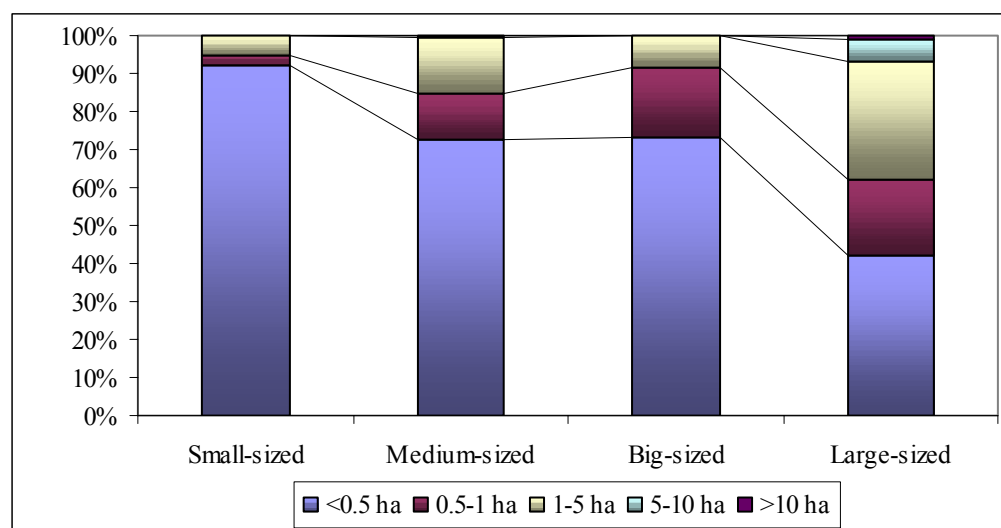
In 1996 the number of private farmers that cultivate up to 1 ha of land was highest - 1,535,223; the land area cultivated by them amounted to 14.6% of private farm land and accounted for 6.2% of the country's total arable land.

Private agricultural holdings cultivating more than 10 ha of land amounted to only 3,506. These were production units of the big farm type and large leaseholders of land. The land area cultivated by them averaged nearly 500 ha. Their relative share to all private agricultural holdings is only a bare 0.2% at the expense of the 65.9% of relative share of land cultivated by them, which accounts for 28.1% of the country's total arable land.

According to a national representative rural household survey conducted under a PHARE ACE project in early 1998, the distribution of private farms by value of production differs significantly from their distribution by size of land plot<sup>8</sup>. The survey findings also pointed that about 60% of the farmers classified as "large" in terms of gross output value and 83% of "big" farmers cultivated land plots of less than 1 ha. (Figure 6).

<sup>8</sup> Strategy for Agricultural Development and Food Security in Bulgaria, FAO, July 1999.

**Figure 6** Size Distribution of Bulgarian Private Farmers According to the Land Cultivated and the Gross Value of Production



\* According to gross value of output the farmers are divided in four roughly equal (in number) quartiles of size, which are labeled in ascending order of gross value as small, medium, large, and big.

Source: FAO, *Strategy for Development of Agriculture and Food Security in Bulgaria*, FAO, July 1999.

The survey also showed that during the 1997-1998 period approximately 77% or 1.5 million farmers did not sell their farm produce in the market, i.e. the degree of their market orientation was zero. It also revealed that all farmers classified as small in terms of gross output and about 84% of all farmers who cultivated arable land plots of less than 0.5 ha were not market-oriented.

**Table 15** Distribution of Private Farmers by Degree of Market Orientation and Gross Value of Output

Degree of Market Orientation (%)	Small-sized	Medium-sized	Big-sized	Large-sized	Total
	%	%	%	%	%
0	99.9	86.5	79.1	43.0	77.1
>0-25	0.1	6.3	7.2	14.0	6.9
>25-50	0.0	1.1	6.3	17.0	6.1
>50-75	0.0	4.6	3.4	15.7	5.9
>75-100	0.0	1.5	4.0	10.3	3.9
Total	100.0	100.0	100.0	100.0	100.0

Source: FAO, *Strategy for Development of Agriculture and Food Security in Bulgaria*, FAO, July 1999.

Only 10% of all private farmers (about 200,000) sold more than 50% of their produce in the market. These were mainly farms that had potential capacity to sustain operations and grow in an increasingly competitive environment. They however need further training, technical assistance and investment resources.

Under current Bulgarian legislation (the Farmer Support Act), “agricultural producers” shall be individual and legal entities producing crop and/or livestock production intended for the market. Further eligibility details are given in the regulations on SAPARD implementation.

**Crop Production**

Table 16 contains a comparison between 1989 and 1998 crop output trends. As can be seen, total crop output registered a significant decline as a result of the smaller areas under crops, with sunflower and pepper being the only exception, as well as a result of lower yields (tobacco excluded). The decline was brought about not only by the unstable production structures but also by the very fact that agriculture was dominated over by a growing number of small private producers who used inefficient production technologies and non-standard seeds of poor quality. Other reasons behind the decline ran as follows: poor soil cultivation and partial crop protection.

All this resulted in high production costs, producing an adverse effect on the competitiveness of the Bulgarian agricultural sector and impeding sales in both domestic and foreign markets.

**Table 16. 1998 Land Area, Crop Yields and Output Relative to 1989**

Crops	1989			1998*			% 1998 compared to 1989		
	Area 000 ha	Output 000 t	Yields t/ha	Area 000 ha	Output 000 t	Yields t/ha	Area	Output	Yields
Wheat	1,138.3	5,425	4.77	1141.7	3,203	2.81	0.3	-41	-41
Rye	24.9	52	2.40	18.4	27	1.44	-26.1	-49	-40
Barley	360.1	1,572	4.36	289.9	717	2.47	-19.5	-54	-43
Oats	38.0	107	2.70	44.5	63	1.43	-17.1	-41	-47
Grain maize	563.2	2,265	4.00	477.1	1,303	2.73	-15.3	-42	-32
Sunflower	413.9	458	3.99	538.8	524	0.97	30.2	14	-76
Sugar beet	40.5	966	24.60	4.1	61	14.92	-90.0	-94	-39
Tobacco	69.9	77	1.11	33.6	39	1.15	-51.9	-50	4
Apples	23.9	458	16.70	14.8	129	6.56	-38.1	-72	-61
Plums	17.2	140	5.80	12.8	62	2.80	-25.6	-56	-52
Peaches	10.6	99	10.60	7.9	42	3.61	-25.5	-58	-66
Cherries	10.9	83	3.90	8.3	33	2.18	-23.9	-60	-44
Field tomatoes	28.9	873	27.20	27.6	469	16.60	-4.5	-46	-39
Green house tomatoes				0.4	21	48.40			
Peppers	17.8	205	11.5	21.4	242	11.10	20.2	18	-3
Field cucumbers				11.5	159	13.50			
Green house cucumbers				0.5	34	69.40			
Onion	11.7	111	10.2	13.8	107	7.70	17.9	-3	-25
Potatoes	40.2	554	13.7	50.9	478	9.40	26.6	-14	-31
Wine grapes	132.6	587	4.6	98.1	319	3.24	-26.0	-46	-30
Table grapes	16.9	69	5.3	14.3	43	2.80	-15.4	-38	-47

Source: NSI

\*The data for 1998 are preliminary

In 1998, crop output registered a larger relative share of 51.9% within total agricultural output in terms of value.

Private farms are the biggest producers of fruit and vegetables, maize, tobacco and potatoes while private co-operatives have specialised in the production of cereals and oil seeds.

**Cereals** are of decisive importance for Bulgarian crop production. Wheat has the largest relative share in the production of cereals, followed by maize and barley.

### ***Tobacco***

Tobacco is the only crop subject to the strictest market and trade regulations. Relative to 1989, the areas planted with tobacco in 1998 decreased by 51.9%. The reasons behind this decrease had to do with the massive migration wave of ethnic Turks from Bulgaria in 1989 as well as the loss of the Russian market. The future growth prospects of the sector are largely dependent on the improvement of its export performance, especially in the Russian market, as well as of the tobacco brand structure that will meet consumer demand and compete with Western tobacco products. In terms of net value, the tobacco sector enjoys the largest share within total agricultural exports (40% on average in the period 1996-97 period), despite the drastic decrease in both output and export volumes over the last few years. Tobacco trade has made an important contribution to the country's positive agricultural trade balance.

### ***Fruit***

Prior to 1989, Bulgarian fruit was primarily exported to the CMEA markets. Since then Bulgaria has been seeking to find new fruit markets especially in Western Europe. Cherries and sour cherries, blackberries, raspberries, strawberries, blueberries and black currants are the most competitive of Bulgarian fruit in foreign markets. The sector however faces sales difficulties, which affect the condition of perennial crops. The sluggish ownership restitution of orchards is another factor at work; part of the orchards have been abandoned and are unfit for fruit growing. The rejuvenation of perennial crops requires significant investment, which smaller owners and producers cannot provide. Fruit production also depends on the canning industry and its financial potential and processing capacity.

### ***Vegetables***

As it often happens in this sector, producers switch from one vegetable crop to producing vegetables that sold most profitably in the previous year. This in turn leads to oversupply and price drops. The vegetable sector is dominated over by small private farmers whose farming practices disregard the principle of market efficiency. Most of them grow vegetables on small subsistence plots of land. Sales are further hampered by the absence of wholesale markets. The establishment of 10 wholesale markets of fresh fruit and vegetables and flowers under a Bulgarian-German project will help the development of the sector and ensure year-round sales at competitive prices. Furthermore, they will help producers of vegetables to overcome any pressure exerted by unfair competition, traders and intermediaries.

### ***Grape Production***

In the past Bulgaria boasted vast vineyard areas. Over the 1966-1970 period vineyards covered 190,000 ha. However due to misguided government policies in the vine growing sector producers had no motivation to produce quality grapes and raw material in particular. The anti-alcohol campaign in the 80's led to the eradication of vines and abandonment of vineyards.

In the following years, unsettled ownership problems continued to produce an adverse effect on the vine-growing sector. Relative to 1968 when the sector registered a peak, total vineyard area has stepped down by about 55% to 60%. The 1998 fruit-bearing wine vineyard area amounted to 98.1 thousand ha, registering a 26% decrease against 1989.

According to BANSIC data, vineyards (wine and table) on individual areas in 1998 covered 154 thousand ha.

The variety structure of white wine grape is based on 4 wine varieties. These are *Rkatziteli*, *Red Misket*, *Dimjat* and *Muskat Ottonel*. Their relative share over the 1993-1997 varied between 72% and 78%. It is however impossible to produce internationally competitive wines from these varieties. The share of the varieties of recognised wines with noble-origin Chardonnay, Sauvignon Blanc, Traminer and Riesling is well below 20%. The structure of the red wine grape varieties is more favourable. The prestigious and much sought after red varieties of Cabernet Sauvignon and Merlot enjoy the highest share of 55% and 74% respectively within the variety structure. **Some of the traditional domestic red wine varieties like Mavrud, the Broad-Leafed Melnik Vine and Gamza whose production has been insufficient to meet even domestic demand deserve special attention because wine of these varieties stands good chances in foreign markets.**

The age structure of vineyards is extremely unfavourable. About 35% of them is more than 20 years old, 28% is between 15 and 20 years old, 22% is between 10 and 15 years old, 13% is between 5 and 10 years old and only a bare 2% of vineyards is below 5 years of age. Due to a lack of funds, little has been done by the owners over the last few years to bring vineyards to a good and strong condition. **Support to both owners of vineyards and wine producers willing to invest in the rejuvenation of vineyards should be made available under SAPARD.**

The future development of the sector depends on the ability and potential of the wine processing industry to buy out grapes produce, which is in turn conditional on innovations and the technologies used by the industry and its processing capacity that will make Bulgaria a viable competitor in the markets already conquered (EU member states, Japan and the USA) and the return of Bulgarian wine to the Russian market possible.

### ***Animal Breeding***

The economic difficulties in the post-1989 period affected animal breeding in a most severe manner. The number of animals per herd and herd structure changed drastically, but so did animal ownership. The major changes in the sector over the 1989-1999 period amounted to: first, a drastic decline in animal numbers (see table 17) and second, the shift of animal ownership from the state and co-operative sectors to the private sector. Animal production is now basically focused in private animal holdings accounting for 98.5% of the cattle numbers, 99% of the cow numbers, 99% of the sheep numbers, 99.9% of the goat numbers, 94.6% of the pig numbers and 98% of the country's laying hen numbers.

**Table 17 Animal Breeding**

(in thousands)			
<b>Animals</b>	<b>01.1.1989</b>	<b>01.1.1999*</b>	<b>1989-1999 Trends (%)</b>
Cattle	1,613	671	-58
Of which cows	648	424	-35
Sheep	8,609	2,774	-68
Pigs	4,119	1,721	-58
Poultry	41,805	15,686	-62
Goats	436	1,048	140

Source: NSI

\*The data for 1999 are preliminary

The 1991-1994 period saw the biggest decline in animal numbers, following the dismantling of the production structures that had been operating for decades on end. All this led to a rapid decrease in the number of animals kept in the former state-controlled farm co-operatives and complexes. In the process of liquidation of co-operatives, animals were distributed amongst their members, which in turn resulted in the fragmentation of the sector and a drastic decline in animal numbers.

Following the liquidation of former farm co-operatives and SOEs (the large intensive animal production units), the sector has been subject to a most rigid fragmentation. At present 85% of the country's animals is housed by farms keeping 1 to 5 cows. Due to the lack of investment funds this breeding structure is difficult to manage, as it is characterised by misguided breeding practices aimed at self-sufficiency alone. Cows are reared on the basis of rather extensive methods of breeding. However, the last few years witnessed a tendency towards the establishment of larger farm units and animal holdings.

Now 2.6% of the country's cows is in herds of over 100 cows, 3.2% is kept in herds of 50 to 100 cows, 3.1% in herds of 20 and 50 cows and 6.2% is in herds of 5 to 20 cows.

Animal selection and artificial insemination are currently facing immense difficulties, which, if not overcome, animal breeding in Bulgaria will fail to meet EU requirements.

Animal breeding needs support along the following lines:

- Improvement of breed composition and structure;
- Enlargement and modernisation of animal farms and holdings; hygiene improvement of animal breeding brought into line with EU production and export requirements;
- Clear-cut specialisation of animal holdings and farms in meat and milk production;
- Production of high quality feeding stuff.

### ***Consumption***

Following 1989, household income has gone on the decrease, coupled with a parallel purchasing power decline as a result of the sky-high 1996 and early-1997 inflation. This in turn has led to a contraction in domestic consumption. The early-1997 shrinkage in consumer demand triggered an enormous increase in the relative share of the economy in kind (self-sufficient economy) where the bulk of total household income and expenditures were of a non-commercial nature.

**Table 18 Household Consumption of Basic Food Products (annual average per capita)**

Product	Unit	1989	1998	Change in % 1998 to 1989
Meat	kg	35.8	22.6	-37
O/w:				
Pork	kg	14.7	5.3	-64
Veal and beef	kg	2.7	5.9	119
Lamb, sheep and goat	kg	4	2.8	-30
Poultry meat	kg	10.2	6.6	-35
Meat products	kg	17.5	10.8	-38
Fish and fishery products	kg	3.4	3.2	-6
Milk	Lt	53	32.2	-39
Yoghurt	kg	63.7	23.3	-63
Dairy products	kg	15.5	12.3	-21

**Table 18 Household Consumption of Basic Food Products - Continued**

Product	Unit	1989	1998	Change in %1998 to 1989
Cheese	kg	11.1	9.4	-15
Eggs	numbers	170	127	-25
Vegetable oils	l	15.3	14.2	-7
Sugar	kg	12	8.9	-26
Vegetables	kg	59.8	60.1	1
Fruit	kg	42.6	35.7	-16
Potatoes	kg	28.3	27.1	-4

Source: NSI.

As household income increases, consumption will go on the rise too, hence domestic market potential.

### **Farm Machinery**

At the outset of the economic reform in Bulgaria there were 52 000 tractors of a total horsepower of 4 million (h.p.). Compared to other countries, farm machinery in Bulgaria lagged significantly behind in terms of both quantity and quality. There was up to 70 h.p. per 100 ha of farm land in Bulgaria against 200 – 300 h.p. in EU member states and over 460 h.p. per 100 ha in Germany.

Following 1990, the renovation of farm machinery has been practically brought to a halt. During the transition period, machinery prices tended to outstrip the prices of agricultural products. As a result, in early 1995 about 35% of the 1991 machinery was practically non-existent due primarily to plunder and destruction and the suspension of machinery renovation, which was to cover some 12 to 13% of its total number. What has left of the farm machinery used under the command economy was now out of date and dilapidated. Only some 20% of the grain harvester was less than 10 years old

**Table 19 Available Farm Machinery**

Type of farm machinery	1980	1985	1990	1997	% of 1990
Tractors	61,968	55,161	52,375	38,928	74
Seeders	15,897	14,170	14,499	11,346	78
Harvesters	9,632	8,492	8,358	6,507	78

Source: MAF

**Table 20 Depreciation of Farm Machinery (1996)**

Type of farm machinery	Total	More than 10 years old	% of total	% for scrap
Chain tractors	4,712	2,309	49.0	15.3
Wheeled tractors	34,216	19,312	56.4	12.5
Harvesters	6,720	3,575	53.2	12.8
Silage harvesters	1,260	889	70.5	20.9
Specialised combines	185	77	41.6	14.0

Source: MAF

Market surveys over the past few years and agricultural development guidelines have allowed MAF experts to make the following investment projections over the next 5 years (2000-2004):

**Table 21 Investments in Farm Machinery**

Type of farm machinery	Number of pieces for 1 year	Number of pieces for 5 years	Unit price	Total investment amount for 1 year	Total investment amount for 5 years
			EUR	'000 EUR	'000 EUR
Tractors of engine power between 60 and 120 h.p. (Mainly domestic production and import from Belarus)	600	3000	11 321	6 792	33 962
Tractors of more than 120 h.p. engines imported from EU members states	100	500	66 038	6 604	33 019
Trailing equipment (ploughs, cultivators, seeders, fertilizer-sprayers, trailers, balers and others – from 1.8 to 2.3 of the tractor value. Grain-dryers and other equipment)			-	26 792	133 962
Combine harvesters (import from EU)	150	750	141 509	21 226	106 132
Combine harvesters – import from Russia	50	250	56 604	2 830	14 151
Spare parts				14 151	70 755
<b>TOTAL</b>				<b>78 396</b>	<b>391 981</b>

Source: MAF

The projections made indicate that, on a yearly basis, the sector will need about EUR 80 million worth of investments or about EUR 400 million over the next five years. The implementation of the projections means taking out of use about 4000 tractors, which are now between 17 to 18 years old (or about 240-250 thousand h.p.) due to wear and tear, replacing them with new tractors having a total of 320 –350 h.p. As regards harvesters, it is expected that another 1,000 new units can replace the 2,000 fully worn out tractors now in use. Over the next five-year period, a crucial change in the quality of soil cultivation (tillage, sowing, fertilisation and plant protection) must be effected to make Bulgarian agriculture a really efficient and competitive sector of the economy. The investment needed should be regarded as only minimum required.

In 1997 and 1998 the government authorised duty free imports of farm machinery. As a result, 260 tractors and spare parts had been imported as of August 1, 1998.

As for potential investors in farm machinery, privatised companies for agri-mechanisation services, and big leaseholders are expected to have the largest share. Big leaseholders, companies and some co-operatives are also expected to embark on investing in modern agricultural machinery. The small land-owners (cultivating 2 to 3 ha) will either jointly cultivate their land or lease it, even put it up for sale eventually. Those who cultivate their land by themselves will focus on vegetable and fruit growing and small-scale animal husbandry. Their income and the loan security required by banks will not allow them to assert themselves as large investors in modern farm machinery.

### ***Fishery and Aqua-culture***

Fishery and aquaculture is a specific agricultural sub-sector. Its share within GDP is less than 1.0%. However, the sector plays an important role in the structure of agriculture as it provides high protein food, which is an important element of human nutrition. As in the



EU, the sector is very sensitive, for it provides employment to a significant part of the population living along the Danube and the Black Sea coast, as well as to people inhabiting the interior areas of the country where fish farms and enterprises and dams are located. While unemployment in these regions is rampant, the sector ensures good employment opportunities.

The Common Fisheries Policy has been developed by the EU, due to the importance and high sensitivity of the sector, despite the latter's minor contribution of only 1% in the GDP of the EU member-states.

The sector encompasses the following sub-sectors: fresh water fish-breeding, industrial fishing in inland water reservoirs, industrial fishing in the Black sea, sea aqua-cultures, processing of fish and other water animals, protection of fish resources and control over fishing activities.

Over 80% of enterprises in fresh water fisheries and Black Sea fishing have been privatised. There are over 70 private, state-owned and of the mixed type companies operating in the sector, providing employment to 7000 people. However, the total number of employed in the fishery and aqua-culture sector surpasses 7000 (including licensed individual fishermen – the Danube and the Black Sea; employed involved in fisheries and industrial fishing – big state-owned and smaller local dams) which is indicative of the importance the sector has in the country's coastal and riverside regions. There are several stable trading companies focusing on ocean fishing and/or frozen fish imports (about 13 000 - 15 000 tons per year). Black Sea fish catch is estimated at about 5 to 6 000 per year while periwinkle catches amount to about 4 000 tons. Average annual fresh water fishery output amounts to around 7 000 tons including dam output. However, there is no data reporting system in the sector (no data on companies, employees or output). One of the main reasons is that there is no uniform system of producer licensing and registration, as the sector is structurally subordinated to different institutions.

Fishing along the Danube is 100% carried out by private "individual" fishermen having industrial fishing licenses issued by the Fishery and Aqua-Culture Agency. Fishing provides living to more than 900 households and is of vital importance to many others inhabiting the country's coastal and riverside regions. According to official data, Danube fish catches have amounted to 1200 tons on a year's average.

Practically, Black Sea fishing is also carried out by individual fishermen in open-deck boats; net fishing and coastal fishing (100% private interest; 95% of private interest in ship fishing), encompassed by the system of fishing licensing, experimentally tested over the last few years in Bulgaria. Replacing the former state monopoly over the sector, the system is being applied on the model of worldwide fishing practices, at the same time complying with EU requirements. In 1998, a total of 1500 industrial fishing licenses were issued, 1469 to individual fishermen in open-deck boats, 41 to fishing vessels, 45 to periwinkle divers and 56 licenses for sea and lake net fishing. In 1999, the number of Black Sea fishing licences issued amounted 2 827.

Industrial fishing in inland reservoirs (mostly dams under Napoitelni Sistemi, plc., Jazoviri i Cascadi Company under the National Electric Company, plc. and Water and Sewers companies) is carried out primarily by private fishermen who will be encompassed by the licensing system as regards their activity in terms of security, control and reproduction of fish resources (artificial fish stocking). All these reservoirs can provide a solid basis for the production of highly protein food as well as for the organisation of active fishing and agri-tourism which is central to the mountainous and

semi-mountainous areas where they are located, supporting rural population to diversify economic activities and earn income. There are in Bulgaria over 250 big-sized (over 500 ha) and small-sized (over 100 ha) state-owned dams as well as over 2 200 small- and medium-sized municipality-owned dams (once within the irrigation and land improvement fund of former co-operative farms and agricultural industrial complexes).

At present, the following major issues and strategic objectives in the sub-sector are being dealt with:

An agreement on fish trade liberalisation between the EU and Bulgaria, granting both parties duty free export quotas on a reciprocal basis has been finalised, now pending enforcement.

A program aimed at the development and support of the country's fish gene pool as well as the stabilisation of the fishery resource base, has been developed and financed by the State Fishery Inspectorate. Under the program, the country's major water reservoirs and dams are being stocked with valuable fish species; the stock material is purchased from producers that provide genetically pure breeding stock. Serious efforts have been made as regards sturgeon re-stocking of the Danube and the subsequent strengthening of sturgeon resources.

A system of industrial fishing licensing in the Black Sea, the Danube, and inland reservoirs has been introduced in Bulgaria; it largely complies with the current EU licensing system in the fishery sector of the member-states. The introduction of a registration and/or licensing system for all economic agents in the sector, be they legal entities or individuals, is imminent.

Efforts are now focused on the establishment of a nation-wide statistical information system, similar to these applied by the EU and FAO. A project for the establishment of wholesale fish markets is currently underway. The implementation of these projects calls for vast amount of funds, which are raised from the licence fees collected by the State Fishery Inspectorate and budget allocations.

### ***Forestry***

Bulgaria's forests and woodland amount to 3.8 million ha and account for 34% of the country's total area. Total afforested area is 3.24 million ha, which represents more than 80% of the country's total forest area. According to the share of forest area (30%), as percentage of the country total area, Bulgaria ranks 19 in Europe.

Coniferous and deciduous species cover 1.2 million ha and 2.1 million ha respectively of the country's total forest area. Total forest stocks/resources are estimated at 467 million m<sup>3</sup> of "standing wood". Annual growth per 1ha averages 3.8 m<sup>3</sup> while total annual growth amounts to 12.3 million m<sup>3</sup>.

A large part of the country's forests (1,337 million ha or 39.8% of the total) are forests of special use.

The vastest forest areas are to be found in mountainous regions; approximately 80% of the total. As a result of the large-scale afforestation carried out over the last 50 years, young forests of 45 years of average age are predominant in the country. Forests below 40 years of age old account for 54% of all forests, and cover 1,83 million ha.

The Forest Ownership Restitution Act and the Forest Act of 1997 have led to profound changes in the former patterns of forest management and use.

It is expected that when the restitution process is accomplished forested areas in Bulgaria will be distributed in the following manner according to their ownership titles – municipality – 51% of total areas, state – 36%, private –10%, others (church, schools, etc.) –3%.

Afforestation is a key measure that has been implemented for years on end to fight soil erosion and improve forest productivity and stability and protect the most valuable genetic forest resources of the country. Afforestation projections point to 23 000 ha in total yearly. Actuals, however, covered 10 000 ha over the last few years and only 7 500 ha in 1998. Scarcity of funds, among other things, is the main reason behind the unsatisfactory level of afforestation and other forest maintenance activities planned.

Problems have been also prompted by the worsening phyto-sanitary condition of forests (desiccation, etc.) and fires, which in turn make afforestation a top priority measure in the next few years. In 1998, the desiccation-affected forest areas amounted to 34 523 ha and accounted for 1% of the country's total forest area.

The existence of 2.5 million ha of abandoned, highly eroded and unfit for agricultural use land, not included in the forestry fund, can develop into a significant area potential for afforestation. Planting new forests is an alternative to gradual soil degradation.

### ***Irrigation***

Bulgaria is not a country rich in water resources. Its geographical location and hot summer climate make irrigation an important productivity factor for the Bulgarian agricultural sector. Until 1989, the country's irrigation system covered some 1.2 million ha of irrigated land out of 4.8 m ha of total arable land in the country.

The state-owned irrigation and land improvement network is managed and used by Napoitelni Sistemi plc. The 1997 irrigation infrastructure encompassed: 160 irrigation dams, 847 pumping stations, 7228 km of irrigation canals and derivations, and 8093 km of irrigation pipe system. Total irrigatable land amounts to 636,000 ha. There are 40 drainage facilities constructed on 130 000 ha of land and 89 drainage pumping stations of 30 000 kW of aggregate pumping power. Apart from the state-owned irrigation and land improvement network, there are also smaller irrigation networks built by former farm co-operatives and agricultural complexes, now owned by municipalities. These are mainly micro dams and local networks of canals and irrigation facilities.

Stemming from the instability and disturbances in the agricultural market, the decreasing water demand for irrigation purposes, poor technical condition of irrigation facilities, low percent of actually irrigated land areas have grown into a major problem encountered by agriculture. It is noteworthy that about **40% of the country's irrigation system is of low efficiency while 80% of the internal canal system is practically unusable.**

In 1990, the land area actually irrigated amounted to 570,000, steadily decreasing to only 50,000 ha in 1997.

The reasons behind the decrease in the land areas actually irrigated are as follows:

- changes in the agricultural production structure and higher irrigation costs; high delivery costs of pump station water and hence price increases;
- poor maintenance and breakdown service of the irrigation network;
- absence of viable structures, taking over the management of the irrigation system and network, given the enormous number of new land owners and potential water users. The structural adjustment of Napoitelni Sistemi plc and the establishment of water

user associations are imminent. Clearly, any investment in the country's total irrigatable land is not justifiable, as only some 10% of it is practically used. Investments should focus only on areas where irrigation is actually carried out, bearing the highest possible RoI, i.e where irrigation improves productivity and hence brings about income growth.

### ***Agri-environmental Concerns \****

#### ***Soil Erosion***

About 60% of Bulgaria's total area and 72% of the country arable land is endangered by erosion processes. Water erosion has had a lasting effect on 4.8 million ha (43% of the country's total area), 802 thousands ha of which being strongly eroded and another 875 thousands ha calling for emergency anti-erosion protection action. The average annual loss of soil amounts to 147 million tons of produce.

About 1/3 of the country's arable land or 1.6 million ha have been affected by wind erosion leading to the loss of 30 to 60 million tons of produce out of fertile soils on an annual basis.

#### ***Acid Content of Soils on the Increase***

The acidification of soils is a serious problem at present. Genetically acidified soils (including forest soils) comprise about 50% of the country's territory.

Acidified soils (pH<5.6) cover 1, 510 thousand ha of the country's total arable land. They are divided as follows:

- Slightly acidified soils (pH 5.1-5.6) - about 630 thousand ha;
- Moderately acidified soils (pH 4.6-5.0) - about 460 thousand ha;
- Strongly acidified soils (pH 4.0-4.5) - about 310 thousand ha;
- Highly acidified soils (pH<4.0) -about 110 thousand ha.

Soil acidification has led to changes in soil microbiological properties, disruption and disintegration of the soil structure, causing a growing leakage of soil nutrients and ultimately a loss of soil fertility.

#### ***Soil salinisation***

Saline soils cover 35 thousand ha, accounting for 0.6% of the country's arable land and 2.4% of Bulgaria's irrigatable land. Two hundred and fifty-two ha have been industrially salinised due to spillover and incidences close to salt pit facilities.

Soils that have undergone secondary salinisation are to be found in vast fertile and plain areas around the country, which are suitable for mechanised cultivation and irrigation following land improvement.

#### ***Chemical pollution***

Land and soil contaminated by heavy metals and metalloids (43 600 ha) due to:

- Emissions of industrial enterprises;
- Chemicalisation (use of plant protection preparations and chemicals)
- Irrigation (using polluted water for irrigation purposes);

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\* Source: Ministry of the Environment and Water Resources: Annual Bulletin

- Automobile transport (exhaust fumes);
- Contaminated soil (stable organic contaminants - PAH, PCB and pesticides)
- Oil pollution due mostly to incidences, accounting for their limited area effect. They have affected only 137 ha.
- Radio- nuclide contamination of soils and land - 1 049 ha.

### ***Heavy Metals and Arsenic Pollution of Soil***

Soils polluted with heavy metals and arsenic in Bulgaria total about 43,000 ha or 0.9% of the country's farm land. Lead, arsenic and cadmium are pollutants that are closely monitored. The above problems can be overcome only by the implementation of soil rehabilitation projects and the use of environmentally-friendly industrial technologies, together with proper and adequate planning and management of the country's environmental policy priorities. Both emission rates and testing equipment have been brought into line with EU requirements.

### ***Soil Pollution Due to Overuse of Fertilisers and Pesticides***

Since 1981 the use of fertilisers has drastically declined. Given 109.94 kg of nitrogen fertilisers used per ha, the 1998 amount had stepped down to 20.77 kg/ha. The use of phosphorous and potassium fertilisers has also decreased from 90.16 kg and 1.89 kg to 26.84 kg and 1.44 kg respectively.

1998 witnessed a record low use rate of mineral fertilisers. The drastic decline in the use of fertilisers can be identified as one of the reasons behind the decline in agricultural output (table 22).

**Table 22. Use of Fertilizers over the 1981-1999 Period (in tons)**

	<b>NPK</b>	<b>Kg/ha</b>	<b>N</b>	<b>Kg/ha</b>	<b>P<sub>2</sub>O<sub>2</sub></b>	<b>Kg/ha</b>	<b>K<sub>2</sub>O</b>	<b>Kg/ha</b>
1981	1 056 369	226.98	511 761	109.94	419 688	90.16	125	26.84
1995	142 127	30.96	129 545	27.6	12 426	2.68	156	0.03
1996	164 894	35.61	151 883	32.36	12 824	2.76	187	0.03
1997	163 922	36.47	145 773	32.49	16 275	3.58	1 864	0.40
1998	113 146	24.11	97 497	20.77	8 900	1.89	6 749	1.44
30.06.99	111 972		107 662		3 328		982	

Source: NSI.

### ***Monitoring***

The management, control and protection of the environment, environmental and natural resources and biological diversity are carried out by and through the Ministry of the Environment and Water Resources as the government competent authority responsible for the implementation of national environmental policies. The Environment Agency is authorised to organise and supervise the activity of the National Computerised System of Environmental Monitoring, which releases information as to the quality of the environment in Bulgaria on a regular basis.

The national network of environmental monitoring has been set up complying with both national and EU environmental standards, aiming to monitor and assess the font background of the country's environment and report any change occurring as a result of anthropogenic effects on nature. The data gathered are published in quarterly and yearly bulletins.

### ***Air***

The emission rates of all sources of air pollutants and contaminants as a result of anthropogenic effects on nature are summarised in 11 major groups and published on a yearly basis.

The National Network of Air Quality Monitoring consists of 69 stations located in 39 settlements around Bulgaria responsible for monitoring the concentration rates of the key indicators making up the ground air layer such as dust, sulphur dioxide, nitrogen dioxide, lead aerosols as well as some specific air pollutants as hydrogen sulphide, etc.

### ***Water***

The National Ground Water Monitoring Network encompasses 253 stations and another 3 automated stations along the rivers of Struma, Mesta, and Maritsa. The frequency of water testing and sampling is 12 times a year. Tests are analysed by a specific scheme and indicators (24 basis physical and chemical indicators, including some specific indicators as well), all of them provided for in current legal acts and regulations. It can be said that the quality of river water has tended to slightly improve since 1996 due mainly to the fact that many enterprises using outdated purification technologies and facilities have ceased operations. On the other hand, production has also decreased and new effective purification facilities were put in place.

As for coastal water and coastal/seaside lakes and the 56-km zone, their water quality has improved and even stabilised despite some occasional disturbances in the performance of the indicators. The above improvement has been due to the enhanced efficiency of water quality management in coastal regions, including better control of pollution, construction of sewers or reconstruction and renovation of sewage farms.

Underground water is monitored on the basis of samples taken from 223 water reservoirs located in 14 hydrological regions. Nitrogen compounds (nitrates, nitrites, etc.) have been reporting values well above the normal rate. Overall, the change of underground water quality can be said to be rather insignificant.

### ***Land and Soil***

Land and soil quality is monitored in respect to heavy metal pollution (318 stations distributed by sources of pollution), stable organic contaminants (98 stations for poly-aromatic hydrocarbons, polychlorobiphenyls, chlororganic compounds/prohibited pesticides and 48 stations for pesticides), acidification (70 stations) and salinisation (15 monitoring stations). The implementation of a mathematical model of water erosion forecast assessment is imminent.

The monitoring stations are located throughout the country, allowing for the timely and accurate recording of soil quality change.

Compared to previous years, there were no new areas polluted with heavy metals in 1999. Most cases of pollution are locally based in some problem regions where environmental indicators are being monitored on a regular basis.

The fact remains that industrial enterprises, mines and waste-water are the key sources of soil pollution and contamination. Chemicalisation (plant protection preparations containing heavy metals), irrigation (rivers contaminated by wastewater from mines) and automobile transport cannot be identified as a potential danger of soil pollution.

Pollution with pesticide residuals is mainly locally based in regions close to major industrial centres, which are also intensive agricultural regions. Monitoring is carried out on a yearly basis, with the density of monitoring stations going on the increase.

Traces of soil acidification and salinisation have not been detected over the last 8 years.

### ***Forest Eco-Systems***

Bulgaria has been a member of the International Co-operative Program for Evaluation and Monitoring of Atmospheric Pollution Effects on Forests since 1986.

The findings of the monitoring tests and samples in a 16 km x 16 km zone have confirmed that tree species in Bulgaria have been steadily deteriorating.

Trees that have not suffered any visible damage account for 11.6% while trees that are mildly to strongly defoliated amount to 60.2%. The share of defoliated trees over the last two years has stepped up by 10%.

Only some 9.5% of trees of the coniferous species monitored in Bulgaria have not been defoliated. The share of defoliated and dead trees has increased by 6.6% and 5.9% respectively.

Sampling over the last two years has shown that the share of trees without any visible symptoms of defoliation has reported a significant decrease while the share of defoliated trees has gone on the increase.

On the other hand, trees of the deciduous species showing no symptoms of defoliation amount to 14.2%. The share of strongly defoliated and dead trees account for some 20%. Over the last two years, the share of damaged trees has stepped up by 4.5%.

### **Protected Areas**

Total protected areas in Bulgaria amount to 4.42% of the country's area. The Protected Areas Act (OG 133/1998), providing for 6 categories of protected areas sets out different timetables for the recategorisation of the above areas as well as management plans.

- Reserve – These areas are model natural ecosystems that include typical or remarkable wild plant and animal species and their habitats
- National park – National Parks should not contain populated areas within their boundaries. They include natural ecosystems with high flora, fauna and habitat diversity, with typical and remarkable scenery and non-living natural features
- Natural monument – natural monuments are typical or remarkable non-living natural features such as rock formations, rock excavations of scientific value, earth pyramids, caves, caverns, waterfalls, fossils and mineral deposits, sand-dunes and other features of exceptional value due to their inherent rarity, representativeness, aesthetic value or scientific or cultural significance
- Maintained reserves – they contain ecosystems with multi-formity of plant and animal species and habitats thereof, with typical and remarkable scenery and non-living natural features
- Natural park - these areas include diverse ecosystems with multi-formity of plant and animal species and habitats thereof, with typical and remarkable scenery and non-living natural features.
- Protected Locality – they include:
  - i- areas with typical or remarkable scenery including those that are the result of the harmonious existence of man and nature and which stand out for their significant aesthetic value
  - ii- habitats of endangered, rare and vulnerable plant and animal species and communities

National Parks, Reserves and Maintained reserves are owned, administered and monitored by the state, while Natural Monuments, Natural Parks and Protected Localities will be owned and administered by their owners (not necessarily the state).

Bulgaria is party to all of the international agreements that are related to site protection. There are five designated Ramsar sites in Bulgaria, which are covered by five Important Bird Areas (IBAs) :Atanasovo lake; Durankulak lake; Srebarna lake, Ropotamo Complex, Shabla lake complex.

1998 saw the adoption of the National Strategy for the Protection of Bulgarian Biological Diversity. The implementation of the strategy has been assigned to the institutions responsible for protecting and influencing the country's biological diversity.

A CORINE-Biotopes project has been finalised providing for the description and mapping out of 141 sites enjoying eco-systems of European importance as well as of the habitats of some endangered wildlife species. The places cover a total area of 1396561 ha, that represents 12,6% of the total territory of Bulgaria. 95 of the sites are in Protected areas with total area 458000 ha (93% of the total territory of the protected areas in Bulgaria). 27 of the sites cover an area over 10000 ha. The 6 biggest protected areas in the country (25000 – 120000 ha) cover most of the sites of CORINE that are situated in the following places: (national parks Central Balkan, Rila and Pirin; natural parks Strandja, Vratza Balkan and Vitosha). Depending on the main selection criteria the Sites were categorised as ones with:

- Botanic importance – 13 sites
- Zoological importance – 53 sites
- Habitat importance – 23 Sites
- Zoological and botanic importance - 11 Sites
- Habitat and zoological importance – 24 sites
- Complex motivation – 17 sites.

The Selection of the Sites of Special- Protection Areas (SPA) became possible after the preparation of a classification of the Palaeo-arctic habitats. In this classification 704 taxonomic units were represented that are describing the habitat diversity of the country. 400 of them are elementary units in the habitat classification.

The establishment of a Protected Area Cadastre is currently underway.

At the present moment in Bulgaria exist 3 main elements that represent the potential base of the future Nature 2000 network:

- Network of protected areas, defined by the existing Bulgarian legislation. The total area of the network is 3,4% of the total area of Bulgaria.
- CORINE sites network defined by the criteria of the CORINE biotopes program which determines the Special Areas of Conservation according to the Habitat directive
- Important Bird Areas Network, defined by the criteria of Bird life international sites, determines the Special Protection Areas according to the Birds directive. There are 48 IBAs that correspond to the requirements of the Bird directive and 34 of them are totally covered by CORINE Sites and correspond to the Habitat directive. They cover a total area of 7,002 sq. km or 6,3% of the land area of the country. They are positioned mainly along the River Danube and the Black sea coast as well as in the central and Eastern Stara Planina mountains and in the south-west of the country.



It is considered that the IBA and CORINE sites network together with the part of the National Protected Areas that correspond to the Directives 79/409/EEC and 92/43/EEC have to lay the potential base of Nature2000 network.

*Source: Ministry of the Environment and Water Resources: Annual Bulletin  
Environmental Report (The Green Book).*

### ***The Impact of Climatic Changes on Agricultural Development***

According to data of the World Meteorological Organisation, the concentration of “greenhouse” gases over the last few years has registered a certain slowdown in its growth rate, sustaining, however, the upward trend of the general gas content. As for agricultural production, animal breeding and rice growing are the main source of methane while plant growing turns out to be the main source of nitrogen and carbon oxides. The recent rise in air temperature is associated with a rise in soil temperature and growing evaporation as well as changes in rainfall volumes and seasonal rainfall distribution, which in turn imply drastic changes in crop production.

The assessment of the effect of climatic changes on agriculture calls for urgent measures restricting the emissions of greenhouse gases and the pursuit of a new structural policy of regionalisation and a crop variety policy that will ensure sustainable agricultural growth.

A national action plan has been adopted aimed at adapting the sector to changes in the climatic conditions. The plan draws upon the following priorities in reducing greenhouse gas emissions:

- Improvement of equipment and facilities for solid and liquid manure collection and storage;
- Construction facilities for ground storage of manure, extraction and use of bio-gases;
- Composting of farm and household waste at special places and use of compost;
- Improvement of rice production technologies;
- Implementation of measures aimed at the improvement of the phyto-sanitary situation and quarantine.

### ***Science and Education***

#### ***Education (University and Secondary)***

The Ministry of Agriculture and Forestry finances 100 colleges and technical schools as follows: 71 agricultural colleges, 3 veterinary colleges, 14 colleges and technical schools of forestry and timber processing and 12 colleges of food processing. In 1998, the number of students coming out of these colleges and schools amounted to 8 241 (5 168 students coming out of colleges and 3 253 out of technical colleges), or 62.8% to 38.2%. Over the 1998/99 school year, the number of students amounted to 9 364 (6 147 in colleges and 3 217 in technical schools), or 65.7% to 34.2% in favour of college students.

There have been 238 classes in agricultural colleges in the country, 169 of which are financed by MAF, 21 non-MAF funded schools and 48 classes in agricultural economics. Given an average of 215 students per agricultural school, the number of students in the 1999/2000 school year amounts to 5 117.

There are 126 classes, i.e. 2 709 students in forestry and timber colleges. Overall, there will be 7 626 students in a total of 364 classes in agricultural and forestry schools, about 4 928 of whom will come out of school in 2005 (68% colleges) and another 2 304 students finishing technical schools in 2004, registering a decline of about 8% in four years.

According to NSI data, the 1999 number of eighth year students amounts to 65 892. Students in agricultural, forestry and food colleges account for 12%.

There has been a growing interest in technical schools. The number of in-coming students in 2003 is expected to amount to 11 917. In 2006, about 3000 students are expected to come out of technical schools.

The above data are indicative of the growing students' interest in agriculture-related professions. Their interest will further increase, following the completion of forestry and land restitution. Currently, the dominant professions in agriculture are as follows: farm technician, farmer, mechanisation services in agriculture, mechanic of farm machinery, driver, operator in the food processing industry, forestry and timber processing, furniture.

Part of the graduates, however, find other jobs (e.g. mechanics of farm machinery and drivers). There have been no statistical reports about the percentage of students applying for agricultural universities.

The changes that affected the agricultural sector presuppose changes in educational and training patterns. There is a growing need for training in management of small- and medium-sized farms. Certain changes have already been effected, e.g. the inclusion of consultancy in school syllabus. Although there is an enormous university capacity in technical agronomy and veterinary science and research, it has never been intended to take over the training of farmers, which is still carried out at a secondary level of education.

Currently there are 66 research institutes as follows: 22 field stations, 15 veterinary stations and 5 laboratories, relying on well-qualified staff. The level of technical specialisation is also high. The growing need for self-financing currently makes research centres embark on shorter-term and more profitable research.

In 1998, the number of university students and post –graduates amounted to 2033 and 171 respectively, stepping up to 2 349 students and 425 post-graduates in the 1999/2000 school year.

Schools and universities need to be restructured to take over the training of farmers applying for aid under the National Agriculture and Rural Development Plan.

#### ***Extension Services and Consultancy – National Agricultural Advisory System (NAAS)***

The NAAS to MAF provides support, expertise and consultancy to farmers under the market economy.

The System has been established by the Agriculture Ministry and the Agricultural Academy supported by a PHARE project. Initially, all running costs (office and equipment) were covered by the PHARE Program but in the course of the project MAF provided funds and is currently financing the system.

The technical assistance package provided a wide variety of training courses to NAAS staff. As extension services should draw upon broad experience in agriculture, the NAAS was intended to recruit mainly some of the research staff of the Agricultural Academy. The extension services are well provided with information collected by the Information Centre. Agricultural advisors took part in extensive training organised by the Training

Centre and are now employing modern analytical accounting methods in farm management advice.

The PHARE Program continued to provide assistance to the NAAS in 1998 as well. The number of local extension services has gone on the increase complemented by some specialised extension services in agriculture. The NAAS operates on three levels as follows:

- National level – NAAS overall activity is managed by the Science and Education Department of MAF. Apart from the HO, there are also three national Information, Training, Agri-business Centres and an Analytical Laboratory for Agro-chemistry Advice;
- Regional level – the regional advisory services operate under the Regional Offices of the Agriculture Ministry;
- Local level – since September 1997 the number of local extension services has increased to 30. Another 3 specialised extension services have been established to provide advice in plant protection, irrigation, vine growing and the wine sector. All services have been continuously supported by the PHARE Program. As envisaged, the NAAS is to be complemented by new specialised units.

The NAAS relies on an information system (local MAF network) consisting of Internet services and a file server. It is used for the management and maintenance of the Internet network of the NAAS and information services offered by NAAS or its main social partners; building, publishing and maintenance of web pages; rendering communications services among NAAS units and full access to the Internet. There is also a NAAS Internet network in place, providing access of all local advisory services to the NAAS HO; direct access of all Sofia-based units to the HO; full access of all NAAS units to the Internet.

### 1.2.2. The Food Processing Industries

#### Share of Food processing industry in GDP 1993-1999 (in %)

Sector	1993	1994	1995	1996	1997	1998	1999
Food processing	4.5	4.0	4.2	4.2	3.4	3.4	3.8

Source: NSI

The share of food processing industry in GDP reached 3.8% in 1999. In 1998, the share of the food, beverages and tobacco products accounts for 19.5% of total industrial output produced, the share of food, beverages and tobacco products accounts for 10.6% of the total export and the share of employment is about 4%.

The production capacity of the processing industry was so developed as to meet not only domestic but foreign demand as well (the former Soviet Union and CMEA). The loss of these markets, along with economic restructuring, entailed a substantial production decrease. It is currently estimated that the processing industry utilises only about 40% of its capacity.

Foreign direct investments in the sector reached USD 285.9 million in the period 1992 to 30.06.1999. These are mainly EU investments, in particular from Greece (51%) and Belgium (22%). Investment in the food processing industry accounts for 30% of total foreign investments in Bulgaria. (See Table)

**Table 22a Foreign Investments in the Food Processing Industry per Years and Sub-branches as of 30<sup>th</sup> June 1999 /in thousand \$US /**

Sub-branch	1992-1997	1998	January-June 1999 /pre-data/	Total 1992-1999 till 30.06.1999/
Brewery industry	55,807	1,325	112	57,244
Soft drinks industry	51,049			51,049
Mill industry	48,344		195	48,539
Sugar industry	33,190	1,874	129	35,193
Canning industry /fruit and vegetables/	27,866	302	11	28,179
Dairy industry	17,578	8,298		25,876
Wine industry	2,885	15,660	3,200	21,745
Oil industry	6,800	3,292		10,092
Bread industry	5,439	15		5,454
Tobacco industry	1,270	154	8	1,432
Meat industry	0	299		299
Others	684		93	777
<b>Total :</b>	<b>250,912</b>	<b>31,219</b>	<b>3,748</b>	<b>285,879</b>

Source MAF

Leading foreign companies are "EASTSTARCHE", the Netherlands (with the participation of the Belgian "Amylum Group"), invested over 46 million \$US (a maize products plant - Razgrad ), followed by "BREWINVEST", Greece with 40,4 million \$US (a brewery "Zagorka"), "KLARINA HOLDING" - Luxembourg with 38,6 million \$US (soft drinks production), "LUXCRAFT", UK - 19,1 million \$US (a canning factory "Storco"), "KRAFT FOODS INTERNATIONAL", USA - 16,6 million \$US (a sugar products plant in Svoge), "SEABORD OVERSEAS", USA - 15 million \$US ("Vinprom Russe"), "INTERBREW" - Belgium - 10,4 million \$US (breweries in Plovdiv, Burgas, Haskovo etc.), "NESTLE", Switzerland - 12,5 million \$US (the chocolate factory in Sofia). Among the biggest investors are also companies like "DANON" - France and "DELTA" - Greece (dairy industry), "HELIAN COMMODITIES" (oil industry) and others.

As 75.8% of the fixed assets in the sector have been privatised, the majority of processing establishments are now private. There are only 24 enterprises with predominant state-owned interest now operating in the sector, which account for 9% of all 261 former state-owned enterprises. Another 1 276 new enterprises for food production have been built.

The food industry is still producing a rather limited range of products, which face strong competition from Western rivals. The wine and canning industries are primarily exported while the remaining industries meet domestic demand and their production volumes are thereby dependent on domestic consumption.

### ***Wine Industry***

The wine industry is the only sector in the Bulgarian food processing industry that has registered growth over the last 9 years. Production capacity utilisation has, however, varied between 40% and 80% across wine enterprises due mainly to the insufficient

quality grape supply. As the sector is export-driven, only 20% of Bulgarian wines is placed on the domestic market.

The EU, Japan, the CIS countries, Poland and the Baltic states are the main export markets of Bulgarian wine. Wine is one of the agricultural products enjoying comparative advantages. According to EC data, wine quotas are 100% utilised far before end-year.

Persistent and acute shortages of quality wine grapes are the most severe problem encountered by Bulgarian wine production. Over the last few years, the amounts of grapes bought out from producers and processed have varied between 240 and 300 million kg. Due to unfavourable climatic conditions, the 1998 quantities of wine grapes bought out and processed by wineries amounted to only some 180 million kg, which led to the under-utilisation of production capacity. The 1999 vintage is also relatively poor. The expectations are that no more than 200 million kg of grapes will be bought out from producers.

The processing technologies employed by wineries are at a different level of development. The final stage of the production cycle, i.e. wine bottling and labelling is satisfactory. Practically speaking, there is no high tech equipment for primary grape processing in most of the wineries, and old equipment is now being renovated by the piece, as there is no investment capital available.

The wine industry needs support for the rejuvenation of vineyards and the introduction of high tech primary processing equipment. This will improve wine yields and quality and hence the sector's competitiveness to meet foreign demand.

Efforts are aimed at introducing the EU wine acquis. The new Wine and Alcoholic Drinks Act of September 1999 (Official Gazette No 86/1999) has repealed the 1978 Wine Act. As envisaged, another 16 legal measures will be adopted within less than a year that will introduce the EU wine acquis into Bulgarian legislation in a gradual manner. At a later stage, the legal matter will undergo codification. The Act provides for the classification of vineyards by category of area and cadastral mapping that will serve as the basis of a wine and vineyard cadastre. The establishment of a cadastre will start in a selected pilot region under a PHARE project commencing in October 1999.

The Act provides for measures that have to do with monitoring and control of the vine potential, with the concrete terms and conditions of planting, re-planting and eradication of vineyards being laid down by a specific legal act.

Obligatory declarations of yields and stocks are a major requirement of the new Wine Act. They are introduced as a primary source of statistical data as well as a means of regular updating of cadastre data and monitoring and regulation instruments. The Act lays special emphasis on control of the wine and vine-growing sector as regards vines, wine grapes, must and grape and wine products.

The 1999 Wine Act provides for some general and imperative rules of ecological practices that will improve the access of Bulgarian wines to the EU markets. Bulgaria fully accepts the rationale and EU acquis concerning quality wines appellation of origin as a necessary precondition for the development of Bulgarian quality policies.

### ***Dairy Industry***

The 1995-1998 period saw the restructuring of state ownership. At present, the dairy sector includes 512 dairy processing establishments. Under the SMEs Act, most enterprises can be classified as micro and small-sized.

Former state-owned milk processing establishments had a production capacity of more than 100 t per day. In 1997, however, most of them utilised about 20% to 30% of their capacity. The production capacity of new private dairy farms varies between 1 to 5 t per day. They have specialised in cheese production.

Following a short-term contraction in both dairy production and consumption, output volumes in 1998 stepped up by 9.5% relative to 1995. Domestic demand for dairy products is also met by the growing imports of cheese and milk desserts.

Bulgarian dairy products are exported mainly to Germany, Lebanon, France, the Netherlands and Ukraine, Denmark and Russia. Bulgarian dairy products to the Middle East have a relatively stable share.

In June 1997, the EU imposed an export ban on Bulgarian dairy products due to non-compliance with the Community hygiene requirements. In 1999 the European Commission authorised three dairy enterprises to export to the EU. These are Philipopolis, Ltd., Kondov Ecoproduce, Ltd. and BG Factory 124, Ltd. The milk collection centres registered in 1997 totalled 3 964, with 2 658 of them meeting veterinary and sanitary requirements and authorised by public health control authorities to carry out operations.

The country's milk legislation (quality standards and legal acts included) is obligatory in its entirety for each and any agent along the food chain. And yet, despite the legislative basis that is in place, the year-round checks and inspections of the public health control authorities and the Hygiene and Epidemiology Inspectorate, enormous number of acts of findings, the 104 or so dairy farms that ceased operation due to processing malpractice and the 1 306 milk collection centres that were never authorised, dairy products of low or non-standard quality are still being placed on the market.

The lack of effective control allows producers and processors to supply the network of retail establishments with dairy products deviating off the quality standards. The reasons behind the poor quality of dairy products are as follows: low quality raw milk, poor hygiene of both production and processing as well as non-compliance with technological instructions, poor control of authorities and insufficient cooling facilities. These are also the main aspects in which urgent measures should be undertaken to modernise the dairy industry. Low raw milk quality limits the possibilities of the sector to recover. Therefore, support should be given to those projects that aim at the actual improvement of the performance of the sector.

### ***Meat Processing Industry***

The sector includes:

- Approximately 312 meat-processing establishments, slaughterhouses excluded;
- Approximately 151 slaughterhouses with industrial capacity of production, slaughtering over 1000 large ruminants yearly and 86 slaughterhouses, slaughtering less than 1000 animals per year.

Over the 1995-1998 period, the meat industry was affected by the interplay of the following adverse factors at work:

- meat output decline due to a drastic decrease in animal numbers;
- Out-of- date equipment and facilities in poor physical condition;
- Lack of capital and indebtedness in arrears;
- Loss of traditional markets;

- Shrinkage in domestic consumption;
- Poor veterinary and sanitary control.

The loss of Bulgaria's major export markets of meat (former Soviet Union countries, Middle East countries and North Africa) brought about a further reduction in production volumes. On the other hand, the higher domestic prices of live animals and meat (compared to international prices) led to a significant shrinkage in exports.

New modern meat processing establishments have been built in the towns of Gorna Malina, Cherven Brjag and Botevgrad. They have a stable market share and utilise more than 50% of their production capacity. Of all former state-owned enterprises in the meat sector, only 3 processing establishments (in the towns of Shoumen, Silistra and Svishtov) have been authorised by the EU to export sheep and goat meat and pork to the Community markets. Overall, only about 58% of the production capacity is being currently utilised.

The recovery of the meat sector should draw upon:

- Renovation of equipment, facilities and innovation of production technologies complying with EU requirements;
- Selection and reproduction of animal breeds and hybrids of high meat quality;
- Reducing the harmful effect of production on environment;
- Improvement of equipment and facilities allowing for a greater variety of meat products;
- Improvement of hygiene requirements and standards and strict control of compliance with a view of EC authorisation of meat processing establishments for export.

### ***Canning Industry***

Currently, there are 160 enterprises for sterilised products; 40 enterprises for frozen fruit and vegetables and only one canning factory with a prevailing state interest in Bulgaria.

The loss of some traditional markets of Bulgarian canned food (CMEA and in particular the CIS countries) led to a drastic decline in export sales, triggering a dis-equilibrium between stocks and production capacity, on the one hand, and sales, on the other. The lack of investment capital led to a steady deterioration of equipment and facilities and lowered production capacity adaptability to meet competition. The utilisation of EU preferential quotas of processed fruit and vegetables is given in Table 24.

The canning industry uses raw material of poor quality, as brought about by the lack of funds, unsatisfactory organisation of seed production and inefficient farming technologies. The sector is mainly export-oriented. As households rely on self-sufficiency (home-made preserves, etc.), the canning industry meets essentially the demands of the army, hospitals, canteens and kindergartens. There is a special public procurement system implemented on the basis of public tenders.

Special emphasis should be laid on:

- Investments in packaging and label design; innovation and technology improvement; providing solutions to environmental issues and problems;
- Development of the raw material and input base of the industry in terms of quantity and quality;
- Seed production problems with vegetables.

### ***Brewing industry***

The brewing industry relies on the following production and market structures:

- 13 breweries;
- 1 enterprise for malt production;
- 4 beer bottling companies;
- 1 plant for spare parts and non-standard equipment;
- 15 new small-sized private beer-bottling factories.

All breweries and bottling enterprises have been privatised, despite the insignificant state interest in them that is to be soon sold.

Estimates indicate that the sector's production capacity is of "the mid-European type in terms of both product quality and technology".

Domestic production provides much of the raw material needed by the sector which currently faces quality rather than quantity problems. Domestically grown barley does not meet major technological requirements and characteristics of high quality barley for brewing. Only 40% to 50% of the demand for hops is met by domestic production. The remaining amounts are imported in the form of hops products.

### ***Sugar Industry***

There are seven sugar-processing enterprises in Bulgaria, four of which have already been privatised.

Sugar beet production has bottomed down. Annual sugar output over the last three years (1996 –1998) amounted to 277 700 tons, 4,900 tons of which – beet sugar, indicating that the sugar amounts produced from raw material imports accounted for 98.2% of total sugar quantities.

There is a number of reasons behind the low interest of producers in the sugar sector, which can be summarised as follows:

- Incomplete reforms in the agricultural sector;
- High production and labour costs in beet growing, low profitability margin, brought about by high operating costs and low yields, given a low purchase/ farm-gate price of beet;
- Sugar beet is purchased by only 1 sugar processing enterprise in the town of Gorna Orjachovitsa.
- Outdated equipment and facilities at a poor level of automation of the production process, as overhauls were last carried out in the 80s.

### ***Oil Crop Production and Processing***

There are in the sector 15 former state-owned enterprises, 14 of which have been privatised. There are also 70 new oil-processing factories, focusing their operation on sunflower seeds and some other oil raw material. Using small production capacity, they work mainly by the piece and rely on outdated processing technologies.

The industry's capacity to process sunflower seeds and other oil crops has increased to 800 000 – 850 000 tons per annum. However, production capacity utilisation fell to 43.2% in 1997.



Compared to modern oil factories in the developed countries, their Bulgarian counterparts report higher unit production costs. Oil quality does not comply with EU and North American standards.

### ***Tobacco Processing Industry***

Tobacco processing in Bulgaria is carried out by a single state-controlled company – Bulgartabak, which is one of the six leading tobacco companies in the world. Its privatisation started as early as 1994 but has not been completed yet.

Tobacco has remained one of the country's major priorities, as it accounts for about 3% of total Bulgarian exports and for 28.8% of total agricultural exports (1997 data).

The decrease in areas under tobacco led to a decline in the production of tobacco and cigarettes, relative to 1989. To revitalise the sector, Bulgartabak makes advance payments to tobacco producers, covering up to 40% of the tobacco purchase price, thus aiding them to carry out agri-technical activities and buy inputs. At the beginning of each calendar year, the government set minimum purchase tobacco prices and pays out direct premiums to producers.

### ***Milling Industry***

The milling industry is a strategically important agricultural sub-sector. There are in the sector 56 milling plants of total milling capacity of 320 million tons. Annual flour production amounts to 1.5 million tons. Following the liberalisation of the market, many new small-capacity mills (150-200 in number) have been established especially in rural areas. The privatisation of state-owned milling enterprises will have been completed by end-1999. Competition on the part of small mills led to the underutilisation of production capacity in the large milling enterprises (30% to 40%).

Even though there are some milling plants that use modern technology and equipment, most Bulgarian mills rely on technically obsolete production capacity. The same applies to storing facilities.

### **1.2.3. Foreign Trade**

Until 1997, the government regulated domestic supply and consumption by way of foreign trade regimes and price regulations and controls concerning basic agricultural products. Whenever a shortage or deficit occurred, the government resorted to export bans and taxes and set limit prices and profitability margins in an attempt to avoid price rises.

In July 1997, export bans were lifted followed by the removal of export taxes in 1998. Early-1998 saw the liberalisation of agricultural exports.

As a next step, the government removed the registration and licensing regime (corresponding to the WTO automatic and non-automatic licensing) in the beginning of 1999. As a result of the early-1999 foreign trade liberalisation, domestic prices are now closely following international price dynamics, which is just another proof that the Bulgarian economy is a small but open one.

Over the last few years (1998 included) agricultural turnover stabilised at about 610 MEURO. Agricultural exports in 1998 declined on a year earlier. There were no significant changes in the commodity structure of agricultural trade. Cigarettes, tobacco and processed tobacco substitutes account for the largest relative share within total agricultural exports, followed by wine, alcoholic drink and beverage exports. Oil seeds,

vegetable oils, white cheese in brine, fresh fruit and vegetables continue to have a significant weight in total agricultural exports. On the import side, cane sugar has traditionally reported the biggest relative share, followed by citrus fruit, soft drink and coffee imports, having a significant weight in total agricultural imports.

As regards exports, 1998 sustained the steady upward trend in the relative share of EU member states in agricultural trade discerned since 1989. As for other Bulgaria's trading partners, there was a certain decrease in exports, with the CIS registering the biggest decline (Table 23).

**Table 23 Bulgarian Agricultural Exports and Imports.**

(Million USD)

	1994	1995	1996	1997	1998*
<b>Exports</b>	<b>810.9</b>	<b>1170.9</b>	<b>915.8</b>	<b>701.9</b>	<b>699.1</b>
OECD	230.1	412.9	313.6	276.7	350.1
EU	166.6	277.3	231.8	196.0	239.5
CEEC	503.1	619.7	546.6	366.3	233.5
CIS	311.9	475.5	413.7	302.8	162.2
Others	77.7	138.2	55.6	58.8	115.5
<b>Import</b>	<b>453.8</b>	<b>455.7</b>	<b>402.8</b>	<b>428.3</b>	<b>387.1</b>

Source: NSI

\*The data for 1998 are preliminary

### ***International Agreements and Integration Policy***

In a long-term perspective, Bulgaria's foreign trade policies will be shaped under the impact of the following factors at work:

- Fulfilment of the country's trade discipline commitments under WTO;
- Integration into EU structures and preparation for full EU membership;
- Fulfilment of Bulgaria's commitments under CEFTA;
- Improved access of Bulgarian producers and exporters of agricultural products to foreign markets. Recovery of lost markets (CIS and Mid-East countries).

### ***EU Integration***

In the post-1989 period Bulgaria has reconsidered its trade policy priorities and on the basis of a wide political consensus pursued a policy towards integration into the EU structures. The beginnings were laid down on March 8, 1993 when Bulgaria and the European Communities signed the Europe Agreement aimed at the gradual establishment of a free trade zone for industrial goods and agricultural trade liberalisation within a transition period of 10 years.

One of the underlying principles of the trade arrangements between Bulgaria and the EU draws upon the asymmetry of market access in terms of both size of concessions and liberalisation terms. Thus, under an accelerated scheme, Bulgaria was granted higher export preferences in the EU markets than Bulgaria granted to exports originating from the EU. Taking into account the sensitivity of agricultural goods in both the EU and Bulgaria, market access improvement rather than full agricultural trade liberalisation is deemed a more appropriate trade liberalisation instrument.

Despite the improved market access Bulgarian agricultural products enjoy in the EU markets, it can be said that a considerable part of the preferential quotas under the Europe Agreement have not been fully utilised. According to estimates, Bulgaria has in effect

profited considerably less than the country was expected to potentially benefit at the time the Europe Agreement was signed. Further agricultural trade negotiations under the Europe Agreement are expected to improve Bulgarian export performance in the EU markets and lead to better utilisation of preferential quotas.

**Table 24 Utilisation of Preferential Export Quotas to the EU**

CN code	Description	Unit	1996		1997		1998	
			Quota	Proportion unused	Quota	Proportion unused	Quota	Proportion unused
0104	Live sheep and goats	Ton	1123	100.0	5013	36.3	5013	0.0
0205	Meat of horses, asses, mules	Ton	200	50.0	220	100.0	230	100.0
ex 0207	Duck and geese meat	Ton	2800	24.7	2800	45.0	2800	87.5
0409	Natural honey	Ton	310	0.0	310	0.0	310	0.0
06031013	Cut flowers, fresh	Ton	170	48.8	220	95.5	230	100.0
07019051	Potatoes	Ton	2440	50.0	2750	100.0	2875	100.0
07020010	Tomatoes	Ton	740	50.0	5500	99.5	5750	99.9
07031019	Onions	Ton	360	37.8	450	36.4	450	87.6
070320	Garlic	Ton	680	50.0	770	20.9	805	29.7
07070010	Cucumbers	Ton	5810	41.3	7370	96.7	7705	88.9
07096010	Sweet peppers	Ton	1030	0.0	1760	71.4	1840	69.6
071021	Peas, beans and other vegetables frozen	Ton	930	0.0	1100	0.0	1150	0.0
07134090	Lentils, other	Ton	300	36.0	330	100.0	345	100.0
080231	Common nuts	Ton	450	0.0	550	0.0	575	0.0
08061019	Grapes, fresh	Ton	410	50.0	550	99.6	575	100.0
080710	Melons fresh	Ton	230	50.0	330	2.1	345	82.0
08081010	Apples	Ton	870	50.0	990	100.0	1035	100.0
08082010	Pears	Ton	2450	50.0	2750	100.0	2875	100.0
08082090	Quinces	Ton	200	50.0	330	100.0	345	100.0
080910	Apricots	Ton	150	50.0	660	100.0	690	100.0

**Table 24. Continued**

CN code	Description	Unit	1996		1997		1998	
			Quota	Proportion unused	Quota	Proportion unused	Quota	Proportion unused
080930	Peaches	Ton	545	49.9	880	100.0	910	94.3
08101010	Strawberries	Ton	2090	50.0	2090	97.1	2090	100.0
081210	Cherries, provisionally preserved	Ton	905	0.0	1100	0.0	1150	0.0
081290	Other fruits provisionally preserved	Ton	850	0.0	1100	8.3	1150	53.1
081340	Other fruits, dried	Ton	610	0.0	770	0.0	805	61.6
1209	Seeds, fruit and spores	Ton	1050	29.7	1210	46.6	1265	0.0
121010	Hops	Ton	300	38.0	330	98.5	345	100.0
15010011	Lard for industrial uses	Ton	4750	50.0	5280	100.0	5520	100.0
15121191	Sunflower seed oil	Ton	330	80.3	440	95.9	460	100.0
16023111	Prepared meat of turkey	Ton	205	49.8	330	100.0	345	100.0
200110	Cucumbers, preserved	Ton	2490	47.8	2750	92.1	2875	97.8
20021010	Tomatoes, preserved	Ton	8060	48.8	8060	98.3	8060	96.0
20029010	Tomatoes, preserved	Ton	8370	50.0	8410	99.8	8410	100.0
20031020	Mushrooms of the species agaricus	Ton	300	50.0	330	100.0	345	100.0
20031080	Mushrooms, prepared or preserved	Ton	110	50.0	220	86.4	230	71.3
20079933	Strawberry jam	Ton	113	50.4	220	100.0	230	97.8
20085071	Apricots, preserved	Ton	350	24.6	440	94.3	460	100.0
20086069	Cherries, preserved	Ton	92	50.0	110	47.3	115	27.0
20087079	Peaches, preserved	Ton	550	50.0	660	99.5	690	99.7
20088070	Strawberries preserved	Ton	520	50.0	572	100.0	598	100.0
20089955	Plums, preserved	Ton	170	34.1	220	96.4	230	90.9
20097019	Apple juice, concentrated, other	Ton	4070	0.0	4840	0.0	5060	33.7
ex 220410	Quality wine, sparkling	Hl	1400	55.1	1500	22.1	1600	39.0
ex 220421	Quality wine	Hl	334830	0.0	368030	0.0	401230	14.7
ex 220429	Quality wine	Hl	128000	0.0	128000	0.0	128000	0.0
24011060	Tobacco	Ton	6000	27.8	6600	60.9	6900	87.8
170410	Chewing gum	Ton	163	100.0	163	100.0	163	100.0
1806	Chocolate	Ton	490	100.0	490	100.0	490	100.0
ex 1902	Pasta	Ton	326	100.0	326	100.0	326	100.0
1904	Prepared foods of cereals	Ton	245	100.0	245	100.0	245	100.0
1905	Bread, pastry, cakes, biscuits	Ton	571	100.0	571	100.0	571	100.0
21011298	Preparations with a basis of extracts	Ton	163	100.0	163	100.0	163	100.0
210210	Baker's yeast	Ton	81	100.0	81	100.0	81	100.0
2105	Ice cream	Ton	81	100.0	81	100.0	81	100.0
2106	Other sub-products	Ton	490	100.0	490	100.0	490	65.7
220290	Mineral waters	Ton	16	100.0	16	100.0	16	100.0

Source: MAF

**WTO Membership**

Bulgaria has been a member of the World Trade Organisation since December 1, 1996 and as such it must observe the multilateral trade discipline introduced and regulated by the Organisation. Under WTO, Bulgaria strictly follows the agricultural trade liberalisation scheme negotiated along the following main lines: tariff reductions of an arithmetic mean of 36% by end-2001; maintenance of quotas ensuring even access of WTO member-countries and meeting its commitments as regards domestic support to farmers and export subsidies for agricultural goods.

Also fulfilling its commitments under WTO, Bulgaria has removed the discriminatory licensing regime of tobacco traders as well as voluntary restrictions on live sheep and goat exports to the EU.

### ***Free Trade Agreements***

#### **CEFTA**

The Central European Free Trade Agreement has been signed by the Czech and Slovak Republics, Hungary and Poland in December 1992. Slovenia joined the Agreement in January 1996.

On July 17, 1998 Bulgaria signed the CEFTA and following its ratification by all member-countries' parliaments it came into force on January 1, 1999, terminating the bilateral trade arrangements between the Czech Republic, Slovakia and Slovenia and Bulgaria.

#### **EFTA**

In March 1993, Bulgaria signed the Free Trade Agreement with EFTA countries, which came into force on July 1, 1993. Under the Agreement, Bulgaria and the EFTA countries shall gradually remove, within a transitional period ending in 2002, the majority of trade restrictions, aiming at the reinforcement of the integration processes in Europe and the establishment of an enlarged and harmonised free trade area in the European continent. With a view of the specific period Bulgaria is currently undergoing, the Agreement is based on the principle of asymmetry of trade liberalisation. The agreement also provides for a safe-guard clause, allowing Bulgaria to undertake appropriate measures in cases of severe economic difficulties and social problems ensuing from the economic reforms implemented. An Additional Protocol on Agriculture under which Bulgaria shall grant concessions to trade in processed agricultural products analogous to the concessions the country grants to the EU member states.

### 1.3. Disparity Analysis

In terms of both area and population, Bulgaria stands very close to countries like Portugal, Greece and Austria, indicating very close levels of average population density (Appendix 2).

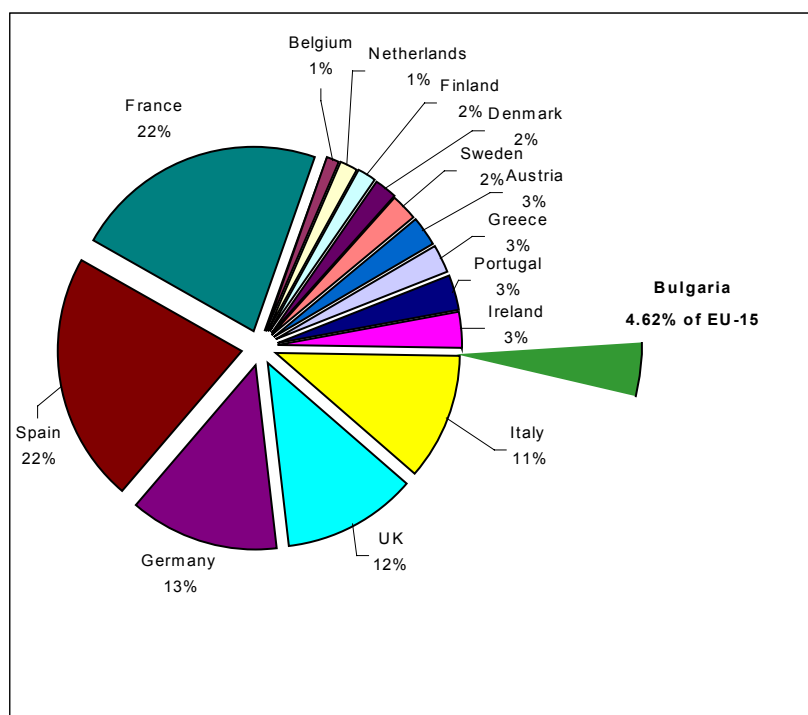
**EU GDP per capita in 1997 averaged EUR 18 979. GDP per capita in Bulgaria in the same year amounted to EUR 1 079, which placed Bulgaria far behind even EU member states, enjoying the relatively lowest living standards like Greece, Portugal and Spain whose GDP per capita amounted to EUR 13 138, EUR 13 415 and EUR 14 758 respectively.**

Following the currency board arrangement, inflation in Bulgaria has been running at rates close to the EU inflation rate, which in 1997 varied between 1% and 7% across the EU member states, given an average of 1.8%. 1998 inflation in Bulgaria amounted to 0.98%.

Unemployment in Bulgaria is higher (13.7%) than in the EU but still close to the Community's average of 10.7%. Indeed, there are EU member states where unemployment runs at lower rates but there are also member states like Italy, France and Finland, for instance, where the macroeconomic indicator hits levels close to the levels in Bulgaria.

The agricultural land used in Bulgaria amounts to 6 203 thousand ha. Bulgaria ranks close to Ireland where the farm land used amounts to 4 325 thousand ha, followed by Portugal (3 967 thousand ha), and Greece (3 465 thousand ha).

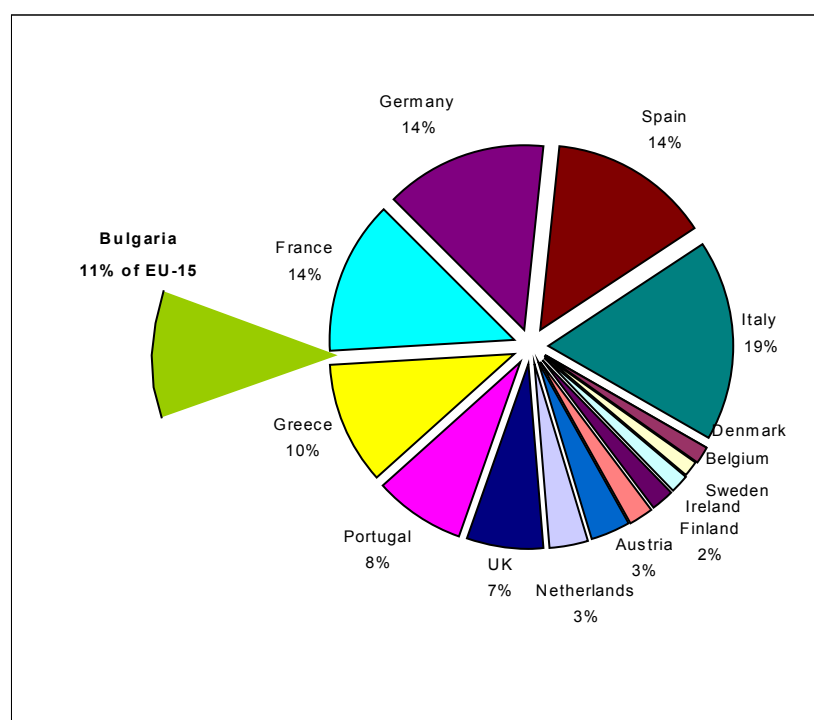
**Figure 7 Land Resources in Bulgaria and EU member states**



Sources: DG VI-A2 La Situation de L'agriculture dans l'union Europeenne, Raport 1998; NSI.

By number of employed in agriculture, forestry, hunting and fishery (769 000 in total), Bulgaria stands closest to Greece (765 000) and Portugal (601 000). Taken as percentage of the actively working population of the country (23.4%), this number has no matching counterpart in the EU member states (this per cent is highest in Greece - 19.9%). All this indicates the enormous importance of the agricultural sector for the Bulgarian economy, which provides employment and income for a large per cent of the country's population.

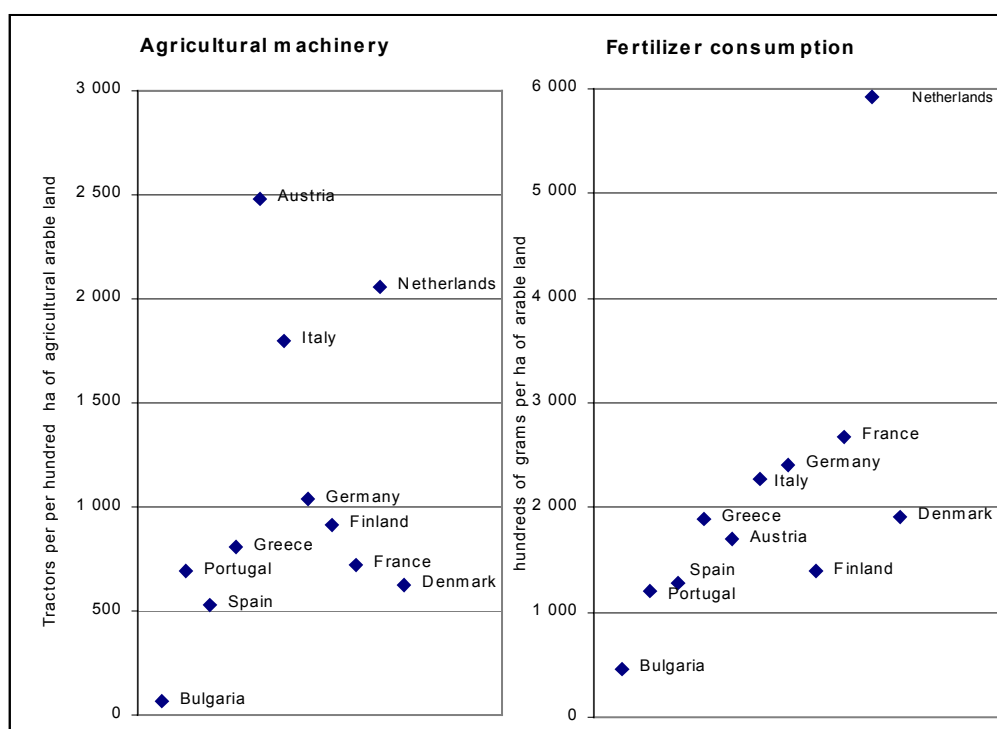
**Figure 8 Employment in Agriculture in Bulgaria and EU Member States**



Sources: DG VI-A2La Situation de L'agriculture dans l'union Europeenne, Raport 1998; NSI.

Bulgarian agricultural output value in 1997 amounted to 4,408 MEURO, approximating the indicator's value in Ireland and Portugal of 4,345 MEURO and 4 347 MEURO respectively. However, these are the countries reporting the lowest output value in the Community. A comparison between Ireland and Portugal and Bulgaria in terms of output value places the latter in a rather unfavourable position.

Bulgaria stands in sharp contrast with EU member states as regards the share of agriculture within GDP. The indicator in Bulgaria amounts to 12.8%, significantly surpassing the EU highest share of 5.9% reported by Greece.

**Figure 9 Input Consumption**

Source: 1999 World Development Indicators CD-ROM, World Bank

The data on farm land, crop yields and production, given in Appendix 2, indicate lower yields in Bulgaria, as compared to the EU. The comparison between animal numbers and average productivity in livestock production has also showed that productivity in Bulgarian livestock production registers lower levels than productivity in EU member states. Once again, the reason behind this disparity is the lower efficiency of Bulgarian agricultural production.



## 1.4. Strengths and Weaknesses of Bulgarian Agriculture and Processing Industry

STRENGTHS	WEAKNESSES
<b>MACROECONOMIC SITUATION</b>	
<p>Low inflation and a stable foreign exchange rate, expected GDP growth of 4% to 5% and household disposable income increase.</p> <p>Growing foreign investors' interest in the Bulgarian economy as a result of the country's macro-economic stabilization and the structural reform program of the Bulgarian government implemented over the last few years. According to data of the Foreign Investment Agency, 1997 and 1998 saw the highest growth of FDI to Bulgaria. 1997 and 1998 (preliminary data) investments accounted for 33.3% and 26.5% respectively of total investment over the 1992-1998 period. Investors' interest has been highest in the manufacturing sector, with investments in industry (the food processing industry included) reporting the highest share of 54.2% over the same period.</p> <p>A number of changes and amendments have been effected in the legal, institutional and management systems needed for the country's transition from command to a market economy as well as for its integration into and accession to the EU</p>	<p>Low GDP per capita; the 1990s have witnessed a drastic decline in purchasing power; household real income and food consumption have also decreased. Overall in the eight years to 1998, household real income had stepped down by 61.3%.</p> <p>1997 food expenditures accounted for 54.4% of total household expenditures. The structure of household consumption has undergone some unfavourable changes. Food consumption has gone on the decrease, in particular meat and milk consumption, indicating a shrinkage in the domestic markets of fresh and processed agricultural products.</p>
<b>SOIL AND CLIMATIC CONDITIONS</b>	
<p>Bulgaria's climate, soil and nature provide favourable conditions for the production of all crops grown in Europe, excluding some citrus and thermophilic crops.</p> <p>The large amount of sunshine in Bulgaria is an important precondition for the production of fruit, vegetables and grapes of high gustatory quality.</p>	<p>Insufficient rainfall volumes for the production of some crops. Annual rainfall averages 637 mm, varying between 2000 mm in some high mountainous regions to 500 mm. Crop yields and stable production levels depend on irrigation.</p>
<b>WORKFORCE</b>	
<p>In 1998, the number of employed in the agricultural sector amounted to 797 000, accounting for 26% of the country's total employment.</p> <p>Rural population consists of hard-working people with a good level of primary and secondary school education, age-long farming traditions and good skills as regards forest and wild nature management.</p>	<p>Drastic rural population fall; deteriorating age structure. The cohort of working age employed has been declining in both absolute and relative terms. In the post-1985 period, the ageing process has deepened, given a regressive age structure.</p> <p>Education: the 1992 census data indicate that the share of well-educated rural population (university degree, technical colleges, etc.) is rather high, and yet well below the country's average.</p> <p>Lack of experience: in modern crop and livestock production, food storage; farm processing practices, hospitality to tourists; business, management and marketing.</p>
<b>AGRICULTURE</b>	
Over the 1980s, the share of agriculture within	Small-sized enterprises cannot meet the challenge

<p>GDP ranged between 10% and 15%. 1993 signalled an upward trend in the GDP share of agriculture, which hit 18.7% in 1998.</p> <p>Supporting services in place: veterinary services, forestry management; technical colleges; elementary and secondary schools.</p>	<p>of new production technologies. Low level of farm machinery use and mechanization services not only in animal husbandry but crop production as well; poor plant protection; low/declining yields. These are the reasons behind the decline in average yields, arable land area, animal numbers and production levels in most agricultural sub-branches. Low quality of farm produce due to low-quality seeds; animals with worsening herd indicators due poor selection and breeding practices; non-compliance with production technologies in both crop and livestock production; the bulk of dairy farms do not meet the hygiene requirements of milk production; poor feed-back from the market to producers; outdated and worn-out machinery in the processing industries; obsolete and dilapidated equipment and facilities. Outdated teaching methods in market economics; poor variety of employment opportunities in the rural economy.</p>
<b>FORESTRY</b>	
<p>Forests are important natural resources, accounting for 1/3 of the country's area under crops; significant source of employment; valuable ecosystems; control of soil erosion.</p> <p>Forests and woodland amount to 3.9 million ha, accounting for 34% of the country's total area. Total afforested area amounts to 3.4 million ha or over 80% of total forest area. As a result of the large-scale afforestation over the last 50 years, 1.3 million ha of forest land has been afforested. Total forest stocks have gone on the increase.</p> <p>The majority of forest land (1.3 million ha or 39.8%) performs protective and recreation functions. Prevailing share of young forests below 40 years of age (54%); average forest age amounts to 45 years.</p> <p>Measures are now being undertaken to meet the country's needs for forest planting and propagation material as well as for the preservation of its sylvan genetic variety.</p>	<p>Low level of export orientation of the timber industry;</p> <p>Small wood-paper processing capacity;</p> <p>Worsening physical condition of forests;</p> <p>Insufficient investment in young forests.</p>
<b>FISHERIES</b>	
<p>Good raw material and input basis, and potentials for quality fish production for direct sale and raw material (fish farms including sea farms, dams) and fishing potential in the Danube, the Black Sea and some inland reservoirs.</p> <p>An effective licensing system (for fishing, farms and producers) in place that has been brought into line with the EU Acquis.</p> <p>Advanced privatisation of enterprises in the fishery sector (fresh water and sea fishing) -over 80% of the fixed assets have been privatised.</p>	<p>Insufficient product variety of the fish placed on the market; weak demand for Bulgarian fish in the EU markets (e.g. carp).</p> <p>Ineffective input basis for fish processing and supply.</p> <p>Fish processing practices do not meet EU hygiene and quality requirements.</p> <p>Insufficient public health and sanitary control of establishments, which needs to be reinforced by the introduction of the HACCP system in processing</p>

<p>Since 1998, budgets allocations have been made to maintain the gene pool of fish and aqua-cultures, with special emphasis on the maintenance of some basic fish species of commercial significance (trout, silver carp, carp, sturgeon, etc.) in the Danube and dams and the rejuvenation of the gene pool in fish farms.</p> <p>Two fish producer organisations already in place. Good fishing tourism prospects. Good export potential of some fish species. Relatively low production (labour and processing) costs.</p>	<p>enterprises and health control in fish farms. No organised system of marketing, absence of wholesale and collection markets. Low domestic consumption, hence demand for fish – about 3 kg. Ineffective financial/incentive schemes of quality promotion.</p> <p>No producer organisations of the European type.</p>
<b>EXPORT POTENTIAL</b>	
<p>Bulgaria has signed trade agreements with the EU, CEFTA and EFTA; a free trade area has been established between Bulgaria and Turkey. FTAs with Morocco, Israel and Macedonia are to be soon finalised.</p>	<p>Loss of Bulgaria's traditional export markets: deteriorating export performance or altogether lost markets in the former Soviet block, as well as loss of some other markets of processed and unprocessed agricultural products; EU market access necessitates a legislative alignment with the EU acquis; quota arrangements as well as improvement of technologies and quality control in the processing industries.</p>
<b>RURAL DEVELOPMENT POTENTIAL</b>	
<p>Resources in place: timber, limestone, granite, region-specific products, crafts that may provide raw material and inputs for further processing, ensure markets and generate new income and alternative employment in rural areas.</p> <p>As for the manufacturing industries, almost all sub-branches had been well developed, with the food processing, timber, textile and knitwear, electric and electronics, machine building and tailoring industries being most important.</p> <p>There is a well-developed social infrastructure in place in Bulgaria, e.g. schools, kindergartens, cultural and community centres, public libraries, clubs, primary health care units.</p> <p>There is a well-developed system of rural social patterns in Bulgaria: self-identification with place of birth, family and community; preservation of age-long traditions and customs; social care.</p> <p>There is water and electricity supply to rural areas and a road infrastructure in place. Postal and telephone services are light spread.</p>	<p>Depopulation trend (out-migration) of young, economically active population. Low quality of life a high unemployment rate due to the lack of alternative employment opportunities. High level of self-subsistence leading to barter economy, hence to non-efficient markets for agricultural products. Low level of production and processing innovations; underdeveloped rural markets; lack of well organized market chains. Poor quality of communications – use of outdated technologies; lack of digital telephone systems, internet and e-mail provision; the establishment of a telephone network in sparsely populated and border areas is lagging behind. The manufacturing sector, some other economic branches and the service sector are still underdeveloped in rural areas, as is the private sector. Farming and trade are now dominated by the private sector. Also, the private sector follows a rather slow growth rate in the manufacturing sector. Rural social infrastructure is not properly maintained due to a lack of funds. The road infrastructure in place is in a poor condition The electricity supply network needs renovation. Rural sewerage and waste disposal may pose a serious problems regarding environmental protection.</p>
<b>RURAL TOURISM</b>	
Bulgaria's climate, rural landscape and nature	Bulgaria's close location to other well-known big

<p>represent valuable economic, environmental and educational resources; summer sunshine, snowfall, beautiful mountain scenery, Black Sea Coast resorts. There are 12 national and natural parks, 89 reserves, 83 protected areas, 383 natural monuments, 912 natural sights of historic importance. The number of sites of local importance is over 4000.</p> <p>A relatively big number of animal and plant species live only in Bulgaria – 170 plant and 383 bird species. Another 200 plant specie living in Bulgaria are available only on the Balkan peninsular.</p> <p>A well developed and live rural culture: folklore; music, literature and dance; age-long traditions and holidays now brought back to life, which are part of the nation's self-identity, values, culture and life style and a good pre-condition for the development of rural tourism.</p>	<p>tourist markets;</p> <p>Specialised tourist products (walking, hiking, mountaineering, educational, ecological) are poorly developed or mixed and balanced;</p> <p>Poor rural tourist services and accommodation and public amenities.</p>
<b>ADMINISTRATIVE CAPACITY AND MANAGERIAL POTENTIAL</b>	
<p>There are already local structures (municipal and district bodies of local government) in place to coordinate, plan and implement local rural development programs and projects;</p> <p>Century-old traditions of co-operative management practices in farming and crafts.</p>	<p>Local structures have not yet gained the experience needed in the implementation and management of local development programs.</p> <p>Lack of partnership/co-operation among local structures, on the one hand, and government administration and NGOs, on the other.</p>

## Opportunities and Threats of Bulgarian Agriculture, Processing Industry and Rural Areas

<b>Opportunities</b>	<b>Threats</b>
<ol style="list-style-type: none"> <li>1. Stable macroeconomic environment that allows long-term planing of economic agents and increases the incentives for investments in agriculture and rural areas;</li> <li>2. Gradual recovery of incomes and increased demand for quality goods;</li> <li>3. Availability of external financial and technical assistance through EU pre-accession instruments;</li> <li>4. Improved access to the Single market of Bulgarian export goods with competitive advantages;</li> <li>5. Political stabilisation on the Balkans which increases intensity of regional trade and tourism;</li> <li>6. Formulation and implementation of consistent policies for rural development and increased government concerns about regional development issues ;</li> <li>7. Access to the EU accumulated experience in rural development approaches and increased possibilities for exchange of experience and know-how;</li> <li>8. Improved policies for continuing vocational training;</li> <li>9. Strengthening of civil society institutions and increased awareness of the benefits of the cross-sectoral partnerships;</li> <li>10. Increased environmental consciousness of consumers and stringent regulations improve return to investments in environmentally friendly production methods;</li> <li>11. Introduction of health nutrition policy which increases the demand of healthy foods.</li> <li>12. Trends in tourist industry which increase the demand of specialized tourist products in the rural areas for which Bulgaria has potential for development</li> </ol>	<ol style="list-style-type: none"> <li>1. Gradual overvaluation of the Bulgarian currency due to fix exchange rate, which may reduce, price competitiveness of the Bulgarian export goods;</li> <li>2. Liberalisation of trade and increased competition on the domestic market which requires policy for adjustment of local producers</li> <li>3. Quick introduction of high EU environmental, hygiene and animal welfare standards, which increase cost and require additional investments for upgrading of technologies, premises and management practices.</li> <li>4. Possible high concentration and reduction of competition in food processing industry as a result of closure of companies non-complying with EU standards</li> <li>5. Deteriorating social infrastructure in rural areas that threatens the social integrity and quality of life leading to migration of young population.</li> <li>6. Deforestation which leads to soil erosion and changes in environment.</li> <li>7. Growing disparities between incomes in urban and rural areas which lead to draining of highly qualified and motivated young labour force.</li> </ol>

## **1.5.Overview and Assessment of Support and Assistance to Agriculture and Forestry**

### **1.5.1.PHARE Program**

The EU PHARE Program in Bulgaria was launched as early as 1990. The program initially aimed to provide assistance to the country's economic reforms, restructuring of the agricultural sector and ensure access to lending resources. At a later stage the Program focused its assistance on the alignment of Bulgarian agricultural legislation with the EU acquis and administrative capacity reinforcement and institution building with a view to Bulgaria's accession to the European Union.

At the outset of the reform in 1990, the PHARE Program extended direct aid to the Bulgarian agricultural sector. Over 13 M ECU provided supplies of barley, maize seed, potato seed, animal health products and plant protection products essential to the maintenance of food security. Small amounts of support were provided for Land Reform and technical assistance to the National Veterinary Service.

The projects described in the table below cover 97% of the total budget of the agricultural support programs 1991, 1992, 1995. Hitherto, MECU 56.75 worth of total assistance to Bulgarian agriculture has been provided under the PHARE Program.

**Table 25 PHARE Program Agriculture - 1991 - 1997**

<b>Sector</b>	<b>BG-9103</b>	<b>Budget MECU</b>	<b>BG-9206</b>	<b>Budget MECU</b>	<b>BG-9507</b>	<b>Budget MECU</b>
<b>1.Land Reform</b>	02-01 TA to land reform (Phase II) 02-02 Computers 02-03 Special survey equipment 02-04 Financial support to Land Reform Agency	2.10 1.00 1.23 0.41	01-01 Pilot project to ILIS (Phase III) 01-02 Equipment 01-03 Digital cadastre maps PILIS	1.55 0.45 1.08	03-01 Support to establishment of LIS (Phase IV), Extension of BG-9206-01-01	0.38
<b>2.Privatisation and SOEs</b>	03-01 TA to agro-processing 03-02 TA to privatisation of SOEs	2.10 0.03	02-01 TA to privatisation in MoA 02-03 Privatisation of SOE in MoA	0.10 1.65	03-06 TA to acceleration of privatisation of SOEs Extension of BG-9206-02-03	0.40
<b>3.Agricultural Credits</b>	01-01 Credit line 07 TA to rural banking	7.00 1.20	05-04 TA to credit line	0.17	03-05 Assistance to agr. capital fund scheme	0.35
<b>4.Extension Services</b>	06-01 TA to agr. research, development and extension 06-02 TA to agr. education. and training 06-03 Regional offices equipment 06-05 National agr. advice service 06-06 TA to NSPPQAC 08-01 TA to private farmers	1.86 0.67 0.12 1.37 0.20 1.98	05-01 Strategy for cattle breeding re-development 05-02 TA to NAAS	0.05 0.76	03-02 Strengthening of NAAS Extension of BG-9206-05-02	0.85
<b>5.Market Development</b>	04-01 TA to agr. marketing 04-02/03 Equipment	1.78 0.84	03-01 Support to AMIS 03-03 Market development project 03-05 Support to veterinary sanitary export control	0.10 1.83 0.54	03-03 Improvement of livestock, fruits and vegetables marketing channels Extension of BG-9206-03-03	0.25
<b>6.Policy Analysis and Integration Policy</b>	05-01 Establishment of Policy Analysis Unit 05-02 TA to Policy Advisory Unit	0.84 0.64	04-01 Identification of reform promotion campaign	0.05	01-01 TA to Policy Advisory Unit and Integration Policy Dept. 02 Harmonisation of legislative and regulatory framework of quality control	0.49 1.60
<b>Program Management</b>	10 PMU	0.66	06 PMU	1.48	04 PMU operation and TA	0.48
<b>Allocation of Major Activities</b>		26.02		9.86		4.80
<b>Total Program Budget</b>		26.36		10.13		5.00
<b>Coverage of Major Activities %</b>		98.7		97.3		96.0

Table 25 summarises the themes of the projects, which were carried out in subsequent programs to 1997. The European Commission Monitoring and Assessment Unit gave the 1991, 1992 and 1995 programs a “Satisfactory” overall rating, and within this overall rating were 14 projects with “Highly Satisfactory” ratings.

The main areas where support was delivered under the 1991, 1992, 1995 programs included; Land Reform, Privatisation, Agricultural Credit, Extension Services, Market Development and Policy Analysis. The 1997 program, due to the economic crisis, which Bulgaria experienced at the end of 1996, and the subsequent IFI loan was closely linked to this loan’s conditionalities. The program focused on the development of a Land Market through the finalisation of the land restitution process.

The main conclusions to be drawn from each of these main themes:

- **Land Reform:** PHARE has supported land restitution from its beginning to its finalisation. Over the last two years MAF’s determined policy that land restitution should be finalised has finally given the political impetus and funds required to achieve this goal. PHARE has also worked in the area of improving the land cadastre and land ownership registration through a pilot project which continues today with funding from the Dutch Government. Further advancement in cadastral and land registration reform requires institutional reform. The World Bank in providing its Agricultural Structural Adjustment Loan (ASAL 1) set as a condition the adoption of institutional amendments for land cadastre and registration, however to date these have not been achieved.
- **Privatisation:** The PHARE support was given to the privatisation department in the MAF. To date some 80% of the former state agri-food and agricultural enterprises have been privatised. The PHARE program team provided valuable support in privatising some of the larger and more difficult food processing enterprises. The pace of privatisation increased significantly after the economic crises in 1996 with the coming to power of the reformist government. Further support is not required in the privatisation process, but support is required for assisting the new private enterprises to adapt to EU harmonised standards of hygiene, product quality and good environmental practices.
- **Agricultural Credit:** The 7 MECU credit line was implemented through the Agricultural Credit Fund Scheme (ACFS) and 33 Private Mutual Rural Credit Associations (PMRCAs) which were established on the basis of co-operative banking principles. The scheme has been successful at providing agricultural producers with credit through the principle of mutual guarantees. Presently Deutsche Genossenschafts und Raiffeisenverband BV (DGRV), the umbrella organisation for all German co-operative banks will be taking over the financing of the technical assistance to the scheme. Credit to farmers is in desperate shortage, the commercial banks regarding agriculture as high risk.
- **Extension Services:** PHARE supported the initiation of an extension service in Bulgaria, with the establishment of central training and business centres and regional and local offices. Further support has been requested for The National Agricultural Advisory Service (NAAS) under the 1998 PHARE program (see next



section). The NAAS is still in its infancy and will require further assistance in order to be able to provide comprehensive advisory services to the rural areas.

- **Market development:** From the beginning of reform PHARE reacted to the need for market information, especially market prices for agricultural producers, in order to facilitate investment decisions. The Agricultural Marketing Information System successfully set up the SAPI (System for Agricultural Price Information) and BAC (Bulgarian Agri-business Centre) both of which operate today (operating expenses coming from the Government and from their own income). Also under this priority 5 assembly markets were constructed (4 livestock and 1 vegetable); they provide sanitary, veterinary and welfare facilities which were previously non-existent.
- **Policy Analysis and Integration Policy:** Initially the unit established in the MAF concentrated on policy advice but as EU integration became the priority the unit divided with the Integration Policy Department dealing with all EU accession issues.

### **Impact of PHARE Assistance - budgets 1990 to 1997 (56.75MECU):**

As described above PHARE's assistance provided essential input supplies at a time when Bulgaria was experiencing severe economic and political change. The agricultural sector was in disarray with production units and the agricultural service industry unable to provide sufficiently to cover domestic needs. Thus the PHARE Program was able to ensure the basic products to ensure food security.

The PHARE Program graduated from ensuring food security to supporting structural reforms, namely land reform, privatisation, credit, extension, market development where the impact has been as follows:

Land Reform – Land Municipality Commissions (responsible for carrying out land restitution) were equipped facilitating them to finalise the land restitution. Also direct support for land restitution provided funds for 188,000 hectares of land to be restituted. A Pilot project on land Cadastre showed how digital cadastre operates in a market environment. It showed and suggested solutions to solving the many difficulties of dealing with a large number of fragmented landowners. As a result the functioning of a land market, especially in the pilot area, has been greatly facilitated.

Privatisation – the PHARE funded team provided support to the privatisation department by helping to privatise 35 of the most difficult enterprises. The impact of this support has been the increased pace of privatisation of state owned enterprises and thus an acceleration of the restructuring process.

Credit – the 33 Private Mutual Rural Credit Associations (PMRCAs) were, up to 1999, the only source of credit for small and medium sized farmers in Bulgaria. They are successfully revolving 10.5 M EUR lending resources with a current recovery rate of 96%, with over 9,000 loans disbursed. In the medium term the PMRCA's apex organisation, the Federation of PMRCAs, intends to apply for a banking license, however in the interim period new legislation will allow the PMRCAs to accept deposits thus providing them with new lending resources. The PHARE Program has established, from a credit program, the basis of a western European co-operative style bank to serve the rural community in its saving and credit requirements.

Extension Services – extension services are essential to the new farmers of Bulgaria, the NAAS is the basis of this service. Impact to date has been varied according to regions and local officers, in some areas the service has an excellent reputation with farmers using it constantly. A recent EU evaluation mission has endorsed the new NAAS structure where NAAS becomes a separate agency under the MAF separate from the National Centre of Agriculture Science (formally the Agricultural Academy) and suggested a new management structure that should provide a more effective service to farmers.

Market Development – PHARE has provided producers with physical markets, with related hygienic facilities, in which they can sell their products and a self-sustaining information service with up to date market prices. The impact of this was to provide new market channels, increase transparency and reduce market distortions.

Integration Policy Department – over the next years the role of this department will be crucial in Bulgaria's accession into the EU. The staff trained through the PHARE Program have developed and will continue to develop the skills necessary to guide the MAF in adhering to the EU commission's requirements for accession and implementing the Common Agricultural Policy.

#### **Future PHARE Assistance:**

From 1998 DG1A (or DG Enlargement as it is now known) and the PHARE program redefined the way in which it would develop PHARE programs, changing from “demand driven” programming to “accession driven” programming, basing support on the Accession Partnership, NPAA and EC Opinion Documents.

#### ***PHARE national program Agriculture 1998 (see also Table 26)***

##### ***Objective:***

The wider objective of 1998 National PHARE Program for agriculture was to strengthen the national and regional capabilities of the Ministry of Agriculture and relevant Agencies to undertake the short-term sector priorities for EU alignment and market-orientated reforms and development and begin the medium-term reforms identified in the Accession Partnership and the NPAA.

##### **Sub-project 1 - Animal health and diagnosis**

A twinning project is envisaged for harmonization of veterinary legislation with EU Directives and training of NVS and SVCS staff in the use of EU schemes and methods of laboratory control. Seminars are planned regarding the issues of agricultural products control.

The central laboratory of the State Veterinary Control Service (SVCS) under National Veterinary Service (NVS) and 8 reference laboratories of SVCS will be equipped for control of meat, fish, milk and poultry products. The equipment of the Laboratory for food and mouth disease shall be finalized. A unified veterinary information system of laboratory control and for planning and implementation of control schemes will be introduced in SVCS. Additionally EU-compatible information system for animal identification and registration will be introduced in NVS in order that all data collected on paper for bovine registration is entered and processed further

The total budget of the project is 4.6 MEURO (IB-1.0 MEURO, Investment – 3.6 MEURO)

#### **Sub-project 2 - Plant health and quality control**

A program to upgrade inspection procedures, laboratory tests and technical training for national inspectors and laboratory staff of the National Service for Plant Protection, Quarantine and Agro-Chemistry (NSPPQAC) will be implemented in the course of one year. This will include training in analytical methods for the staff of the NSPPQAC central laboratories (Laboratory for Biological Testing of Plant Protection Products, Central Laboratory for Plants Quarantine and the Central Laboratory for Control of Pesticides, Nitrates, Heavy Metals and Fertilisers) and information and technical support to the 15 regional plant protection services.

The total budget of the project is 1.6 MEURO (IB-0.5 MEURO, Investment – 1.1 MEURO)

#### **Sub-project 3 - Economic reform and alignment**

The Ministry of Agriculture and Forestry (MAF) has to introduce major new policies and means of supporting general and sector reforms and developments, and align laws, institutional and enforcement capabilities for every major sector of the Common Agricultural, Fisheries and Forestry Policies. It is intended to give training possibilities to 35 staff in the area of policy analysis, integration processes and accession negotiation implemented through in-country training, exchange visits to Member States and by providing Bulgarian and foreign external experts to undertake studies, surveys and syntheses of policy alternatives and other countries' experiences. Three seminars related to European integration will be organised. Assistance to the process of approximation of Bulgarian legislation to that of the EU Acquis will be continued through technical assistance to the 16 existing sector working groups.

Assistance will be provided for the structuring of the Directorate for the quality control of fresh fruit and vegetables, under MAF. The total budget of the project is 0.7 MEURO.

#### **Sub-project 4 – Support to the National Agricultural Advisory Service (NAAS)**

The National Agricultural Advisory Service has been established in the course of the last three years under PHARE financed project. The strengthening of NAAS at regional and local level will contribute to the development of economically, technically and environmentally sustainable agricultural and rural practices. The total budget of the project is 0.8 MEURO.

#### **Sub-project 5 – Implementing Agency**

The PHARE Implementing Agency, which replaces the PMU in MAF after the end of 1998, will have to ensure the smooth and timely implementation of all sub-projects. Program operating costs will be supported according to the DIS Manual. The budget for those activities is 0.3 MEURO.

#### ***Pre-ins Agricultural Project BG 9812 (Support to the Development of Land Market in Bulgaria)***

The project, in close co-operation with the World Bank, will assist the responsible ministries/ institutions (MAF, MJ, MRD&PW) on the legal and operational options, costs and timetables needed to establish easy-to-understand, efficient and transparent

land registration system and recording arrangements supported by uniform cadastral base. The project will support MAF in preserving the agricultural land register, which was created as an output from the land restitution process and will assist the starting – up of a program for land consolidation as a facilitating tool for development of agricultural land market. The budget of the project is 2 MEURO.

The previous PHARE 1998 activities related to the SAPARD program are the following:

### **BG9810-01: Special Preparatory Program for the Structural Funds in Bulgaria:**

#### **1. BG9810-01-01: Pilot Integrated Development Project in the Dobritch region implemented according to structural funds principles (1MEURO, contracted):**

- The main objective of the project is the practical testing of institutions and staff responsible for the implementation of SAPARD at national and local level. The project started 18 October 1999 and will end October 2001. Project team has been set up and trained and the first applications for grants (appr.80) were received. A meeting was held on March 30<sup>th</sup> with representatives of the EC Delegation, MAF, SFA, CFCU and the National Fund. A Memorandum of Understanding was discussed and prepared. According to this Memorandum the total amount for investment projects is 500 000 EURO EC participation plus 96 667 EURO Bulgarian Government for the following investments:

Sub measure 1 Financial support for investments in the improvement of milk storage by

- reconstruction and modernization of existing milk storerooms
- purchase of cooling tanks

Sub measure 2 financial support for investments in:

- reconstruction and modernization of existing cow housing facilities
- purchase of milking and feeding equipment and animal waste disposal facilities.

The management of the 500000 EURO is delegated from the CFCU to SFA.

At the moment, the Memorandum of Understanding is in procedure of approval in the Commission of the European Communities. The payments of grants and decisions of the Application Committee are not possible before the Memorandum enters into force.

#### **2. BG9810-01-02.03: SPP Technical assistance component for the preparation for the accreditation of SFA (2.6 MEURO, contracted):**

The overall objective of the project is to help Bulgaria apply and manage the new financing instruments ISPA and SAPARD. The project started 13th January 2000 and has 2 phases. The first one with duration of 6 months till September 2000 and the 2<sup>nd</sup> one till the end of the project. The main types of assistance are: preparation of the ex-ante evaluation of the NARDP, preparation of SAPARD Guidance Manual, SAPARD Project Development Guidebook, preparation specific measure to be implemented, training of Regional facilitators of SAPARD to prepare publicity campaign. An addendum for SFA has been signed under this project with main objective to assist the SFA in reaching the criteria laid down by the EC to receive and manage SAPARD funds as an accredited SAPARD Agency. The addendum will run for 12 months

starting not later than end of June 2000. An equipment component (software and hardware) for not more than 150,000 EURO is previewed. Additional 50,000 Euro are earmarked for contracting of an audit company.

**3. BG98/IB/SPP/03: Improvement of the efficiency of the SAPARD Task Force in MAF** – Twinning with the Greek Ministry of Agriculture (0.46MEURO, contracted):

The following main tasks were previewed for this project: Assistance to the preparation of the NARDP, legal, institutional and financial framework for a paying agency to implement SAPARD, Publicity strategy and mobilization for the implementation of the NARDP beneficiaries, technical and institutional framework and procedures for the implementation of specific measures of SAPARD, technical preparation of an integrated rural development project at rural area level, identification of needs for effective, management, monitoring and evaluation of SAPARD. The project is for 12 months and the end of the project is November 27<sup>th</sup>. Within the scope of the twinning project, two parallel main fields have been identified, for which the approximation of the *acquis communautaire* has been a priority: **The first one** is the preparation of the National Rural Development Plan and the preparation of the Bulgarian authorities to its implementation. **The second one** is the establishment of a Paying Agency for implementing SAPARD.

Field 1 – Preparation of the National Agriculture and Rural Development Plan (SAPARD) for its implementation at legal, institutional, administrative and organizational level, according to EU requirements (regulations and implementing rules)

Under this field, two stages have been envisaged:

- (a) During the **first stage**, technical support to be provided to the SAPARD Task Force and MAF Officials on the preparation of the National Rural Development Plan (NARDP) and the effective integration of EU recommendations for its final approval. The work under this stage has been organized under Sub-Project 1 “Preparation of the National Agriculture and Rural Development Plan: of the Twinning Project.
- (b) During the **second stage**, the cooperation focused on the transfer of knowledge (legal, administrative and organizational) to Bulgarian Task Force for implementing SAPARD and the identification of needs for its effective monitoring and evaluation. The work under this stage has been organized under the following Sub-Projects:
  - Sub-Project 3 “Publicity strategy and mobilization of the implementation of the NARDP beneficiaries”
  - Sub-Project 4 “Technical and Institutional framework and procedures for the implementation of specific measures”
  - Sub-Project 5 “Technical preparation of an Integrated Rural Development Project at a priority rural area level”
  - Sub-Project 6 “ Preparation of the mechanism for effective management, monitoring and evaluation of SAPARD”

Field 2 – Establishment of the Paying Agency for implementing SAPARD, subject to EU regulations and financial rules

The work under this field has been organized under a separate Sub-Project (Sub-Project 2), of which the envisaged actions focus on the transformation of State Fund Agriculture into a Paying Agency in accordance to EU requirements (accreditation, internal control etc) and financial rules for SAPARD.

**BG9810-02: Project Preparation Facility: preparation of measures under SAPARD** (1MEURO, contracted partially):

The aim is the developing of measures in the field of agriculture and rural development to be financed under SAPARD. Up to the moment an analysis have been done for the following sectors: milk producing and processing, fruits and vegetables marketing and processing, meat processing, forestry. The ToR for the measures: Vocational training, Setting up producers groups, Technical Assistance, Development of Agri-environment practices, Processing and Marketing of Fishery Products and Water Resources Management was prepared and was sent to EC Delegation for approval.

**SIGMA (OECD):** Support for Improvement in Governance and Management in Central and Eastern European Countries. A joint initiative of OECD Centre for Cooperation with the Economies in Transition and the European Union PHARE Program – are providing short-term assistance to the future SAPARD Agency for helping its accreditation.

### ***National PHARE Program 1999 (see also Table 26)***

#### ***Specific objectives***

Assistance to the pre-accession phase and harmonisation of the Bulgarian veterinary sector with the EU acquis with a view of Bulgaria's future integration into the EU by supporting animal identification, registration of animal holdings, preventive border control, establishment of the Animal Identification and Registration System and further construction of the long-term border inspection check point at Kapitan Andreevo - the main check point with Turkey.

Improvement of phyto-sanitary control, including border control, production control, laboratory and diagnostic activities, improvement of biological testing and registration of pesticides, exercising control of raw material and products of plant origin as regards their pollution with chemical and biological pollutants in compliance with EU requirements, and establishment of a system of control of farm produce based on organic farming methods.

Implementation of the acquis, leading to seed and propagation material quality; improvement of the system of control of seeds, planting material and the sector's regulation.

Bringing agri-statistics into line with EU requirements; establishing agri-statistical structures, stepwise introduction of a program for agri-statistical surveys in compliance with the EU CAP, improvement of Bulgarian agricultural policies and implementation of CAP.

Co-ordination of the legislative alignment process in the implementation of the EU agricultural, forestry and fisheries acquis; adoption and implementation of a stepwise national programs for the alignment of other agricultural sub-sectors with the EU CAP and CFP, taking into account the share of these sub-sectors in the country's economy; quality and marketing; bringing local industries to a higher level of development; establishing control and regulatory bodies, etc.

### **Project 1 – Improvement of Veterinary Control and Animal Identification**

The project's budget is 3.0 MEURO and the support will be provided for the :

Upgrading of the facilities at the BIP of Kapitan Andreevo:

The TAIEX recommendation will be followed as per the investment needs for the upgrading of the post to EU standards. The construction work will be coordinated with the Ministry of Interior.

Technical assistance

TA will be provided for the preparation of the feasibility studies for the project, and the supervision of the construction works. This shall include 12 man-months EU expert and Bulgarian expertise covering the construction period (total 2 years). Training will be organised for the staff of the BIP on enforcement of the legislation (controls on the BIP and the “green border”, animal welfare etc.).

Construction of a wire fence alongside approximately 50 km of the border of Bulgaria with Turkey:

The border fence will be re-constructed alongside the two main accessible parts of the border, i.e. 23 km at village Matochina, Haskovo region and 27 km at village Krainovo, Yambol region (the remaining part of the border is inaccessible for animals, there are natural barriers – rivers, rocks, or the villages on both sides are far away from it). The re-construction of the fence will prevent the trespassing of animals, which are grazing close to the border. The Bulgarian authorities will ensure the maintenance of the fence and reinforce the border control measures.

Completion of animal tagging:

Purchase of additional second ear-tags for bovine species and ear-tags for sheep and goat species in order to complete the 2nd phase of identification/registration program of NVS. The tagging will be performed by the NVS staff.

Purchase of necessary IT and communication equipment and software for animal registration:

The Bulgarian authorities have selected the Eurovet software for animal computerised registration. The software will be implemented for the registration of bovines in the southern border regions of Bulgaria under PHARE 1998, and the systems will be extended to the whole territory and to all the animal species requiring registration under PHARE 1999. The long-term BIPs for live animals will be linked to the information system in NVS in Sofia. The registration of the animals will be done by the staff of the NVS. The Bulgarian state will finance the purchase of the relevant hardware, while a server will be financed under the PHARE Multi-Country Veterinary Program.

## **Project 2 - Improvement of The Phyto-sanitary Control**

The project's budget is 1.88 MEURO and the support will be provided for:

Technical assistance and training under twinning for establishment of the legislative base for plant protection and biological testing and its implementation. Investment component for Phyto-sanitary Control will include:

Equipment for 5 border points in Gjueshevo, Kalotina, Vrushka Chuka, Bregovo, Vidin; Equipment of 5 phyto-sanitary laboratories at the above mentioned BIPs; Equipment for 5 regional offices laboratories, i.e. Pleven, Stara Zagora, Dobrich, Kjustendil, Sofia-region.

Strengthening of the Central Laboratory for Plant Quarantine.

Construction of a green house to the Central Laboratory for Plant Quarantine.

Investment component for Biological Testing will include -Equipment for Department of Biological Testing in NSPPQA HQ and Equipment of the station in Pleven (field testing and laboratory). Investment component for the Control of Chemical and Biological Contaminants will include - Strengthening of the 2 laboratories for Northern (in Varna) and Southern Bulgaria.

## **Project 3 - Control of seed quality production and trade**

This project reflects the priority in agricultural sector with reference to the provision of legal resources and administrative capacity for free movement of the seeds and seedling produced in Bulgaria within the EU internal market.

The project will consist on:

- approximation of legislation for the seed and seedling sector;
- establishment of a system for quality control complying with the EU and the OECD methods,
- purchase of laboratory equipment, establishment of information network, training of the CIFTSC specialists.

The project's budget is 0.95 MEURO.

## **Project 4 - Restructuring of the agricultural statistics**

In the framework of the future negotiations for accession to EU it's essential for MAF to have a statistical tool and data complying to high quality standards. It must enable MAF as well as the other partners to prepare the negotiations in the best conditions.

The project will consist of:

- establishment of a specialised central technical and administrative infrastructure in the MAF responsible for the organisation, the programming, the data collection and the statistical data processing regarding agriculture;
- establishment of the regional infrastructures for agro-statistics attached to the representations of the MAF to implement the requested surveys: gathering of information, control, electronic data, and transmission of the data to the central body for processing;



- creation of an appropriate sampling base answering to the national and Community needs, the necessary area frame surveys and surveys on lists carried out;
- setting up of statistical tools for MAF which enable data collection complying to EU quality standards in relation to the future negotiations for accession of Bulgaria to EU;
- management of Bulgarian agricultural policy for short and medium term and CAP in long term in the future.

The project's budget is 1.34 MEURO

### **Project 5 - Policy support and alignment**

The Ministry of Agriculture and Forestry (MAF) has to introduce major new policies and means of supporting general and sector reforms and developments, and align laws, institutional and enforcement capabilities for every major sector of the Common Agricultural, Fisheries and Forestry Policies.

The present project is a continuation of an on-going PHARE 1998 project.

The project has two sub-components:

- Assistance to the process of approximation of Bulgarian legislation to that of the EU Acquis will be continued through technical assistance to the 16 existing sector-working groups, set up within the Integration Policy Department of the MAF. Technical assistance shall provide for feasibility studies preparation in order to identify the functions and the implementing measures to be adopted at national level according to the requirement of the Common Market Organisations (CMO's) and the needs of implementing structures at all levels. Detailed information about the implementing structures, functions and procedures at national level (as case studies) and analysis of the exchange of information and co-ordination within the administrative system will be provided to the Bulgarian decision-makers to facilitate the preparation of a program for Bulgaria. Training and support of PAU staff will be provided to conduct the impact assessment of the legislative approximation. IT and office equipment shall be purchased.
- Assistance is also envisaged for support to the establishment of Directorate for the quality control of fresh fruit and vegetables under MAF. (Ordinance No 33 of the Council of Ministers from 17.12.1998). Training of DCF&V staff in central and regional will be provided as well as supply of IT and office equipment for its central and 28 regional units. The IB component will be implemented in two parts. The twinning component includes provision for Pre-Accession Adviser for the duration of one year and for training of IPD and working groups staff.

The project's budget is 0.6 MEURO.

### **Project 6 - Approximation of legislation and establishment of an operational system for state and professional control in vine and wine sector**

The implementation of the European legislation in the wine sector is identified as a strategic priority in the NPAA. It will create favourable conditions for vine and wine sector development and will contribute to the wine quality improvement.

A Draft Law on Wine and Spirits (LWS), harmonized with the EC legislation, was prepared and approved by the Council of Ministers in February 1999 and introduced

in the Bulgarian Parliament. It has already passed the Agrarian Commission and now is in the Commission on Economics. The present project will permit the Bulgarian authorities to implement the Law. A Strategy for development of vine growing in Bulgaria has been elaborated by MAF and now is under discussions within the Ministry.

The project has four sub-components:

- Elaboration and adoption of legislation for the wine and vine sector, harmonized with the EU requirements;
- Support to the establishment of an Implementing Agency within MAF for control of vines and wines, support to the establishment of National and Regional Vine and Wine Chambers, support to the establishment of a National Arbitrary Commission to MAF and Regional Wine Tasting Committees to Regional Chambers, including investment.
- Provision of equipment for two control laboratories for wine analysis: one laboratory within the Implementing Agency under responsibility of MAF and one laboratory within the General Inspectorate for wine licensing; and equipment of laboratory for determination of characteristics and the minimum inspection requirements of vines varieties including 'in vitro' genetic bank.
- Establishment of an information system for data on vine and wine sector, including a Register of wine producers and Register of quality wines with appellation of origin; and establishment of a Vineyard cadaster for the main 5 vine-growing regions of Bulgaria (1st stage covering around 1,000 km<sup>2</sup>).

The project's budget is 2.50 MEURO.

The Bulgarian contribution to the above mentioned 6 PHARE'99 projects will be approx. 3.15 MEURO

### ***PHARE 2000***

The Ministry of Foreign Affairs, responsible for coordinating all PHARE projects for 2000 have included:

#### **Project 1 - Support to restructuring of the agricultural statistics and its approximation to the EU standards**

The project's budget is 2.5 MEURO and it finances the second year of the three year statistical reform program which has as its overall objective to improve the compliance of the Bulgarian agricultural statistics to the EU standards.

The project intends to strengthen the existing system with know-how transfer in new sectors especially fruit trees survey and FADN.

The transfer of the know-how will take into consideration the specific needs and priorities adopted by the Commission of Agricultural Statistics in the MAF. The survey program has to be in line with the EU norms.

Some surveys tested during previous projects have to be introduced into the annual current program. Some others have to be tested.

Particular attention will be paid to the first introduction of the FADN system and analyses of agricultural incomes. A training of additional experts both in central and in regional level will be organised. A real statistical network between the regional delegations and the central level and to Eurostat will be partially implemented. Actions toward the easy accessibility of the main users of agro-statistical information to the database will be undertaken.

## **Project 2. – Strengthening of Administrative Structures of SFA and MAF for Implementation of Rural Development Program**

The project will facilitate the first, and most difficult, years of the SAPARD program implementation in Bulgaria will enable its efficient implementation and will allow the Bulgarian authorities to absorb the maximum funds available for each of the years from 2000 to 2006.

### Results for SFA , MAF and their regional offices:

- The staff of the SAPARD Agency efficiently managing the SAPARD Program according to the EU standards of control and reporting;
- The project Selection Committees for each measure operating effectively;
- SAPARD Department prepared to operate as Secretariat to the Monitoring Committee;
  - Transparent and operating effectively implementation procedures for the measures;
  - Delegated authorities able to implement their measures;
  - The regional offices trained and able to carry their functions as implementing bodies;
  - The trainers providing Vocational Training under SAPARD trained to give relevant courses to SAPARD beneficiaries.

### Results for the local administrations:

Local administration planning capacity developed in selected regions for identification, preparation and monitoring of projects for integrated rural development.

The budget of the Project is 1.0 MEURO.

### ***PHARE 2001-2006 (see also Table 26)***

The following projects could be envisaged under PHARE 2001-2006, without prejudging the PHARE programming exercise:

### **Project - Support to the restructuring of Bulgarian Fisheries and Aquaculture Sector and approximation of legislation covering the sector**

The project intends to strengthen the administrative capacity of the State Fisheries Inspectorate and to improve the system for licensing of fisheries activities including the introduction of fishing vessels register, and to improve the control system on fishing activities. Beneficiaries will be The State Fisheries Inspectorate (SFI), the 6 Regional Fisheries Inspectorates (RFI), Research Institutes and NGOs in the Fisheries and Aquaculture sector. The budget of the Project is 2.5 MEURO (0.8 MEuro Twinning and 1.7- supply of equipment).

#### **National Veterinary Service - Institute for control of Veterinary medicines**

To fully equip three permanent Border Control Points (Kalotina, Port Varna, Port Burgas) Total - 2.7 MEURO

1. Laboratory for the control of veterinary medicines - 0.6 MEURO

#### **National Service for Plant Protection (NSPPQAC)**

Improvement of phyto-sanitary control including control on imports, producers and diagnostic activity carried out by laboratories- approx. 2 MEURO

Continuation of work on improvement of the biological testing and registration of plant protection products - 2.5 MEURO

Continuation of work on the improvement on the control on pesticides, residual quantities of pesticides, nitrates and heavy metals - 0.7 MEURO

Creation of specialized units and building up of a system of control on the production of organic farmers. 0.4 MEURO

The Bulgarian contribution to these 4 activities will be approx. 7.6 MEURO.

#### **General Inspectorate for Seed Testing and Seed Control**

Reconstruction and finalization of equipment procurement for PHARE project BG95-07-02-08 revised by Twinning Partner BG9913-03-01 of the General Inspectorate of Seeds Testing and Control. - 0.5 MEURO

#### **National Grain Service**

Establishment of a state of the art system for control of the quality of animal fodder and animal fodder additives – 1.2 MEURO

Technical Assistance:

- First Phase (0.15 MEURO) - Directives and Regulations on the control on the quality of animal fodder, EU standards on the methods of testing on the quality of combined animal fodder, Auditing, Language tuition for English and French.
- Second Phase (0.15 MEURO) - Administrative, marketing and financial methods of work in the organization of the control of the preparation of fodder. Implementation of a system for quality control ISO 9001-3. Language tuition for English and French.

Equipment - 0.9 MEURO (First Phase - 0.4 MEURO - Laboratory equipment and computer network between the central and regional offices. Second Phase - 0.5 MEURO - equipment for three laboratories, photo-coping machine and computers).

**Table 26 Pprojects for Improvement of Veterinary and Phyto-sanitary Control  
Financed by PHARE National Programs for 1998, 1999, and 2001-2006**

Project No.	Project	Funds Total MEuro	Including		Completion Term
			Institution Building	Investment	
<b>1998 NATIONAL PROGRAM FM signed on 22.12.98</b>					
<b>TOTAL FOR 1998 NP:</b>		<b>8.00</b>	<b>2.7</b>	<b>5.3</b>	<b>12.2001</b>
<b>BG980601.01</b>	<b>Animal Health and Diagnosis</b>	<b>4.60</b>	<b>1.0</b>	<b>3.60</b>	<b>12.2001</b>
BG9806010101	TA by Twinning for NVS		1.0		
BG9806010102	Animal Identification and Registration System			0.4	
BG9806010103	Software and Hardware for Veterinary Food Control			0.1	
BG9806010104	Veterinary Laboratory Equipment			3.1	
<b>BG980601.02</b>	<b>Plant Health and Quality Control</b>	<b>1.60</b>	<b>0.5</b>	<b>1.10</b>	<b>10.2000</b>
BG9806010201	TA by Twinning for NSPPQAC		0.5		
BG9806010202	Laboratory Equipment			1.10	
SUB-TOTAL VETS AND PHYTO ONLY:		6.2	1.5	4.7	
<b>1999 NATIONAL PROGRAM FM Expected to be signed at the end of 1999</b>					
<b>TOTAL FOR 1999 NP:</b>		<b>10.27</b>	<b>4.04</b>	<b>6.23</b>	<b>12.2002</b>
<b>BG99xx-01</b>	<b>Improvement of Veterinary Control and Animal Identification</b>	<b>3.0</b>	<b>0.3</b>	<b>2.70</b>	<b>07.2001</b>
01-01	Upgrage of BIP Capitan Andreevo			1.20	
01-02	TA for Design and Supervision of Works		0.3		
01-03	Construction of 50 km "Green Border"			0.55	
01-04	Supply of Ear Tags for Sheep and Goats			0.80	
01-05	Animal I&R System – Follow-Up Of BG9806-01			0.15	
<b>BG99xx-02</b>	<b>Improvement of The Phytosanitary Control</b>	<b>1.88</b>	<b>0.59</b>	<b>1.29</b>	<b>03.2002</b>
02-01	TA (Twinning)		0.59		
02-02	Equipment for Phytosanitary control			0.75	
02-03	Equipment for Biological testing			0.21	
02-04	Equipment for Control of plant products			0.23	
02-05	Equipment for Biological agriculture			0.10	
SUB-TOTAL VETS AND PHYTO ONLY:		4.88	0.89	3.99	
<b>2001-2006 NATIONAL PROGRAM</b>					
BG20xx - 01	<b>National Veterinary Service Institute for control of Veterinary medicines</b>	<b>3.30</b>		<b>3.30</b>	
	Equipment for three permanent Border Control Points (Kalotina, Port Varna, Port Burgas)			2.70	
	Laboratory for the control of veterinary medicines			0.60	
BG20xx - 02	<b>National Service for Plant Protection (NSPPQAC)</b>	<b>5.60</b>		<b>5.60</b>	
	Improvement of phytosanitary control including control on imports, producers and diagnostic activity carried out by laboratories			2.00	
	Continuation of work on improvement of the biological testing and registration of plant protection products			2.50	
	Improvement on the control on pesticides, residual quantities of pesticides, nitrates and heavy metals			0.70	
	Creation of specialised units and building up of a system of control on the production of organic farmers			0.40	
SUB-TOTAL VETS AND PHYTO ONLY:		8.90		8.90	

### 1.5.2.Non- Community Support

Over the 1990-1998 period, reforms in the Bulgarian agricultural sector were supported under programs and projects financed by international donors and bilateral assistance schemes. Support focused on:

- Development of capacity for the formulation and implementation of agricultural policies;
- Institution building and reinforcement;
- Development of agricultural services and market infrastructure;
- Sustainable agricultural development;
- Restructuring of the country's irrigation system.

Assistance under the above projects totalled about USD 84 million, provided by the major project donors: the EBRD, Germany, Switzerland, Japan, England, France, the Netherlands and Belgium.

### **1.5.3. Government Support**

**The Farmer Support Act** of 1998 is the underlying legal act, providing for government support to Bulgarian farmers. The Act aims at the following main objectives of government support policy:

- development of viable and efficient farms;
- promotion of agricultural production in regions reporting deteriorating socio-economic indicators or regions enjoying unfavourable climatic and environmental conditions.
- development of environmentally-friendly agriculture, preserving and improving soil fertility and the country's gene pool;
- improvement of rural production infrastructure, providing conditions for the generation of higher income.

Under the Farmer Support Act, government support to farmers shall be provided by economic, structural and organisational measures, extension services and scientific research as well as by training and qualification improvement programs. Assistance to the association of farmers into branch organisations on a product, functional and regional principle is also an important element of government support policies.

The Act also requires an Annual Agrarian Report to be submitted. The Report analyses the agricultural sector in the preceding and current year and outlines measures to be undertaken by the government in the following year. There is a special section dedicated to the funding of these measures. The Agrarian Report is approved of by the Council of Ministers not later than October 31, each year and the budget allocations needed by the agricultural sector are provided for in the Government Budget Act in the following year.

**This mechanism of government support largely complies with the measures aimed at agriculture and rural development in the applicant countries from Central and East Europe, described in details in art. 2 of the Council Regulation 1268/99.**

A key instrument of government support to agriculture in Bulgaria is the State Agriculture Fund (SFA), established in 1995 in pursuance of the then Protection of Agricultural Producers Act (repealed by the Farmer Support Act). SFA is a legal entity with its own budget, annually adopted by the Council of Minister at the proposal of the Agriculture Minister.

Sources of SFA budget financing:

- budget subsidies extended on an annual basis;
- percentage of the insurance premiums of insurance companies;
- funds allocated under international programs, etc.

The 1999 SFA budget amounts to about 42 MEURO.

SFA extends financial aid to farmers by investment credit facilities. Another form of SFA support to producers of bread wheat is extended on the basis of futures deals, which, however, will be gradually limited.

The extension of financial support and promotion of investment activity, based on 8 investment programs, are a top policy priority of SFA.

***Agricultural Start-up Program***: supports investment projects of young farmers for business start-ups and aims at improving the working conditions and level of mechanisation at farms owned or run by young farmers. The loan extensions are up to BGN 15 000; repayment period of up to 24 months, including a grace period of up to 12 months.

***Bulgarian Farm and Development Programs***: provide investment support to larger farmers, requiring respectively 10% (the Bulgarian Farm Program) and 30% (the Development Program) of farmer's own resources. The maximum loan amounts to BGN 100 000 under the Bulgarian Farm Program and BGN 260 000 under the Development Program.

***Mountainous Farming Program***: supports investment projects in mountainous areas by extending preferential investment credits of up to BGN 15 000.

***Eco-Farming Program***: supports investment projects amounting up to BGN 80 000 aimed at environmentally-friendly farm produce or activities related with soil fertility improvement, new construction for environmentally-friendly crop and livestock production. Farmer's own investment estimated at minimum 25 % of the totally invested project amount.

***Young Farmer Program***: provides financial support to farmers - physical persons below 35 years of age by extending investment loans of up to BGN 15 000 for the purchase of machinery and land, new construction and training and qualification courses having to do with production efficiency. The maximum grace period is 24 months.

***Greenhouses Program*** - provides investment assistance to projects for the construction of greenhouses. A major requirement is that a farmer's own investment contribution should amount to minimum 35% of the total investment amount under a project.

***Basic Repair Works and Recycling of Tractors Program*** – provides investment assistance for: basic repair works of a private tractor – up to BGN 5,000; for purchasing of a recycled tractor – up to BGN 10,000. The farmer's own investment contribution should amount to minimum 30% of the total investment amount under a project; repayment period of up to 18 months, including a grace period of up to 6 months.

Investment credits under the above programs:

- credit term - 1 to 8 years;
- grace period - 3 months to 4 years;
- interest rate - 6% on an annual basis.

The existing investment programs of State Fund Agriculture are programs to facilitate the access of agricultural producers to credits under the conditions of commercial banks and State Fund Agriculture - that represent market conditions i.e. interest rate is not subsidized.

Agricultural producers have relied on investment support equal to 11.847 MEURO and worth of 441 investment credits in 1998. Commercial banks have approved of 200 investment projects altogether amounting to 5.993 MEURO. The structure of investment projects has been as follows:

**Table 27 1998 Investment Credit Structure**

Lending facility:	Number of Projects	Credit Amount (M EURO)
Farm machinery	94	3.550
Animals	94	2.036
Animals and machinery	8	0.221
New construction	2	0.155
Perennial crops	1	0.008
Farm land	1	0.023
Total	200	5.993

Source: MAF.

To promote investment activity in 1999, the government has envisaged extent to 37.250 MEURO. 338 investment projects have been approved, 149 of which have been refinanced by commercial banks. The structure of investment lending as at December 31, 1999 is given in the table below.

**Table 28 Structure of Investment Credit as at December 31, 1999.**

Lending Facility	Projects Refinanced	Amount (MEURO)
Farm machinery	96	4.317
Herd and/or breeding animals	30	1.301
New construction (crop and animal production)	3	0.135
Perennials	9	0.737
Farm land	3	0.098
Bee farms	-	0.061
Greenhouses	-	0.311
Other	8	0.488
Total	149	7.448

Source: MAF.

Based on a MoU in the framework of The Dobrich Pilot Project SFA co-finances the National part of the project.



Based on a MoU between the EC and the Bulgarian government, a PHARE project for Agricultural Capital Fund Scheme has been successfully implemented, which is a good example of the project outputs achieved, given EU technical and financial assistance and SFA co-financing support and farmers' own resources. There are now 33 local private rural mutual credit associations (PRMCAs) united into the National Federation of PRMCAs, with a HQ located in the town of Plovdiv.

Launched in 1995, the Agricultural Capital Fund Scheme has, since then, aimed to established a network of private farmer credit co-operatives, providing financing for the production and processing of agricultural products as well as for the purchase of farm machinery. Private farmers are thus allowed access to lending resources via their own credit co-operatives. The implementation of the project relied on MECU 7 worth of EC allocations and MECU 3 worth of grants extended by the Bulgarian government. These resources were extended to co-operatives in the form of capital grants and non-repayable funds. Farmers' paid-in share capital amounted to MECU 1.

Currently, the 33 PRMCAs include about 10 000 members. The share capital paid in totalled about BGL 2 billion while the minimum capital contribution per member amounted to BGL 100 000. Each credit co-operative comprises a membership of minimum 200 people, with this number being significantly higher in many of the co-operatives.

All PRMCAs have paid in minimum share capital of BGL 34 million, which ensures their viability. Hitherto, **4 500** loans totalling **BGL 11.3 billion** have been extended at the extremely high **repayment rate of 99.3%**.

#### ***Investments in Irrigation and Land Improvement Facilities***

Another important aspect of government agricultural policy has to do with support to irrigation and amelioration on the basis of annual budget allocations and subsidies. Until 1998 government investment policies in irrigation and amelioration relied on direct budget subsidies. Part of the investments was targeted at the construction of irrigation facilities that have been left unfinished, reconstruction, renovation and repair of big facilities, water supply to agricultural research institutes and animal farms, construction and renovation of small-sized irrigation and land improvement facilities. Another part of the investments was used for the maintenance, breakdown service and repair of large irrigation and drainage facilities as well as for the overhaul of smaller amelioration facilities. Investments are also made to strengthen land protection against erosion, pollution, salinisation, marshy areas and other contamination of farm land. Table 24 below shows the investment allocations extended by the Land Improvement Fund for irrigation and land improvement facilities over the period 1994-1998.

**Table 29 Expenditures of the Land Improvement Fund over the 1994-1998 Period**

(in thousand EURO)

<b>Year</b>	<b>Capital Expenditure</b>	<b>Other</b>	<b>Total Expenditure</b>
1994	6 615	1 414	8 029
1995	9 857	1 138	10 995
1996	6 532	2 378	8 910
1997	3 515	985	4 500
1998	5 187	1 284	6471

Source: MAF.

***Investment in Forestry***

The National Bulgarian Forestry Fund is another major mechanism of government support. In 1998, EURO 25 410 thousand and EURO 34 404 thousand in 1999 worth of funds have been utilised for the financing of activities related to the management, reproduction, use and protection of the country's state-owned forests and woodland. The revenue of the National Bulgarian Forestry Fund is formed on the basis of the tariff stakes from the national trade with wood material, not on the basis of subsidies from the State Budget.

At the same time, government support policies are also aimed at improving farmers' access to lending resources and providing alternative sources of financing in agriculture. A major step forward was the Storage of and Trade in Grain Act, introducing an altogether new system of warehouse receipts against grain deposits. To speed up the use of warehouse receipts for grain deposit as security for a loan, the EBRD has extended a credit line to service the 1999 harvest.

***Investments in Rural Infrastructure***

One of the main disadvantages of the command economy was that rural development issues were partially dealt with based on palliative measures rather than seeking comprehensive solutions. The rural policies of the 80s implemented in the less developed areas, i.e. "settlement systems of the 4<sup>th</sup> and 5<sup>th</sup> functional type" in the border regions and Strandja-Sakhar region did not produce the desired effect, as investments were primarily made in new production capacity without, however, improving its efficiency. Furthermore, local population and authorities were altogether excluded from the central decision making process.

The government invests in the construction of a road infrastructure (fourth class roads). The funds extended over the 1995-1998 period are given in table below.

**Table 30 Government Budget Allocations for the Construction of a Fourth-Class Road Network over the 1995-1998 Period**

(in thousand EURO)

<b>Year</b>	<b>Budget Resources Extended</b>
1995	5 975
1996	3 181
1997	859
1998	1 166

Source: MRDPW.

## **2. AN OVERVIEW AND ASSESSMENT OF THE NATIONAL AGRICULTURE AND RURAL DEVELOPMENT PLAN**

### **2.1.Strategy Framework**

Agriculture is a sector of key importance for the Bulgaria's pre-accession to the European Union. Its importance is predetermined by the role of the agricultural sector in the Bulgarian economy as well as its paramount significance in EU common policies and acquis.

The Copenhagen Summit Decisions, the conclusions laid down in the Commission's *Opinion*, the Annual Report of EC of October 1999 on the Bulgaria's Progress towards Accession, as well as the general provisions of the EU *Agenda 2000* Framework and the bilateral phase of the acquis screening reduce the country's priorities in agriculture and fisheries to two key aspects, as laid down by the updated NPAA:

**economic**, incorporating:

*building a modern and competitive agricultural sector meeting EU economic criteria*, i.e. a sector able to operate under the pressure of EU market forces by implementing a strategic investment policy that mobilises all financial resources in a good mix aimed at the implementation of the acquis in agricultural production and trade, forestry and fisheries;

*sustained agricultural and rural development* in compliance with environmental protection requirements on the basis of stable rural communities, alternative employment, economic diversification, and large-scale infrastructure.

**legal-administrative**, including:

*agricultural (veterinary and phyto-sanitary control included) legislation alignment* with the EU acquis and preparation for the implementation of CAP mechanisms by sectors and commodity groups;

*bringing the existing administrative capacity and procedures into line with EU membership requirements* targeted at the enhancement of the organisation capacity for the implementation and enforcement of the acquis as well as for the undertaking of functions and responsibilities related to EU membership;

*building organisational structures*, which will ensure the implementation of the legal mechanisms in Bulgaria's co-operation with the EU under the Accession Partnership Framework.

These aspects are intimately related with the government agricultural policy and reform currently implemented.

The establishment and assertion of market structures based on stable ownership patterns, favouring the development of an efficient and competitive agricultural sector has to do with the completion of land ownership restitution by end-1999; the privatisation of the majority of state-owned assets in agriculture and forestry as well as the improvement of the legal and institutional framework of market development and land lease. The restitution and privatisation processes have now gained momentum since 1997. The Agriculture Ministry has committed itself to speeding up privatisation so that end-1999 can witness the privatisation of over 80% of the assets in agriculture and forestry.

Land ownership restitution and the provision of owners with title deeds is a decisive pre-condition for the operation of a healthy land market as well as a stimulus for commercial banks to lend credits to farmers. Ultimate land ownership restitution will also ensure the basis of lasting and stable ownership relations, viable production structures and the overall structural adjustment of the sector. The government has indicated its will to bring land ownership restitution to an end in 1999, relying on budget allocations and PHARE funds.

The latest amendments to the Land Lease Act have provided for better land lease opportunities as another instrument of the land market. The establishment of a land registry, as foreseen by a recently adopted Land Cadastre and Registry Law, will provide the information needed by a genuinely operating land market.

The development of stable and viable farm structures will promote sustainable agricultural development. One of the greatest challenges for Bulgaria in the process of economical restructuring in agriculture is to improve the quality and to implement the Acquis. Agriculture and environmental protection is ensured through a number of legal acts: Environmental Protection Act, Nature Protection Act, Plant Protection Act, Agricultural Land Protection Act and the relevant legislation on Environmental Impact Assessment (Ordinance No.4/98, Ordinance No.1/97 and Ordinance No.2/95).

The legal framework of legal entities and farm units draws upon the country's Commercial Code and current Co-operatives Act. The last couple of years have seen a number of drawbacks in the legal basis of farm co-operatives that reflected in their performance, which in turn necessitated the new co-operatives act. The new co-operatives act has introduced some EU-specific elements of farm co-operatives, allowing, for instance, legal entities to become members of farm co-operatives. Thus, the organisation of co-operatives draws upon the spirit and traditions of co-operative democracy aimed at the protection of group interests and each member's rights. Land use patterns will be improved with a view of the actual exercise of ownership rights to restituted land.

The state policy is directed at increasing the ability of the agricultural producers to access credits from the commercial banks, as well as at expanding the diversity in the alternative financing of agriculture. The Grain Storage and Trade Act adopted in 1999, which introduced the system of where house receipt system aims for this. In order to accelerate the functioning of the system in which the where house receipts are acknowledged as collateral to credits taken by the producers, EBRD launched a special credit line to the Bulgarian Commercial Bank which will serve the active period in 1999.

The Bulgarian government has put as its main priority the development of credit system "friendly" to entrepreneurs, including these in the agricultural sector. During the last year the guarantee functions of SFA have been further extended in order to relieve the "collateral" problem with the commercial banks. Furthermore, at present officers from SFA are working together with bank experts in order to better assess the investment projects of agricultural producers and facilitate the release of credits for agricultural projects.

The improvement of the sector's competitiveness and export orientation can only be achieved by promoting the investment process in agriculture on the basis of infrastructure projects and targeted government support; on the basis of high quality agricultural products meeting EU standards. The production, technological and market

infrastructure adequacy is an important prerequisite for the market operation of the agricultural sector, at the same time providing transparency of the business environment that will facilitate agricultural development. The investment policy priorities laid down by the National Investment Program of the Bulgarian government over the 1999-2001 period, are as follows:

- establishment of 10 wholesale markets of fresh fruits, vegetables and flowers; feasibility studies and establishment of wholesale fish markets that will play the role of representative markets in the implementation of the common market organisation of fish and fishery products under the EU Common Fisheries Policy;

- maintenance and modernisation of the country's irrigation facility network as a specific element of agricultural production infrastructure. The drafting of a Water User Associations Act, laying down the rights and responsibilities of associations is imminent. The act will also stipulate the ways and terms of water use and exploitation of irrigation facilities by the associations of water users.

The government will also undertake **rural development measures**, which are expected to greatly improve rural living standards and provide alternative employment opportunities, generating higher income.

Pre-accession to the EU is one of the key agricultural policy goals, i.e. alignment of Bulgarian agricultural legislation with the EU acquis; bringing administrative capacity and procedures into line with EU requirements; as well as implementation of the Internal market mechanisms, CAP and EU structural policy in its agricultural aspects and agri-statistical methodologies.

A Central Integration Policy Department of the MAF has been functioning for several years now. The veterinary and phyto-sanitary services are effectively harmonising the country's legislation and implementing the EU acquis in the relevant areas. Institution building is actively supported by the EU PHARE Program (see Part V – National Legislation, Progress done since the last regular report of the EC).

## 2.2.Objectives of the Plan

The **overall goal** of the National Agriculture and Rural Development Plan is to reinforce the achievement of the objectives under the Accession Partnership and the NPAA as well as the main objective of the National Development Plan, viz. **achieving sustainable low-inflationary economic growth as a major precondition for the generation of higher income and improvement of living conditions and standard with a view to Bulgaria's future integration into the EU social and economic area**. The social and economic policies of the government are based on the following long-term priorities:

- Completion of the transition period to a market economy and establishment of an institutional system brought into line with the EU acquis;
- Improving the competitiveness of the Bulgarian economy;
- Accelerated establishment and improved quality of infrastructure and ecology;
- Improving living conditions in rural areas and adaptation of human resources to the new economic and Euro-integration environment;
- Promoting well-balanced sustainable development in a regional aspect.

Having regard to:

- (i) objectives under the Accession Partnership
- (ii) the economic priorities laid down by the National Program for the Adoption of the Acquis,
- (iii) Council Regulation 1268/99 on SAPARD:

*“Art. 1(2) Community Support shall comply with the conditions laid down in the framework of accession partnerships and shall relate in particular to:*

*(a) solving priority and specific problems for the sustainable adaptation of the agricultural sector and rural areas in the Applicant Countries;*

*(b) contributing to the implementation of the acquis communautaire concerning the CAP and related policies”.*

- (iv) the socio-economic conditions prevailing in Bulgarian rural areas, their strengths, as well as potential,

the objectives of the National Agriculture and Rural Development Plan over the 2000–2006 period have been defined as follows:

**1. Development of efficient and sustainable agricultural production and competitive food processing sector through improved market and technological infrastructure and strategic investment policies, ultimately aimed at reaching EU standards.**

**2. Sustainable rural development, consistent with the best international environmental practices by providing alternative employment opportunities, economic diversification, development and rehabilitation of infrastructure.**

Both objectives aim at improving rural economic and social conditions. They are both complementary to and consistent with the overall goal of the National Agriculture and Development Plan. They are clearly targeted at improving agricultural structures and market efficiency, implementation of the Acquis Communautaire while creating employment opportunities and raising living standards in rural areas.

The **first objective** of the 7- year plan aims at improving production quality and establishing competitive processing and marketing structures in the agricultural sector. In the future, living and working conditions in Bulgaria will become more and more dependent on the competitiveness of agriculture and forestry. Re-structuring of agricultural holdings is one of the priority areas that needs an all-out and concerted effort to help farmers meet the EU farming requirements and production standards.

The improvement of market structures is crucial for the successful development of the agricultural sector in Bulgaria. The establishment of competitive structures and enterprises in the food processing sector and viable marketing and trading units will define the market share of the sector. Production capacity modernisation calls for vast investment amounts targeted at the bringing national quality, health and marketing standards into line with EU requirements upon Bulgaria's accession to the Community. SAPARD funds and assistance will speed up the renovation process supporting the implementation of the Acquis.

**Living and working conditions are largely dependent on employment creation and improving infrastructures and services rendered to rural population.** Rural development objectives are to be considered in their complexity, i.e. the pursuit of a

common economic, community, infrastructure, environmental and cultural policy in rural areas, implemented by:

- **Diversifying and structural adjustment** of production structures, especially in problem areas; creating favourable conditions for the production of goods and services, establishment of small and medium-sized enterprises, which could draw upon the intellectual capacity, skills and crafts of rural population;
- **Improvement of core infrastructure** in rural areas that will lay the foundation for the development of viable enterprises and better quality of rural life;
- **Revival** of area- specific cultural and historical identity and life style;
- **Preserving age-old rural community values-** e.g. family traditions, preventing young people from migration, reinforcement of rural community identity; involving young people in the planning and implementation of local integrated rural development projects;
- **Rational, prudent and sustainable use** of natural resources, preservation of rural landscape and rational use and management of forests, etc.

### 3. STRATEGIES AND PRIORITIES FOR SAPARD ASSISTANCE

The strategy for SAPARD assistance described below aims at achieving the main objectives of the National Agriculture and Rural Development Plan while taking into consideration the following constraints:

- The priorities set in Art. 4.3 of Council Regulation 1268/1999, in particular: *“In their plans, applicant countries shall ensure that priority is given to measures to improve market efficiency, quality and health standards and measures to create new employment in rural areas, in compliance with the provisions on the protection of the environment.”*
- The list of eligible Measures given in Art. 2 of Council regulation 1268/1999.

Though aiming to achieve a common goal, the two objectives of the Plan, focus on different groups of problems, weaknesses and threats and hence call for a different approach to action. To ensure integrity of action in the pursuit of the two objectives, the following policy principles have been taken into account in the development of the strategy for SAPARD assistance:

- Rural development actions can be successful if only integrated in a **proper policy mix**;
- Actions taken to **improve the competitiveness** of the farm and food processing business will only be successful if combined with actions aimed **at the improvement of irrigation and marketing infrastructure**;
- The promotion of sustainable rural development requires a **multi-sector approach**. Actions to improve competitiveness in the agri-food sector have to be combined with actions to stimulate alternative employment and improve the provision of services, physical infrastructure and rural culture.
- Rural communities are best placed to identify their employment, infra-structural and service needs. The actions of local communities require **co-ordination at a sub-regional level** to minimise displacement and duplication of effort and ensure reasonable compatibility between local and national development objectives. Co-ordination will include close co-operation with other government institutions (MRDPW) that will be reached at NUTS II level.

The first objective of the plan focuses on **the promotion of efficient and sustainable agricultural production and a competitive food-processing sector capable of reaching EU standards**.

The analysis of the strengths and weaknesses of the Bulgarian agri-food sector and rural areas points to a number of internal and external structural problems over the transition period to a market economy that can be summarized as follows:

- Fragmentation of the sector resulting in an enormous number of subsistence farms;
- Deteriorating level of in-farm equipment and facilities resulting in significant waste, low productivity, and poor quality of production;



- Aging agricultural population and lack of skills and knowledge of modern farming practices and farm management.
- Insufficient bargaining power of producers of primary products due to the underdeveloped market infrastructure, insufficient transparency of market information, lack of traditions in marketing cooperation as well as inadequate governance arrangements, i.e. long term contracts between producers and processors leading to instability of prices and uncertainty of income and lack of incentives for investments in farm-specific assets (orchards, vineyards, etc.);
- Integrated and multi-sector approach;
- Internal Coherence and Effectiveness;
- Sustainability and Environmental concern;
- Partnership.

Burdened as it is with structural problems, the Bulgarian agri-food sector will have to face another adjustment to **a new external shock – compliance with the stringent EU environmental standard** in an environment of growing competition from external suppliers due to the gradual liberalisation of trade.

Legislative alignment with the *acquis* and compliance with the **EU environmental, hygiene and animal welfare standards** already cost producers a lot:

- Part the equipment and premises has been rendered redundant due to non-compliance with new standards. Thus, for instance, if the new meat legislation is to be now enforced, some 80% of the production facilities in the industry will have to be closed. Moreover, according to estimates, a significant part of the facilities cannot be upgraded
- The cost of learning and understanding and managing enterprises in a manner consistent with the new standards will be significantly high.

Training and technical assistance are an indispensable part of the adjustment to the new EU standards. However, actions to reduce transaction costs for compliance with regulations will not be sufficient to facilitate the transition to the new environmental, hygiene and animal welfare standards. The experience gained in implementing different donor-supported programs has revealed that the impact of training is unsatisfactory if producers face binding constraints to respond. As already discussed, Bulgarian agricultural producers face financial constraints having to do with:

- Insufficient domestic resources related to small scale operations, unfavourable terms of trade that have prevailed in the 1990s, and several inflationary outbursts in the past.
- Lack of access to external resources due to the underdeveloped agricultural credit schemes and inexperience of commercial banks in servicing private agricultural holdings as well as stringent banking regulations.

Thus, some of the reasons for the lack of funds to finance the adjustment to the new standards are related to structural problems internal to the sector while others are external, deeply rooted in the structure of the Bulgarian financial system. The Government supported by EU PHARE Program and the international financial institutions has been developing policies and schemes to facilitate access to credit. However, they are expected to produce a positive effect the medium term while the

adjustment of the sector to the new standards is a problem that Bulgarian producers have already faced. Clearly, without sufficient support to adjustment, the new environmental standards will be either inadequately enforced or lead to the collapse of a critical mass of agricultural holdings and food enterprises, growing unemployment and balance of payment problems, and subsequent pressures for protection.

Training and technical assistance need to be complemented by investment support to agricultural holdings and food processors focusing primarily on the up-grading of equipment and production facilities to meet the EU standards and the improvement of product quality.

The enforcement of the new health and quality legislation also requires adequate systems for external control. Support for the improvement of veterinary and phytosanitary control, to be provided by the EU PHARE Program shall be indispensable to augmenting the impact of actions under the Strategy for SAPARD assistance. (See Table in APPENDIX 5)

A similar approach has been used to implement another SAPARD priority, i.e. improvement of market efficiency. As already mentioned, market inefficiencies stem from underdeveloped market infrastructures, imperfect flow of information and asymmetric bargaining positions.

The establishment of market infrastructure in agriculture is an important precondition for the efficient market operation of the sector. There is a need for accessible, properly equipped and managed wholesale markets of all agricultural products, in particular wholesale markets of fruit and vegetables. This in turn is expected to create a favourable business environment of transparency for the development of the agricultural sector. At the same time actions are proposed to reduce transactions costs through improvement of the Agricultural Market Information Service and Market Research.

Support to the establishment of producer groups is an important instrument to reduce the uncertainty of the environment, improve the terms of trade and price stability as well as the marketing costs of primary agricultural producers. The eligible measures under SAPARD provide for grants to the running costs of producer groups, which can be identified as an important incentive for the creation of producer groups and a major input to improve the effectiveness of their operations. And yet, the lack of traditions in Bulgaria requires special support for promoting the idea and benefits of producer groups among farmers, as well as for the exchange of experience.

The promotion of stable long-term relationships between primary producers and processors can play an important role in stabilising prices and serve as an incentive to increase investments in farm-specific assets as orchards and vineyards. Therefore, food processors that establish long-term vertical links with local primary producers will take priority in support.

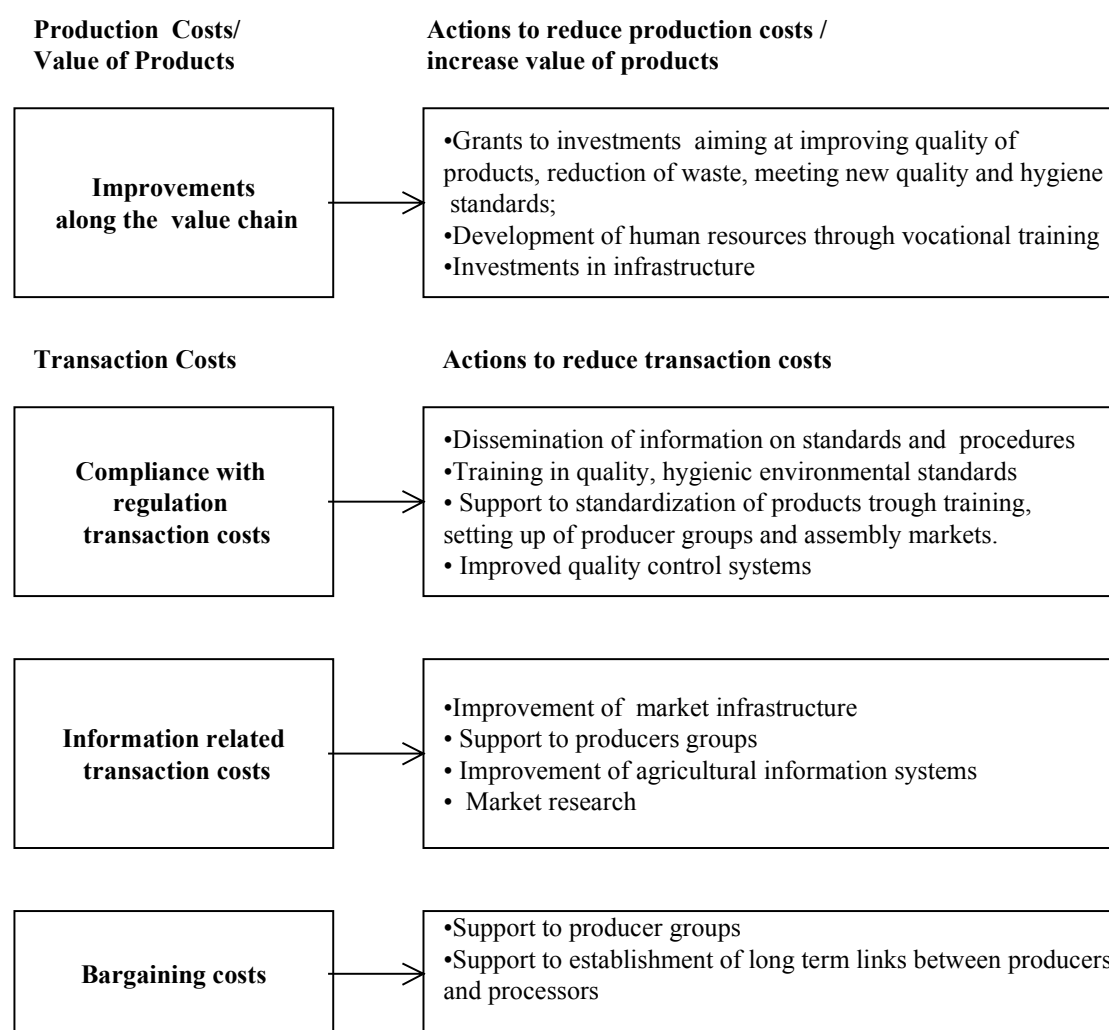
Investment in irrigation facilities aims at higher yields and stable production levels. In many parts of Bulgaria rainfall volumes and sunshine are often unreliable in critical plant growth periods bringing about lower and unstable crop yields and hence lower income. Irrigation is therefore crucial to the comparative advantages Bulgarian crop production may enjoy. Fresh investment in irrigation infrastructure is a must. A new Water User Associations Act that will provide for water users' rights and responsibilities is in the drafting. It will also regulate the terms and conditions of

water use and exploitation of irrigation and drainage systems by the associations of water users.

In conclusion, the strategy under Objective 1 of the National Agriculture and Rural Development Plan rests on the improvement of efficiency of agricultural holdings and food processing enterprises through:

- Support to improvement in the whole value chain, and
- Reduction in the different types of transaction costs.

**Figure 10 Strategy for the Achievement of Objective One of the National Agriculture and Rural Development**



**Sectoral/Size scope.** A large proportion of Bulgarian private farmers is too small to be viable and often has a demographic structure, which is not conducive to become market-orientated businesses. The development support therefore will be targeted at those farmers who can assemble sufficient land, owned or leased to reach economic viability and sustain operations in an increasingly competitive environment. Economic viability has been defined as the full utilisation of an agricultural holding's resources at a minimum efficient scale and ability to operate and to generate sufficient net income without recourse to government support to its operational activity or

unsustainable level of indebtedness. Priority for support will be given to young farmers who have been identified as particularly important for the development of the sector in the long run.

The concentration of resources is to be further achieved by giving priority to selected sub-sectors in the primary and processing sector, as illustrated on Table 31.

**Table 31 Sector Priorities of the Strategy for Achievement of Objective One of the Plan.**

<b>Primary sector priorities</b>	<b>Processing sector priorities:</b>
<b>Priority Sub-sectors:</b>	<b>Priority Sub-sectors:</b>
Vineyards growing	Wine production
Fruit and vegetable growing	Fruit and vegetable processing
Milk production	Dairy sector
Meat Production	Meat processing and slaughtering
Forestry	Forestry product processing

Priority sectors have been selected on the basis of public discussions of experts and business support institutions. It is the severity of the adjustment problem that they face or/and competitive advantages revealed in good export performance (current or past) that has been the main selection criteria.

Farmers must be supported to improve the quality and marketing of fresh products and the provision of high quality raw-material for the food processing industry in the following sectors: dairy and milk production, vineyards, fruit and vegetables and other crops. Assistance will contribute to the increase in income and improvement of the living and production conditions in agriculture.

Investment support should be in particular given to milk producers to improve the product quality and marketing. Special attention should be focused on the improvement of animal welfare conditions, milking hygiene and storage, milk collection points and transportation.

Another aspect of assistance has to do with support to investments in perennials - apples, peaches, sour cherries, strawberries, raspberries, black currants, and in the rejuvenation of vineyards. The necessity for investments in vineyards is particularly great. The analysis of the sector shows that the age structure of plants is deteriorating and that there has been a drastic decrease in the areas under Bulgarian grape varieties. All this has predetermined the enormous need for vast amounts of investment for the recovery of this traditionally competitive sector of Bulgarian agriculture.

The reinforced targeted impact differs by industry and measure. A list of monitoring and impact indicators is attached in Technical Sheets of the measures.

**Employment impact.** In developing the strategy, special emphasis has been put on the assessment of the possible impact of the actions under Objective 1 on employment in rural areas.

The strategy mix proposed is expected to produce a positive impact on farmers' incomes, working conditions and work safety. As already pointed out, primary

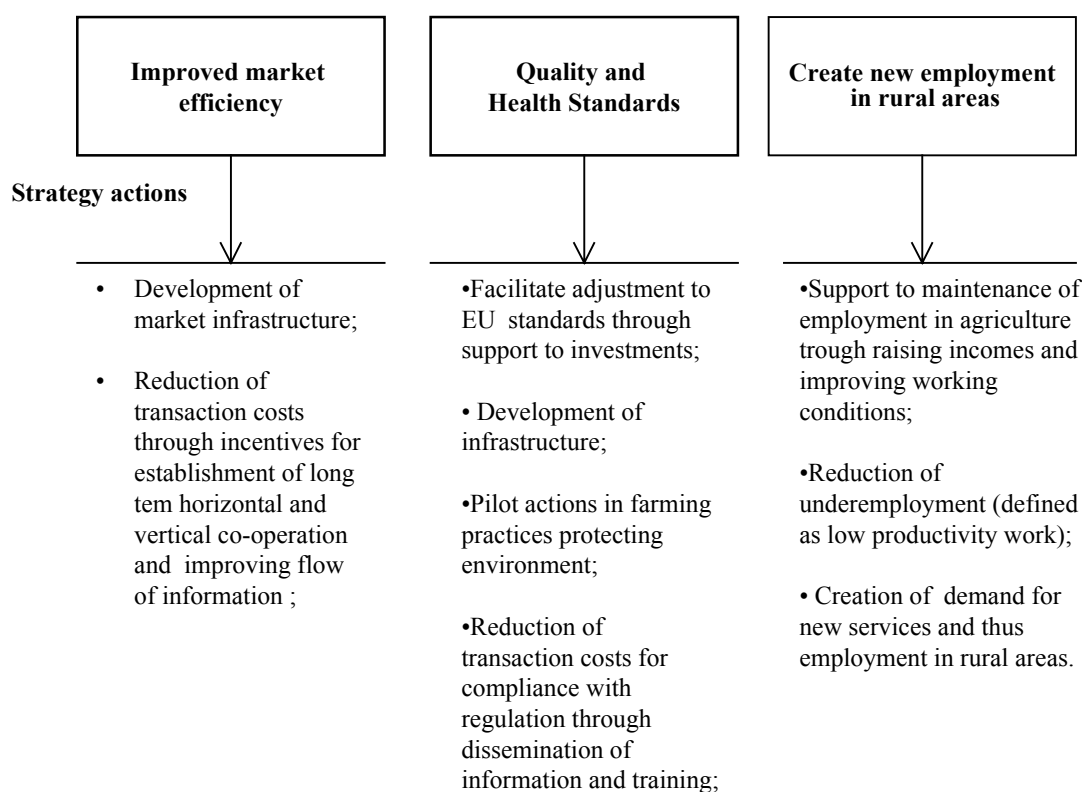
agriculture and forestry in Bulgaria employ some 800 000 people who are the backbone and source of integrity of the rural economy. Employment in primary agriculture generates income for a large share of the rural population and supports jobs in rural area services. Whatever the efforts to increase employment in related and supporting industries and services, it is mainly primary agriculture, forestry, and processing that will determine rural employment, and hence the quality of life in rural areas.

Raising incomes and improving the quality of work of this group of people will contribute to **maintaining employment, attracting and retaining young people in rural areas**. It is easy to retain employment in agriculture /rural areas in periods of decline, collapse of urban industry, high unemployment and hence low opportunity costs of labor. In the long term, however, as European experience shows, employment depends on incomes and living and working conditions.

It has been estimated that agriculture employs between 200-400 thousand young farmers that provide the core of sustainable agricultural development. **Young private farmers are the main target group** of all actions and interventions under the plan.

**Figure 11 SAPARD Priorities in the Strategy for the Achievement of the Objective One of the National Agriculture and Rural Development Plan**

**SAPARD Priorities (Art. 4 (3) Council Regulation 1268/1999**



**Table 32 SAPARD RDP 2000-2006 of Bulgaria: Employment forecast with SAPARD intervention for Sub-programme 1.**

Measure	Total jobs	Permanent jobs		Temporary jobs	
		Maintained Job in better conditions	New employment Jobs	Total costs	MansXmonths
Measure 1.1	35 000	35 000			
Measure 1.2	4659	2 328	2 331	133	19 950
Measure 1.2.1	300		300	43	6 450
Measure 1.3	3 000	1 500	1 500		
Measure 1.4	2 662	2 662			64 000
Measure 1.5	40		40		
Measure 1.6				27	4145
<b>Total Subprogram 1</b>	<b>45661</b>	<b>41490</b>	<b>4171</b>	<b>203</b>	<b>94545</b>

The anticipated impact of the measures under Priority Area 1 on agricultural employment (maintaining current employment levels as a result of building stable structures in agriculture and the food sector, improving working conditions, creating new jobs) is highlighted in table 1 above. The implementation of priority area 1 measures is expected to provide new though temporary employment by getting people involved in the very implementation of projects – renovation and modernisation of processing establishments, construction of wholesale markets and collection points, forest roads, afforestation, irrigation facilities.

The **second objective** of the National Agriculture and Rural Development Plan focuses on **sustainable rural development, consistent with the best international environmental practices by providing alternative employment opportunities, economic diversification, development and rehabilitation of infrastructure.**

As it has been stated before in the Plan, rural areas account for 81% of the country area and concentrate still significant human resources (43.6%). Main weaknesses of those areas are the depopulation trend (out-migration) particularly among the younger population, which is mainly due to lack of job opportunities. According to NSI data unemployment rate in villages as of November 1998 r. (20.1%) is higher than the relevant one in the towns (14.6%) and the average for the country (16.0%). NSI does not take into special consideration the unemployment rate in the rural areas, but accumulates data for the unemployment rates in the towns, the villages and the average for the country. This unemployment is derived from the decline of employment in state-operated agricultural farms, from the significant decline of public service sector and of the state owned and operated industries.

Rural areas have also significant resources, which present significant development potential. This strategy aims at exploiting this potential. Although these areas used to provide basic services to rural population, the service sector no longer provides good level of basic services and it needs support in order to retain population.

Rural areas of Bulgaria have beautiful nature, long annual sunshine hours, and clean environment, which is a good precondition for good living and leisure activities. They have at their disposal fertile agricultural land and well-forested areas. This along with the rich cultural heritage may serve as good basis for the development of the rural tourism and other forms for diversification for economic activities.

The compact settlements with strong rural communities living in these areas, together with the well developed in the past social infrastructure, need renovation and expansion of the existing road infrastructure, as well as the gradual solving of the problem with the ill maintained and lacking sewerage systems; in certain geographical areas these communities have also to solve problems with the telephone networks, and the electricity supply infrastructures. Only in this way they can turn their settlements into attractive centres for economic development.

Despite the fact that well developed road infrastructure already exists, its insufficient maintenance in the last decades puts obstacles in front of the inter settlement economic development - many settlements still remain remote and isolated. All these factors make rural areas insufficiently attractive for economic activities, and to young people.

As a result the agricultural market orientations in these regions is very low. The prevailing small farm holdings of 2 ha on average are producing exclusively for self-subsistence and cannot provide fair incomes to their owners. This is why the development of alternative economic activities like rural tourism, craftsmanship and rural services may serve as the economic leverage, which will contribute to the retention of the local people.

Solving all of the described problems demands enormous funds which SAPARD cannot provide.

Drawing upon EU experience and the specificity of Bulgarian rural development, the main principles of rural development policy in the rural areas can be defined as follows:

**Complexity of development**, i.e. the implementation of a common rural, community, infra-structural, environmental and cultural policy for all rural regions.

**Economic feasibility** – differentiation and structural adjustment of production units, in particular in problem regions, creating favourable conditions for the production of goods and services drawing upon the intellectual capacity and crafts of rural communities, establishing small- and medium-sized enterprises;

**Preservation of age-old rural community values** – family traditions, customs that will prevent young people from migration; reinforcement of rural community identity;

**Revival of region-specific cultural and historic values and life style;**

**Sustainable rural development**, a principle that largely combines all other principles of rural policy, also including rational and prudent use of natural resources, conservation of rural landscape, rational and efficient management and use of forests; coping with waste problems and environmental pollution.

**In order to implement the above principles, the Rural Development Strategy should be aimed at achieving the following objectives:**

- to provide financial and other forms of assistance to existing SMEs and business start-ups in rural areas ; rural tourism and projects for the diversification of small- and medium-sized business and farms in rural areas with relevant potential;
- to offer financial and other forms of support to the implementation of projects for integrated rural development related with infrastructure, social and cultural improvements of rural communities living in the rural areas;
- to fund the implementation of demonstration projects for organic farming and a pilot project, that support environment-related farming practices;
- The depletion of non-renewable resources such as soil, water and forest ecosystems, will compromise the prosperity and quality of life of future generations. SAPARD will therefore make some investments in projects that will protect these resources, but will also use the cross-compliance principle to ensure that other investments are focused on projects that meet the minimum required environmental standards.
- to offer vocational training and technical assistance to potential beneficiaries.

**Strategic Actions related to sustainable rural development will include:**

- Help farmers and families working on small farms to find alternative sources of income and employment;
- Identify and support people willing to start up a business (small- and medium-sized) in rural areas;
- Identify and develop rural tourism packages; marketing;
- Identify and support rural crafts for the production of goods of high export value;
- Improve and maintain electricity and water supply in rural areas;
- Improve and maintain rural housing and communications networks;
- Improve and maintain rural education;
- Promote and protect rural arts and culture;
- Prevent the depletion of natural resources and conserve and improve rural landscape and wildlife;
- Invest in the management and protection of the country's forests;
- Reinforce the recreational function of forests;
- Plant more forests; maintain current and develop greater employment potential in forestry;
- Foster the development of fishing and fish farming as a tourist attraction;

**Priority** will be given to actions with a clear impact on **alternative employment creation**. Concerted actions to improve village infrastructure and support related industries are targeted at the improvement of the overall social and entrepreneurial environment in rural areas.

Special emphasis is laid on rural areas facing severe structural problems, high unemployment and low income by channelling resources to areas in which a critical mass of social grievances has built up. Therefore, employment creation and infrastructure works offer only a short-term solution to unemployment and poverty



problems while seeking to produce a long-term and sustainable impact of an improving business and social environment in rural areas.

**Table 33 SAPARD RDP 2000-2006 of Bulgaria: Employment forecast with SAPARD intervention for Sub-programme 2.**

Measure	Total jobs	Permanent jobs		Temporary jobs	
		Maintained	New employment	Total costs	Men/months
		Job in better conditions	jobs		
Measure 2.1	8,260	2,300	5,960	61.300	
Measure 2.2				38.000	5700
Measure 2.3				27,630	4145
<b>Total Subprogram 2</b>	<b>7788</b>	<b>2,300</b>	<b>5,960</b>	<b>126,930</b>	<b>9845</b>

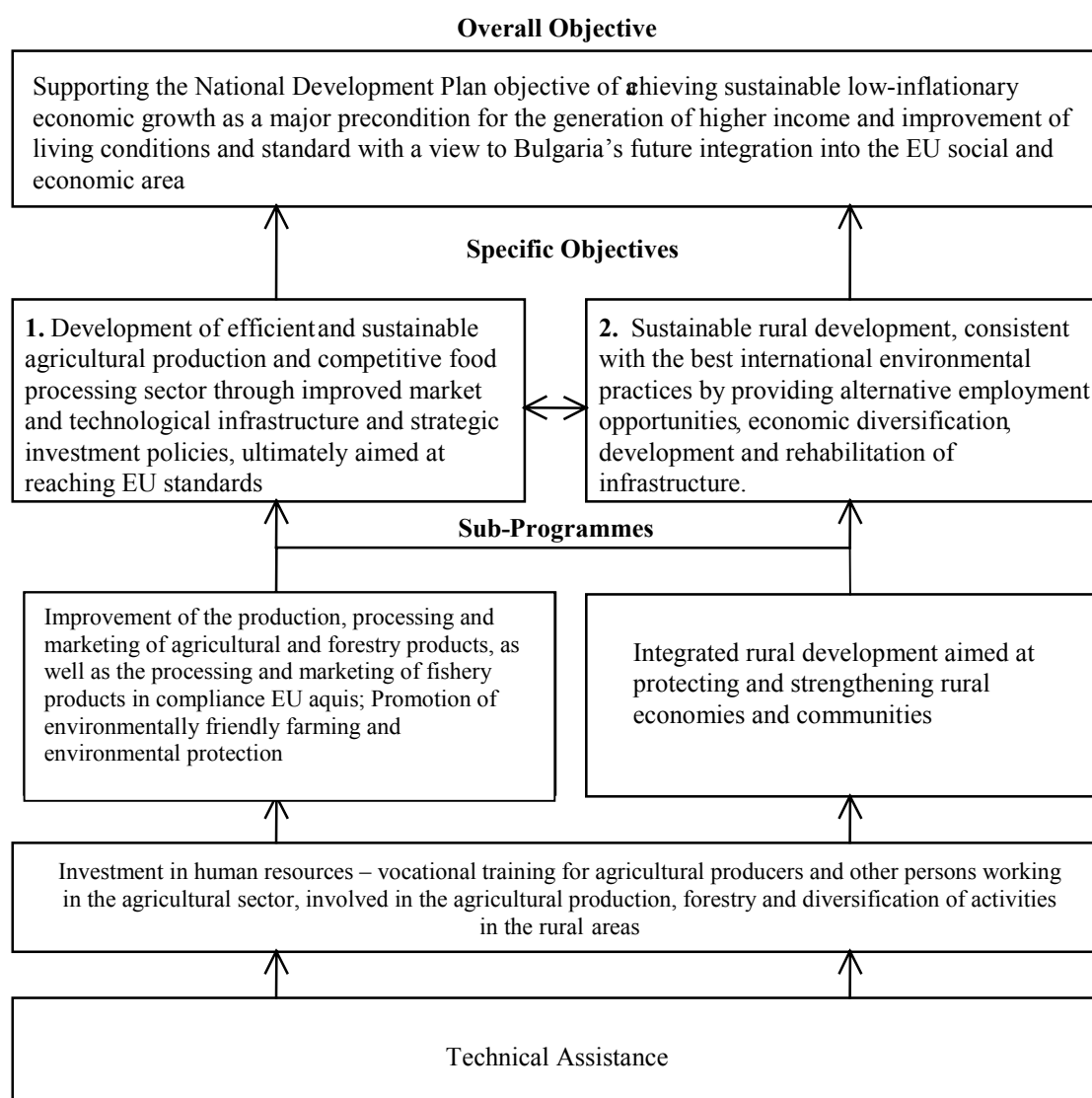
The anticipated impact of the measures under Priority Area 2 on rural employment (creating new jobs in spheres other than farming, i.e. rural tourism, crafts, services, etc; maintaining current employment by improving living and working conditions in rural areas) is indicated in table 2 above. The implementation of priority area 2 measures will also provide temporary employment to rural population by getting it involved in the establishment of settlement and inter-settlement infrastructures.

### **3.1. Allocation of Funds to Priority Areas and Geographical Scope**

The implementation of the above strategic actions will be integrated in four priority areas (sub-programs):

- 1. Improvement of the production, processing and marketing of agricultural and forestry products as well as the processing and marketing of fishery products in compliance with EU acquis; promotion of environmentally-friendly farming and environmental protection.***
- 2. Integrated rural development aimed at protecting and strengthening rural economies and communities***
- 3. Investment in human resources – vocational training for agricultural producers and other persons working in the agricultural sector, involved in the agricultural production, forestry and diversification of activities in the rural areas***
- 4. Technical assistance***

A flow chart of the plan's general and specific objectives and priority areas is given in Figure 12.

**Figure 12 Objectives and Priorities of the Plan**

In the allocation of SAPARD Assistance funds, top priority is given to the actions in first priority area as it covers strategically important actions related to the improvement of production and processing in the agricultural sector in compliance with the EU acquis. Market outlets and income growth are largely dependent on the production of quality products and the promotion of a competitive processing industry. Allocations under the first priority area amount to 70% of the SAPARD budget.

Project selection ranking criteria will pursue a vertical integration of measures aiming to achieve a greater concentration of aid funds under measures 1.1, 1.2, 1.2.1 and 1.5 and a better effect of utilisation, i.e. in selecting investment projects for agricultural holdings, priority will be given to these projects concentrating on processing establishments in the relevant sector applying for aid under *Measure 1.2 Improving the Marketing and Processing of Agricultural and Fishery Products* to speed up alignment with the acquis. As for support to the purchase of machinery and equipment, priority will be given to the producer groups recognised in the sectors

eligible for aid. Following consultations with branch organisations and data analysis at a regional level, other sectors will be further defined in the relevant sectors.

In selecting project proposals under *Measure 1.2 Improving the Processing and Marketing of Agricultural and Fishery Products*, priority will be given to projects focusing on farmers supported under *Measure 1.1 Investment in Agricultural Holdings*. As regards project proposals under *Measure 1.2.1 Wholesale Markets*, priority is yielded to projects implemented in the same regions.

Under *Measure 1.5 Producer Groups*, only producer groups recognised in the sectors supported under measure 1.1 will be aided.

The second priority area is next in importance, as it covers the implementation of integrated rural development plans in selected Bulgarian rural regions. The importance of this priority area will grow over time (about 19.8% of SAPARD funds allocated).

Funds allocated under Priority area 3, investment in human resources, amount to 4,4% with assistance being horizontally provided.

Technical assistance (both Program Technical Assistance and Technical Assistance under Art.7 (4) of Council Regulation 1268/1999) amounts to 5.8% of SAPARD funds.

The **geographical scope** of the measures under the 4 priority areas is as follows: Assistance to improve the competitiveness of farms and agri-business, i.e. measures under priority area 1, will be available to all areas.

Assistance under priority area 2 will be extended for the selection of projects out of the rural areas with priority given to 34 less developed rural areas with relevant potential for development, identified by means of Government Ordinance No 105/02.06.99 on the Identification of Areas for Reinforced Impact and Area Boundaries. A list of the less developed rural areas and maps are given in Appendix 1.

The concentration of funds under SAPARD is important and therefore the efforts were directed at achieving the integrated approach, by prioritizing. During the planning period this will be achieved by:

- a) Improvement of the statistical information for better definition of the areas with potential for development:

In connection with the restructuring of the statistical information processing and the introduction of the Eurostat methodology it is considered that during the implementation of the Plan MAF will have access to better statistical base which will help the improvement of the system for concentration of funds. For this reason MAF proposed an agri-statistics project for PHARE 2000, which will continue from the already started project for development of the agri-statistics under PHARE 1999.

With the setting up and the improvement of the regional statistics, along with the improved planning at regional level, it will be possible to delineate geographically the regions with potential for development.

### **b) Sector and geographical concentration of intervention**

In the technical description of the measures in the Plan, a system for concentration of funds has been devised, so that the maximum effect by the end of the Planning period to be achieved.

For the First Priority Area it has been chosen to direct the efforts on sector concentration of funds, so the sectors with potential for development have been identified that need significant investments in order to improve the relevant enterprises according to the acquis communautaire requirements. The regional concentration of SAPARD funds will be conducted during the selection procedure for projects, giving priority to investments under Measure 1.1 and Measure 1.2. in specific areas for different sub-sectors in order to achieve vertical integration from production to processing and marketing.

Regarding the second Priority area, a priority is given (according to the Cohesion principle of the EU), to projects from the “less developed rural areas”, defined in the Regional Development Act as “regions for targeted impact with specific problems”. Out of these regions with higher development potential will be identified; in fact the eligibility criteria regarding infrastructure projects from these areas will include the presentation of municipality multi-sector economic development plans, which will clearly present the relevant potential for development. These plans should also identify the areas of private businesses that have the highest potential for development, should that be the agricultural sector, the service sector or alternative employment sector. The goal is to achieve the maximum impact from SAPARD aid and to concentrate the efforts while implementing the Program.

### **c) Integrated approach and potential for development**

The strategy under SAPARD presents the integrated approach and the interrelations of the different measures. The efforts regarding all of the measures are directed at the regions with potential for development – i.e. irrigation projects will be supported in areas where there exists an expressed need for them by agricultural producers; support will be granted only to producers with market prospects –the wholesale markets and the collecting points will be supported in regions where there exists a wide spread vegetable growing. In regions where the potential for development of agriculture is weak, activities that are connected with alternative potential for development will be supported; as it is formulated in the context of the new EU policy regarding rural areas – extensive agriculture, forestry, diversification of economic activities, etc.

Project assessment criteria have been specifically developed to achieve greater concentration of funds in the neediest rural areas.. The criteria have been described in detail in the technical sheets per each measure.

### **3.2.Coordination Between Economic Development Plan, PHARE 2000, and SAPARD**

The coordination for the preparation of National Economic Development Plan and the EU three Pre-accession funds (PHARE, SAPARD, ISPA) was established with Decision № 555 of the Council of Ministers of the Republic of Bulgaria as of October 19<sup>th</sup> 1998, regarding the arrangement of a Special Preparatory Program for Bulgaria for the implementation of the EU Structural funds. According to this Decision Central Coordination Unit with representatives of different ministries was established headed by the Ministry of Regional Development and Public Works.

According to EC Regulation 1266/99, coordination between the pre-accession instruments will be ensured at national and regional levels in the framework of the NEDP. Measures financed by PHARE shall not be supported by SAPARD as it is already presented in the NARDP (see Appendix 5).

Arrangements will be established (through the supporting documentation for each measure of the SAPARD Plan) to ensure that applicants for both sources will be cross-checked by the Managing authorities and the bodies responsible for project selection of both Programs in order to avoid overlapping and double EU financing. Each application under a SAPARD measure must indicate whether funds has been sought from another Community Aid instrument.

PHARE 2000 social and economic cohesion will finance regional development programs in two targeted regions at NUTS II level (North West and South Central regions). The implementation will be conducted by the MRDPW. Vocational training of beneficiaries that could not be trained under SAPARD Programme (mainly measure 1.2 – Processing of agricultural and fishery products) could be proposed under the future PHARE Social and Economic Cohesion projects.

With recently adopted by the Council of Ministers Decree for adoption of the ordinance on development and implementation of macro-district strategies and programs, co-financed by PHARE program in the fields of regional development and economic and social cohesion and the preparation for the use of European Union Structural Funds, and for the establishment of planning regions and state-public commissions for economic and social cohesion, the coordination at regional NUTS II-type level is assured by participation of regional representatives of MAF and SAPARD Agency in the above mentioned commissions. In their work, the Commissions will observe that there is no overlapping between the Phare and SAPARD instruments.

In the Selection Committees for the SAPARD projects representatives from the respective ministries concerned(including MRDPW that is responsible for the implementation of PHARE Social and Economic Cohesion projects) , will be presented. In their work the Selection Committees will observe that there is no overlapping between the Phare and SAPARD instruments.