eurostat

Country profile

Statistisches Bundesamt

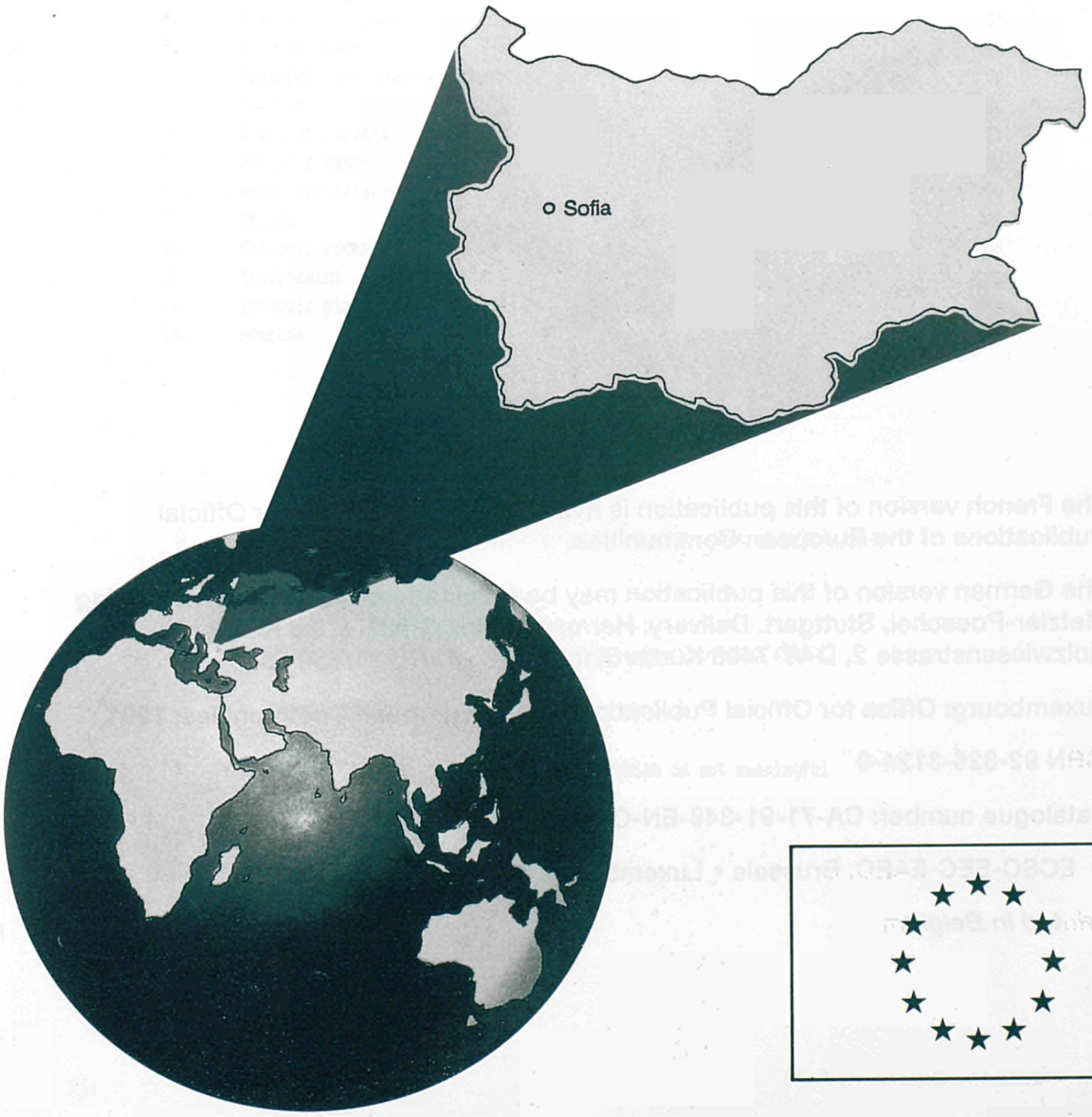
Bulgaria 1991

eurostat

Statistisches Bundesamt

Country profile

Bulgaria 1991



Cataloguing data can be found at the end of this publication.

STATISTISCHES BUNDESAMT
Gustav Stresemann-Ring 11, D-6200 Wiesbaden

and

EUROSTAT, STATISTICAL OFFICE OF THE EUROPEAN COMMUNITIES
Plateau de Kirchberg, L-2920 Luxembourg

Edited by: Statistisches Bundesamt

The French version of this publication is available from the Office for Official Publications of the European Communities.

The German version of this publication may be obtained from the publisher, Verlag Metzler-Poeschel, Stuttgart. Delivery: Hermann Leins GmbH & Co KG, Holzwiesenstrasse 2, D-W-7408 Kusterdingen. Fax: 49/70 71/336 53.

Luxembourg: Office for Official Publications of the European Communities, 1991

ISBN 92-826-3124-9

Catalogue number: CA-71-91-348-EN-C

Printed in Belgium

CONTENTS

EXPLANATION OF SYMBOLS

0	=	Less than half of 1 at the last occupied digit, but more than nil
-	=	Magnitude zero
|	=	General break in the series affecting comparison over time
.	=	Figure unknown
x	=	Tabular group blocked, because information is not meaningful

GENERAL ABBREVIATIONS [1]

cif	=	cost, insurance, freight included	kW	=	kilowatt (10^3 watt)
cm	=	centimetre	kWh	=	kilowatt hour (10^3 watt hour)
D	=	average	l	=	litre
DM	=	Deutschmark	Lv	=	lev
dt	=	100 kg	m	=	metre
fob	=	free on board	m^2	=	square metre
g	=	gram	m^3	=	cubic metre
GRT	=	gross registered ton	MD	=	monthly average
GW	=	gigawatt (10^9 watt)	Mio.	=	million
GWh	=	gigawatt hour (10^9 watt hour)	mm	=	millimetre
h	=	hour	MW	=	megawatt (10^6 watt)
ha	=	hectare (10 000 m^2)	MWh	=	megawatt hour (10^6 watt hour)
Hj	=	half-year	NRT	=	net registered ton
hl	=	hectolitre (100 l)	P	=	pair
JA	=	beginning of year	SDR	=	special drawing rights
JD	=	year average	St	=	piece
JE	=	end of the year	t	=	metric ton (1 000 kg)
JM	=	middle of the year	tdw	=	dead-tons weight (tdw = 1 016.05 kg)
kg	=	kilogram	tkm	=	ton-kilometre
km	=	kilometre	Vj	=	quarter
km^2	=	square kilometre	US $	=	US dollar

[1] Special abbreviations are allocated to the respective sections. With only few exceptions, provisional, revised and estimated figures are not marked as such. Detail may not add to total because of rounding.

Selected international weights and measures

1 inch (in)	=	2.54 cm	1 imperial gallon (imp. gal.)	=	4.546 l
1 foot (ft)	=	0.305 m	1 barrel (barr.)	=	158.983 l
1 yard (yd)	=	0.914 m	1 ounce (oz)	=	28.350 g
1 mile (m)	=	1.609 km	1 troy ounce (troy oz)	=	31.103 g
1 acre (a)	=	4047 m^2	1 pound (lb)	=	453.592 g
1 cubic foot (ft^3)	=	28.317 dm^3	1 short ton (sh. t)	=	0.907 t
1 gallon (gal.)	=	3.785 l	1 long ton (l. t)	=	1.016 t

LIST OF TABLES

PREFACE

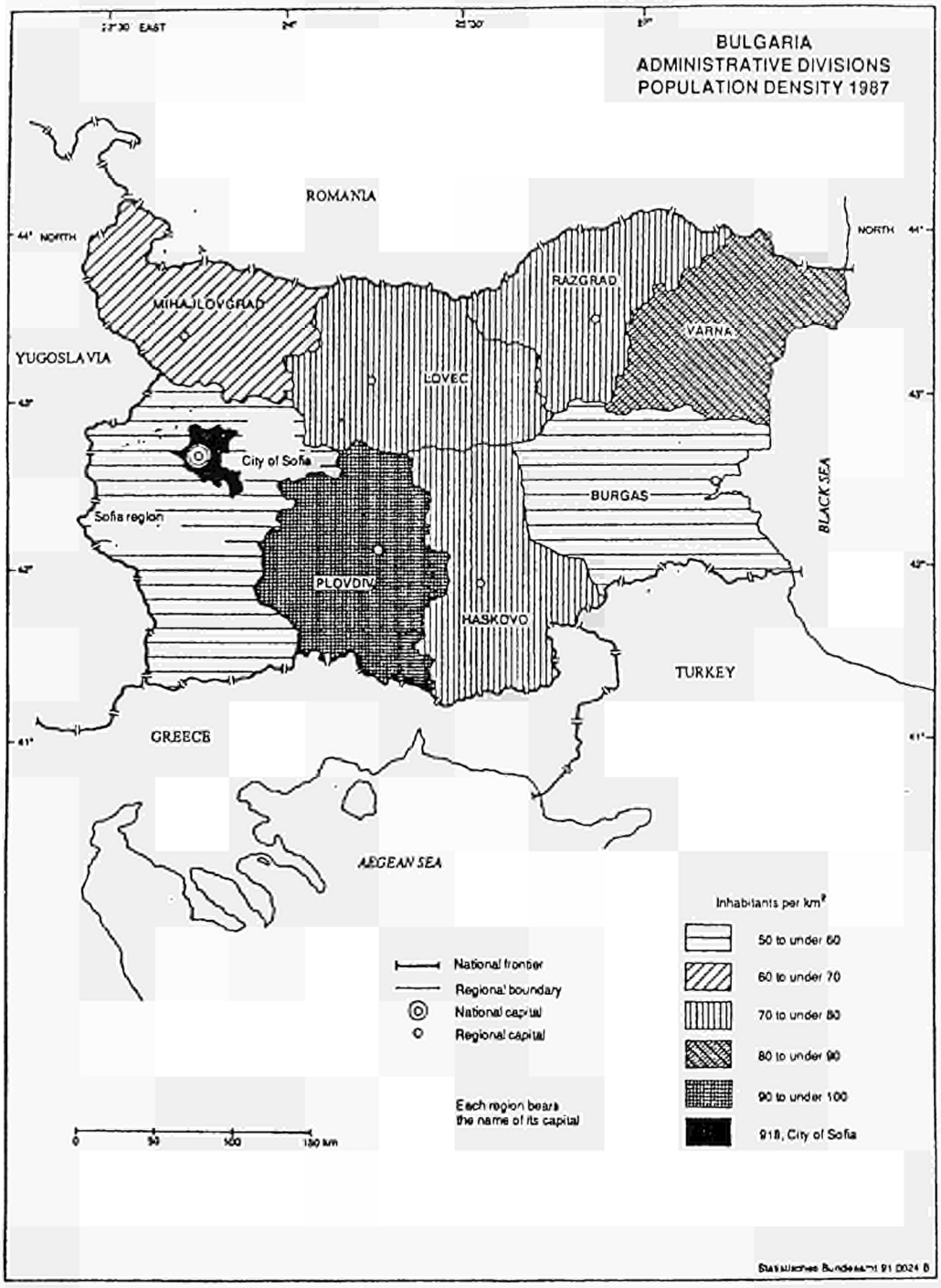
The country reports appearing in the statistical series, Statistik des Auslandes, contain sets of data on the demographic and, in particular, economic structure and development of individual countries. The sources for this are the statistical publications of the countries concerned and international organizations. The main national sources are listed at the end of this report.

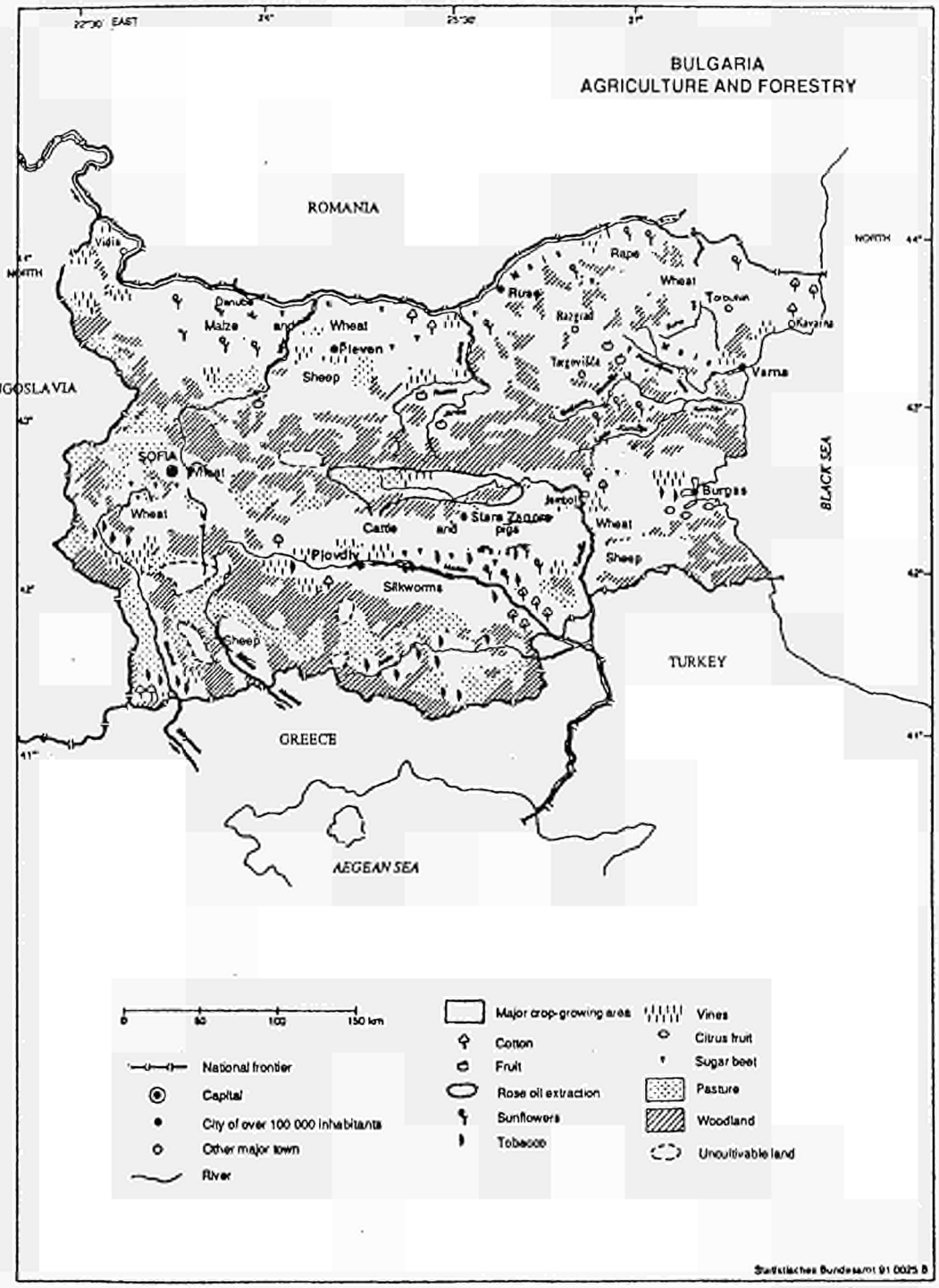
The statistics on former State-trading countries should be treated with caution, since methods and classifications particularly in the areas of prices and wages, money, credit and finance and national accounts frequently differ from those commonly used in non-State-trading countries. Comparability of the available data is therefore limited, if it exists at all. It has not been possible to analyse these problems in detail in this report.

The text of Chapter 7 (Agriculture) in this country report and contributions to other topics connected with agriculture were compiled by the Institute for Foreign Agriculture and Agricultural History (IALA) at the Academy of Agricultural Sciences in Berlin-Köpenick and edited by the Statistisches Bundesamt. The sources used by the IALA are listed separately in Section 19 (Sources).

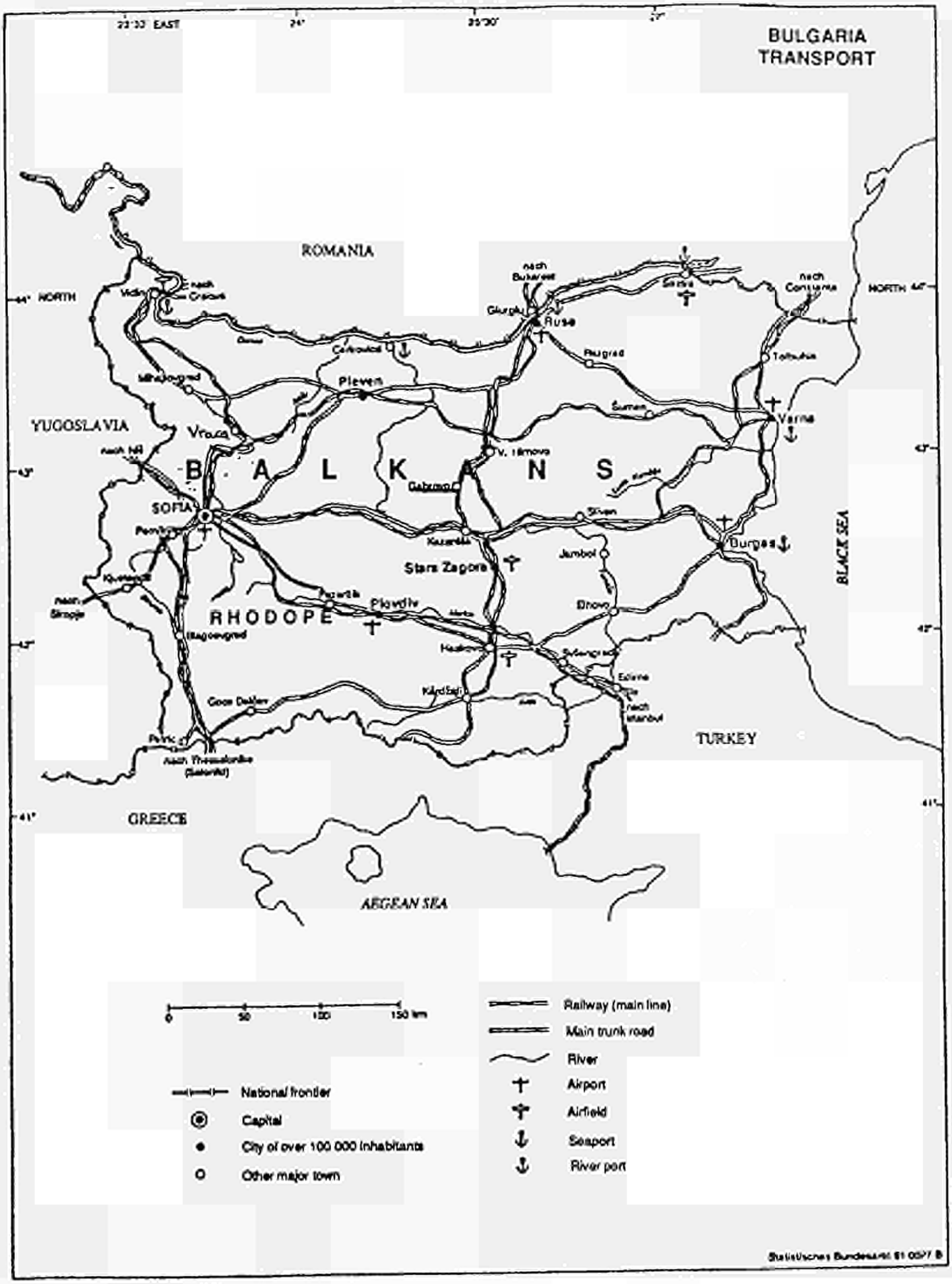
Users who require more detailed factual or chronological breakdowns of the figures or further information on methodology may examine the original documents at the Statistisches Bundesamt in Wiesbaden or consult its information service at the Berlin-Kurfürstenstrasse branch.

The maps published in this report are provided solely for illustrative purposes. The terms used and national frontiers depicted imply neither a judgment of the legal status of any territory nor an endorsement or recognition of boundaries by the Statistiches Bundesamt.


BULGARIA
ADMINISTRATIVE DIVISIONS
POPULATION DENSITY 1987
ROMANIA
YUGOSLAVIA
GREECE
TURKEY
AEGEAN SEA
BLACK SEA
MIHAJLOVGRAD
RAZGRAD
VARNA
LOVEC
City of Sofia
Sofia region
BURGAS
PLOVDIV
HASKOVO
National frontier
Regional boundary
National capital
Regional capital
Each region bears the name of its capital
Inhabitants per km²
50 to under 60
60 to under 70
70 to under 80
80 to under 90
90 to under 100
918, City of Sofia


BULGARIA
AGRICULTURE AND FORESTRY
ROMANIA
YUGOSLAVIA
GREECE
TURKEY
AEGEAN SEA
BLACK SEA
Vidin
Danube
Maize
and
Wheat
Pleven
Sheep
Ruse
Rape
Wheat
Razgrad
Tolbukhin
Kavarna
Targovishte
Varna
SOFIA
Wheat
Wheat
Cattle
and
Stara Zagora
pigs
Jambol
Burgas
Wheat
Sheep
Plovdiv
Silkworms
Sheep
0
50
100
150 km
National frontier
Capital
City of over 100 000 inhabitants
Other major town
River
Major crop-growing area
Cotton
Fruit
Rose oil extraction
Sunflowers
Tobacco
Vines
Citrus fruit
Sugar beet
Pasture
Woodland
Uncultivable land


BULGARIA
MINERAL DEPOSITS,
INDUSTRIAL CENTRES
ROMANIA
YUGOSLAVIA
GREECE
TURKEY
BLACK SEA
AEGEAN SEA
SOFIA
Plovdiv
Varna
Burgas
Ruse
Pleven
Stara Zagora
Silistra
Tolbuhin
Razgrad
Kavarna
Kozloduj
Mihajlovgrad
Vraca
Teteven
Gabrovo
Kazanlăk
Sliven
Jambol
Karnobat
Pazardžik
Dimitrovgrad
Haskovo
Kărdžali
Madan
Svilengrad
Kjustendil
Blagoevgrad
Samokov
Pernik
Asenovgrad
Veliko Tărnovo
Sevlievo
Tărgovište
Kotel
Karlovo
Panagjurište
Pirdop
Stanke Dimitrov
Giurgiu
Gigen
Svištov
Mičurin
Lovec
Dolni Dăbnik
Kremikovci
Maritza-Iztok
Krapetz
Tjulenovo
Scale: 0 50 100 150 km
National frontier
Capital
City of over 100 000 inhabitants
Other major town
River
Hard coal deposits
Hard coal mining
Brown coal deposits
Brown coal mining
Lead and zinc
Chromium
Iron
Cadmium
Copper
Manganese
Salt
Pyrites
Silver
Uranium
Zinc
Oil
Natural gas
Oil pipeline
Planned oil pipeline
Natural-gas pipeline
Oil refinery
Nuclear power-station
Dams, planned dams
Hydroelectric power-station
Thermal power-station
Iron and steel production
Non-ferrous metal smelting
Shipbuilding
Cement works
C Chemical industry
Cp Petrochemical industry
El Electrical engineering
G Glass and ceramics industry
Gu Rubber industry
H Timber industry
Fz Vehicle manufacture
L Leather industry
M Metalworking and mechanical engineering
N Food industry
Nb — : brewing
Nz — : sugar
Pa Paper industry
T Textile industry
Ta Tobacco and cigarette industry
Statistisches Bundesamt 91 0026 B


BULGARIA
TRANSPORT
ROMANIA
YUGOSLAVIA
GREECE
TURKEY
BLACK SEA
AEGEAN SEA
B A L K A N S
RHODOPE
SOFIA
Pleven
Ruse
Varna
Burgas
Stara Zagora
Plovdiv
Vidin
Vraca
Gabrovo
Sliven
Jambol
Elhovo
Kazanlăk
Haskovo
Kărdžali
Blagoevgrad
Goce Delčev
Tolbuhin
Šumen
Silistra
Giurgiu
V. Tărnovo
nach Thessaloniki (Saloniki)
nach Istanbul
Edirne
0
50
100
150 km
National frontier
Capital
City of over 100 000 inhabitants
Other major town
Railway (main line)
Main trunk road
River
Airport
Airfield
Seaport
River port
Statistisches Bundesamt 91 0577 B

1. GENERAL SURVEY
State and government

Name of State
Full name: People's Republic of Bulgaria
Short form: Bulgaria

Foundation/independence
independent since 1878
People's Republic since 1946
State first founded in 681

Constitution
May 1971

Form of government
People's republic

Head of State
President Zhelyu Zhelev

Head of government
Prime Minister Dimiter Popov

Representation of the people/legislature
People's assembly of 400 elected members, each with a five-year term of office

Political parties/elections
Bulgarian Socialist Party (BSP)
(approx. 870 000 members), successor to the Bulgarian Communist Party

Union of Democratic Forces/
(SDS): Opposition movement in the assembly (includes citizen's movements, social democrats, ecological groups, alternative socialists, etc.)

Peasants' Party (BZNS): traditional party of the rural population of the Patriotic Federation (newly founded in 1989) Rights and Liberties

Movement: Chiefly representing the interests of the ethnic Turkish minority

The seats gained at the elections to the people's assembly on 10 and 17 June were as follows: Bulgarian Socialist Party: 211; Union of Democratic ; Forces: 144; Rights and Liberties Movement: 23; Peasants' Party: 16; others: 6

Administrative divisions
Eight regions plus the capital, Sofia

Membership of international organizations
United Nations and specialist UN organizations; Council for Mutual Economic Assistance (COMECON); observer status in the General Agreement on Tariffs and Trade (GATT)

1.1 BASIC DATA

	Unit				
Area					
Total area	km^2	1989:	110 994		
Arable land and permanent crops	km^2		41 420		
Population					
Total population					
Census results	1 000	1975:	8 727.8	1985:	8 948.4
Mid-year	1 000	1990:	9 146.0		
Population growth	%	1975-1985:	2.5	1985-1990:	2.2
Population density	Inhabitants per km^2	1975:	78.6	1990:	82.4
Births					
Population	per 1 000	1965/70 Av:	15.8	1985/90:	14.9
Deaths					
Population	per 1 000		8.7		11.0
Deaths in first year of life	per 1 000 Live births		31		15
Life expectancy at at birth	Years	1965:	69	1990:	73
Public health					
Regular hospital beds	No	1970:	59 509	1989:	87 217
Population per hospital bed	No		143		106
Doctors	No		15 819		28 218
Population per doctor	No		538		319
Dentists	No		3 111		6 048
Population per dentist	No		2 737		1 487
Education					
Pupils in general schools	1 000	1970/71:	1 154.6	1989/90:	1 147.4
Students in vocational and technical colleges	1 000		130.3		104.0
University students	1 000		88.6	1988/89:	126.2
Employment					
Manual and non-manual workers	1 000	1970:	2 748.7	1989:	4 060.7
Percentage of total population	%		32.3		44.0
Agriculture and forestry	1 000	1975:	810.7		723.4
Manufacturing industry	1 000		1 296.6		1 562.9
Agriculture, forestry and fisheries					
Index of agricultural production	1979/81 Av= 100	1984:	108	1988:	100
Food production	1979/81 Av= 100		109		103
per inhabitant	1979/81 Av= 100		107		102
Quantities harvested					
Wheat	1 000 t		4 836	1989:	5 402
Maize	1 000 t		2 994		2 421
Grape	1 000 t		1 120		754
Cattle population	1 000 t	1980:	1 787	1990:	1 577
Timber harvest	1 000 m^3		4 937	1988:	4 104
Fish catch	1 000 t	1983:	121.1	1987:	110.5

	Unit				
Industry					
Production index	1980 = 100	1984:	120	1989:	144
Power-station capacity	MW	1970:	4 117		11 103
Electricity production	GWh		19 513		44 324
Extraction of					
brown coal	1 000 t	1983:	6 526		5 848
iron ore	1 000 t		554		482
lignite	1 000 t		26 805	1988:	29 168
iron concentrate	1 000 t		824		629
Production of					
steel	1 000 t		2 831	1989:	2 899
cement	10^6 t		5.6		5.0
heavy goods vehicles	No		6 445		7 849
preserved fruit	1 000 t		351		269
wine	1 000 hl		3 412		2 314
Foreign trade					
Imports	US $ 1 000 000	1983:	12 283	1988:	16 582
Exports	US $ 1 000 000		12 130		17 223
Transport and communications					
Railway network	km	1970:	4 196	1989:	4 300
Roads	km		36 143	1988:	36 897
Cars per 1 000 inhabitants	No	1980:	88.1		128.7
National airline passengers	1 000	1983:	2 384		2 874
Telephone connections	1 000	1970:	473	1989:	2 515
Television licences	1 000		1 028		1 663
Tourist travel					
Foreign tourists	1 000	1980:	5 485.8	1989:	8 220.9
Foreign currency receipts	US $ 1 000 000		260	1987:	354
Money and credit					
Official buying and selling rates	Lv per DM 100	end 1985:	37.45	March 1990:	47.42
Savings deposits	Lv 1 000 000	1970:	3 138.7	1989:	16 222.7
Public finances				Forecast	
Revenue	Lv 1 000 000	1985:	18 770.8	1989:	24 288.0
Expenditure	Lv 1 000 000		18 665.7		24 288.0
Foreign debt (gross)	US $ 1 000 000	1984:	2 135	1989:	10 800
Prices					
State retail price index	1980 = 100	1984:	103	1988:	110
Food and beverages	1980 = 100		105		114
Industrial goods	1980 = 100		101		107
National accounts					
Produced national income					
at current prices	Lv 1 000 000	1975:	14 289	1989:	30 006
at constant prices	1980 = 100		74.2		135.5
per head of population	1980 = 100		75.5		133.2

1.2 MAJOR ECONOMIC AND SOCIAL INDICATORS OF COUNTRIES IN CENTRAL AND EASTERN EUROPE *)

Indicator / Country	Nutrition		Public health		Education		Energy
	Calorie intake 1986 (per person/day)		Life expectancy at birth in 1988	Inhabitants per hospital bed in 1989	% of		Energy consumption per head of population in 1988
					Literacy in the population of (15 and over) 1988	Registered pupils in the population of primary school age 1987[1]	
	kcal[2]	% of requirements[3]	Years	Number	%		kg oil unit[4]
Albania	2 713	114	72(90)	190(88)	75(86)	100	894(86)
Bulgaria	**3 642**	**145**	**73**	**106**	**98**	**104**	**4 074(87)**
Yugoslavia	3 563	139	73(90)	169(86)	93(90)	95	2 159
Poland	3 336	126	72	143(87)	99(86)	101	3 453
Romania	3 373	127	70	112	98	97	3 459
Soviet Union	3 399	133	70	76	100(86)	105	4 512
Czechoslovakia	3 448	141	72(89)	97	99	96	4 302(87)
Hungary	3 569	135	70	107	99(86)	97	3 068

Indicator / Country	Agriculture		Foreign trade	Transport	Communications		National income[5]
	% share of		% of manufactured products in total exports[7]	Motor cars 1989	Number of main telephone lines in 1989	Television licences in 1989	Index of produced national income per head of population 1989
	Agriculture in the produced national income in 1989[6]	Agricultural workers in the total labour force in 1989		Per 1 000 head of population			
	%			Number			1980 = 100
Albania	35(85)	49.8(88)	.	2(70)	2	83(87)	.
Bulgaria	**13**	**13.2(88)**	.	**129**	**235**	**189**	**119**
Yugoslavia	14(87)	23.6(88)	78(88)	127(86)	138	175(87)	.
Poland	15	26.4	62(87)	127	78	265	102
Romania	16	27.9	.	.	80	160	127
Soviet Union	23	18.8(88)	24(87)	50(87)	106	321	120
Czechoslovakia	10	11.5	89(86)	200	136	298	115
Hungary	14(88)	20.0	69(87)	177	81	278	111

(*) The figures in brackets indicate the year in question

(1) Percentages of more than 100 are the result of a survey method based on educational stages, which included some pupils outside the relevant age group

(2) 1 kilocalorie = 4.187 kilojoules

(3) 1984/86 average

(4) 1 kg oil unit = 0.043 gigajoules

(5) The national accounts of the countries of Central and Eastern Europe are based on the concept of material production. For more details on the concepts and definitions used, see the section on National Accounts

(6) At current prices

(7) SITC headings 5-8.

The national territory of the People's Republic of Bulgaria has a total area of 110 994 km2 approximately one-third the area of the Federal Republic of Germany. Bulgaria lies in the eastern part of south-eastern Europe. It is bordered by the Black Sea to the east, Greece and Turkey to the south and south-east, Yugoslavia to the west and Romania to the north. Its maximum length (from east to west) is 520 km and its maximum width is 330 km.

Bulgaria has several physical regions. Northern Bulgaria comprises the Danube plain (the Bulgarian Plateau) and is bordered by the Danube and the northern foothills of the Balkan Mountains. The plain is drained by several rivers flowing south-north, the most prominent being the Topolovec, Lom, Cibrica, Ogosta, Iskar, Vit, Osâm and Yantra. The southern boundary of the plain is formed by the Old Mountains (Stara Planina). To the north of this is the hilly Pre-Balkan range, which covers some 72% of the total area of the Bulgarian Plateau. The highest peaks in the Balkan Mountains are in the centre of the range. The parallel Sredna Gora lies to the south, divided only by the Sub-Balkan Basin.

The southern slopes of the Stara Planina and the northern foothills of the Rila Rhodope massif form a transitional plateau in western Bulgaria on which Sofia, the capital, is located. The Rila Rhodope range occupies the extreme south and south-west of Bulgaria. The Marica, which flows west-east through the Upper Thracian Plain (Marica Plain) between the Rhodope and the Sredna Gora, rises in the Rila. The Marica Plain is one of the most fertile and productive agricultural regions in Bulgaria. The country's highest elevations occur in the Rila massif.

The North Bulgarian Plain is largely treeless and assumes a steppe-like character towards the Dobrudzha. The fertile loess ensures that people stay on the land. The transition to the Balkan range is barely perceptible. The adjacent Sub-Balkan Basin to the south consists of a series of tectonic basins separated by granite rifts. The Kazanlâk and Karlovo basins are well - known for the cultivation of roses, used to produce rose oil. The middle section of the Sredna Gora range on the south of the basin blends into the Marica Valley to the south. The fertile alluvial soil, combined with a good irrigation system, supports a wide range of crops here.

Bulgaria lies in the transitional zone between the Mediterranean and the Eastern European continental climates. Most of the country has a continental climate, characterized by fairly cold winters and very warm summers and by relatively low precipitation.

There are five different climatic zones in Bulgaria: (1) a zone with a moderate continental climate (northern Bulgaria between the Danube and the Balkan mountains); (2) the transition zone between the continental and Mediterranean climates (basin and valley between the Balkans and the Rila-Rhodope massif); (3) a zone with Mediterranean climate (the southern and south-eastern slopes of the Rhodope Mountains; (4) zones under the influence of the Black Sea (continental influence on the north coast, more Mediterranean influence on the south coast); (5) mountainous zone.

The time difference between Bulgarian and Central European time is +1 hour.

2.1 Climate *)
(Multiannual average)

Station position Height above sea - level	Pleven 43°N 25°O 109 m	Sofia 43°N 23°O 550 m	Plovdiv 42°N 25°O 161 m
Air temperature (°C), monthly average			
Coldest month: January	- 2.5	- 2.2	- 0.3
Warmest month: July	23.1	20.8	23.6
Year	11.6	10.2	12.5
Air temperature (°C). average daily maxima			
Coldest month: January	1.1	1.1	3.3
Warmest months: July and August	29.4	27.8	30.6
Year	16.8	15.6	18.3
Rainfall (mm)/number of days with at least 1.0 mm precipitation			
Driest month: February	28/5	28/6	33/5
Wettest month: June	84/9	84/11 V	58/7
Year	624/84	634/88	511/69

*) Footnote: see end of table

2.1 Climate *)
(Multiannual average)

Station position Height above sea - level	Sliven 43°N 26°O 265 m	Petric 41°N 23°O 150 m	Varna 43°N 28°O 35 m
Air temperature (°C), monthly average			
Coldest month: January	1.1	2.4	1.1
Warmest month: July	23.1	24.4	23.3
Year	12.5	13.4	12.6
Air temperature (°C). average daily maxima			
Coldest month: January	4.4	.	4.4
Warmest months: July and August	28.9	.	28.9
Year	17.2	.	17.1
Rainfall (mm)/number of days with at least 1.0 mm precipitation			
Driest month: February	36/5	19^{VIII}	23/5
Wettest month: June	84/9	90^{XI}	66/8
Year	604/75	622	486/67

*) Roman numerals denote differing months.

More detailed climatic figures for these and other weather stations are obtainable from Deutscher Wetterdienst, Zentralamt, Postfach 185, D-W-6050 Offenbach am Main.

A fee is usually payable for this information.

3 POPULATION

At the end of 1990, according to the United Nations, Bulgaria had 9 150 000 inhabitants (extrapolated figure) of whom 4 540 000 were male and 4 610 000 female. The average population density for the country as a whole was calculated as 82.4 inhabitants per km^2. The last population census was conducted in December 1985 and showed a population of 8 950 000. The previous census in December 1975 had given a figure of 8 730 000. According to these figures, therefore, the population increased by 220 000 (2.53%) over this ten-year period - an average annual growth rate of 0.25%.

3.1 POPULATION GROWTH AND DENSITY *)

Item	Unit	1970	1975	1980	1985	1990
Population	1 000	8 514.9	8 727.8[a]	8 876.6	8 948.4[b]	9 146.0[c]
male	1 000	4 256.6	4 357.8	4 421.7	4 430.1	4 539.0
female	1 000	4 258.3	4 370.0	4 454.9	4 518.3	4 606.0
Population density, whole country [1]	Pop. per km^2	76.7	78.6	80.0	80.6	82.4

*) As at end of year.
1) 110 994 km^2
a) Result of population census on 2 December.
b) Result of population census on 4 December.
c) Mid-year figures.

The United Nations forecast for the population of Bulgaria in 2025 is 9 350 000 (low variant) to 11 040 000 (high variant).

3.2 UNITED NATIONS POPULATION FORECASTS *)
(x 1 000)

Population forecast	1995	2000	2010	2015	2025
Low variant	9 230	9 306	9 355	9 362	9 348
Medium variant	9 392	9 535	9 760	9 866	10 070
male	4 656	4 718	4 825	4 874	4 970
female	4 737	4 817	4 935	4 992	5 100
High variant	9 618	9 841	10 285	10 529	11 035

*) Mid-year figures.

The number of births per 1 000 inhabitants fell from 15.8 (1965-70 average) to 14.9 (1985-90 average). At the same time the number of deaths per 1 000 inhabitants rose from 8.7 to 11.0. The natural population growth (the difference between the number of births and deaths, excluding immigration and emigration) thus slowed from 0.71% (1965-70 average) to 0.39% (1985-90 average) per annum. Infant mortality (deaths in the first year of life per 1 000 live births) fell from 31 (1965-70) to 15 (1985-90 average). Life expectancy at birth rose between 1965 and 1987 from 69 to 72 years.

3.3 BIRTHS AND DEATHS

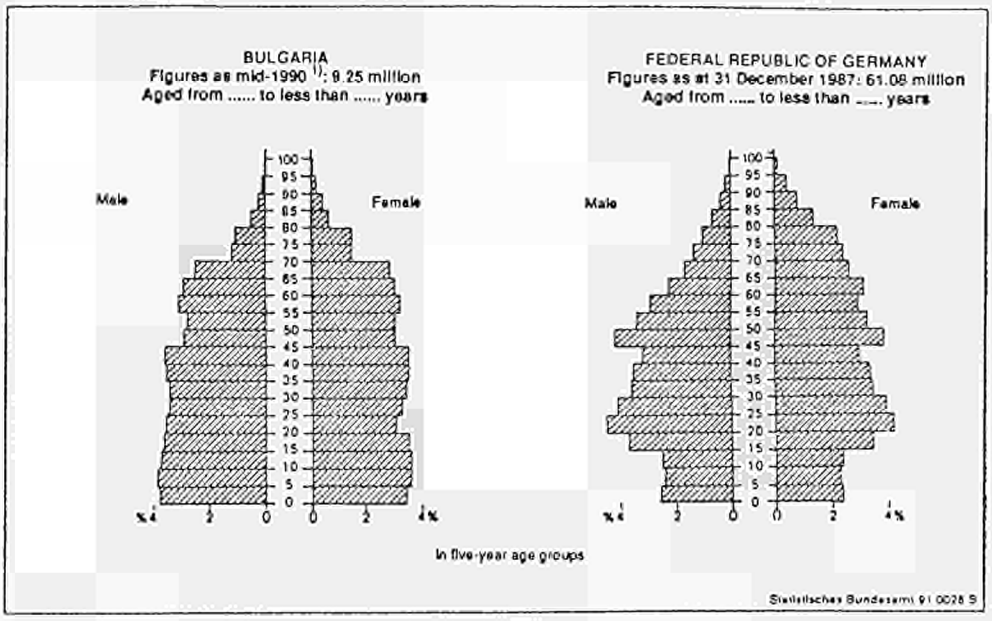
Item	Unit	1965-70 av.	1970-75 av.	1975-80 av.	1980-85 av.	1985-90 av
Births	per 1 000 inhab.	15.8	16.2	16.2	15.7	14.9
Deaths	per 1 000 inhab.	8.7	9.1	9.8	11.0	11.0
Deaths in first year of life	per 1 000 live births	31	26	22	18	15

3.4 POPULATION BY AGE CATEGORY *)
(% of total population)

	1970		1980		1990	
Age from... to less than ... years	Total	Male	Total	Male	Total	Male
under 5	7.6	3.9	7.6	3.9	7.2	3.7
5 - 10	7.4	3.8	7.4	3.8	7.4	3.8
10 - 15	7.8	4.0	7.1	3.6	7.3	3.7
15 - 20	8.0	4.1	7.0	3.6	7.1	3.6
20 - 25	8.1	4.1	7.1	3.6	6.7	3.5
25 - 30	6.8	3.4	7.4	3.7	6.7	3.4
30 - 35	6.8	3.4	7.6	3.8	6.8	3.4
35 - 40	7.6	3.9	6.3	3.2	7.0	3.5
40 - 45	7.7	3.9	6.3	3.1	7.1	3.6
45 - 50	7.5	3.7	7.0	3.5	5.9	2.9
50 - 55	4.5	2.2	6.9	3.4	5.8	2.8
55 - 60	5.6	2.8	6.6	3.2	6.3	3.1
60 - 65	5.1	2.5	3.8	1.8	5.9	2.9
65 - 70	4.0	1.9	4.5	2.1	5.3	2.5
70 - 75	2.7	1.2	3.5	1.6	2.7	1.2
75 - 80	1.5	0.6	2.3	1.0	2.6	1.1
80 and over	1.4	0.6	1.6	0.7	2.1	0.9

*) Mid-year figures.

AGE STRUCTURE OF THE POPULATIONS OF BULGARIA AND THE FEDERAL REPUBLIC OF GERMANY
Age groups as % of population



1) Estimate

Before the First World War, Bulgaria still largely had the reproductive structures typical of the traditional Balkan societies with high birth rates. In the period between the wars, from the mid-1920s, a noticeable structural change set in, with a faster decline in the birth rate and a natural population growth which was slowing down but still relatively high in European terms. This trend continued at a fairly constant rate after the Second World War, with mortality rates bottoming out at a low level (though rising temporarily as a result of the ageing population), a falling birth rate and a correspondingly low natural population growth. A net reproduction coefficient which has constantly remained below one since the mid-1970s means a long-term decline in population. Measures to increase the birth rate, such as were taken in the late 1960s and mid-1970s, achieved a short-term improvement but were ineffective in the long term. As in other countries, these measures influenced parents' desire for children only in terms of timing and not as a rule in terms of general family planning: their effect was in any event restricted almost wholly to young couples and they were virtually useless as far as families which already had two children were concerned. Financial incentives had little effect; only preferential treatment with more living space influenced reproductive behaviour, and then only among low-income groups.

Other demographic indicators in Bulgaria have also shown trends akin to those found in highly industrialized societies. The age structure has been transformed from a pyramid to a shape with a relatively narrow base of young people and an increasingly high proportion of people aged 60 and over.

The main reason for this demographic trend is the fertility level, which has changed radically in the past 30 years. Both the general and the age-specific fertility rates in the 20-29 age group (responsible for the bulk of births) show a sharp decline. The average number of children per married woman, which was still seven at the turn of the century, has now fallen to less than two. At the 1985 census, 7% of families were childless, 25% had one child, 54% two and 14% three or more. Families with two children are already becoming less common in large towns, and not only amongst the educated classes.

The change in the age structure is another reason for this demographic trend. The ageing of Bulgarian society, already mentioned above, has meant that the proportion of women aged between 20 and 24 has declined considerably. The real cause lies, however, in individual behaviour variables, i.e. in a noticeable change in the number of children desired by Bulgarian families. Two processes of social change are regarded as particularly significant here: first, the clear correlation of the number and ideal number of children with the educational level of the parents: those with a lower level of education or vocational qualification have consistently had a larger number of children and desired more children, a sign that traditional family ideals have persisted more strongly in these social groups than in parents with a higher level of education. A second factor which has obviously influenced individual preferences for a small family is the rapid urbanization process.

Although the more favourable age structure has caused the urban birth rate to be significantly above that in villages, which have suffered from depopulation since the mid-1970s, the practical consequences of rapid urbanization, such as the housing shortage, urban lifestyle, etc., have increasingly directed individual reproductive patterns towards small families.

The housing shortage in particular means that families have to reduce their original ideal number of offspring. The widespread recruitment of women to industry is regarded as a further factor in the change in reproductive behaviour.

Population density at the end of 1986 was over 100 inhabitants per km^2 in industrialized areas such as Ruse, Plovdiv and Varna; in more agricultural areas, fewer than 50 inhabitants per km^2 were sometimes recorded. The Sofia conurbation, which accommodates 13% of the total population, showed an average density of more than 900 inhabitants per km^2.

3.5 AREA, POPULATION AND POPULATION DENSITY BY DISTRICT *)

District	Area	Population 1976	Population 1986	Inhabitants per km² 1976	Inhabitants per km² 1986
	km²	1 000			
Blagoevgrad	6 484	326.0	349.5	50.3	53.9
Burgas	7 702	424.1	450.5	55.1	58.5
Gabrovo	2 034	177.1	174.1	87.1	85.6
Haskovo	4 008	294.1	303.1	73.4	75.6
Kardzali	4 027	289.2	303.9	71.8	75.5
Kjustendil	3 055	199.1	189.3	65.2	62.0
Lovec	4 135	216.0	200.9	52.2	48.6
Mihajlovgrad	3 623	235.0	222.6	64.9	61.4
Pazardzik	4 457	314.7	328.8	70.6	73.8
Pernik	2 391	174.4	175.5	72.9	73.4
Pleven	4 335	359.0	361.2	82.8	83.3
Plovdiv	5 642	728.1	759.1	129.0	134.5
Razgrad	2 654	204.4	199.2	77.0	75.1
Ruse	2 618	294.8	305.0	112.6	116.5
Sumen	3 390	254.6	255.9	75.1	75.5
Silistra	2 854	177.0	174.1	62.0	61.0
Sliven	3 620	238.3	240.0	65.8	66.3
Smoljan	3 487	164.5	165.6	47.2	47.5
Sofia-Land	7 091	321.8	304.1	45.4	42.9
Stara Zagora	5 077	394.1	413.5	77.6	81.4
Tolbuhin	4 707	252.0	257.5	53.5	54.7
Targoviste	2 717	178.9	170.2	65.8	62.4
Varna	3 832	440.8	464.9	115.0	121.3
Veliko Târnovo	4 646	349.2	338.1	75.2	72.8
Vidin	3 041	177.0	164.8	58.2	54.2
Vraca	3 943	310.6	286.7	78.8	72.7
Yambol	4 113	207.0	203.9	50.3	49.6
City of Sofia	1 311	1 083.8	1 203.6	826.7	918.1

*) Districts are denoted by the name of their major town. Figures as at end of year.

The following summary shows the distribution of the population across the new regions introduced in August 1987.

3.6 AREA, POPULATION AND POPULATION DENSITY BY REGION *)

Region	Area	Population			Inhabitants		
		1987	1988	1989	1987	1988	1989
	km^2	1 000			per km^2		
City of Sofia	1 311	1 210	1 217	1 223	923	929	933
Burgas	14 657	874	876	876	60	60	60
Varna	11 929	981	982	987	82	82	83
Lovec	15 150	1 068	1 061	1 053	71	70	70
Mihajlovgrad	10 607	666	662	658	63	62	62
Plovdiv	13 628	1 262	1 271	1 279	93	93	94
Razgrad	10 842	851	851	849	79	79	78
Sofia Region	18 979	1 017	1 016	1 014	54	54	53
Haskovo	13 892	1 047	1 051	1 054	75	76	76

*) New administrative divisions dating from 26 August 1987. Regions are named after their capital cities.

Urbanization has taken rapid strides in the last two decades. With its present urban population of about 70% (United Nations figure), Bulgaria is the most heavily urbanized country in South-Eastern Europe. As the main centre for obtaining goods in short supply and because of its cultural attractions the Sofia conurbation became a particularly attractive destination for migration. However, urbanization also brought with it many undesirable changes, particularly in the countryside. The most serious of these was the demographic distortion of villages. The rise in the proportion of old people noticeable here distorts not only the demographic but also, increasingly, the functional structure. The depopulation of villages often goes hand in hand with the erosion of social and/or cultural services such as schools and nursery schools, which then encourages further migration. The last few years have, however, brought the first signs of de-urbanization: 13% of migrants in 1987 moved from town to country, compared with only 8% in the 1950s and 1960s. Despite many improvements in development, however, the countryside has not yet made itself sufficiently attractive to counter balance the pull of urban life. The attempt by the latest reforms by local government to ease the burden on the existing regional centres by upgrading certain sub-centres is one consequence of the undesirable effects of urbanization.

3.7 URBAN AND RURAL POPULATION *)

Town/country	Unit	1970	1975 1)	1980	1985 1)	1990 2)
In towns	1 000	4 453	5 019	5 548	5 951	6 430
	%	52.3	57.5	62.5	66.5	70.3
In rural communities	1 000	4 061	3 709	3 329	2 998	2 716
	%	47.7	42.5	37.5	33.5	29.7

*) Figures as at end of year
1) Census result. 2) Mid-year figures.

The number of cities with more than 100 000 inhabitants rose between 1978 and 1988 from seven to ten. At the same time the population of the capital, Sofia, increased by over 100 000 - a growth of 10.2%. Considerably higher growth rates of 22.6%, 20.9% and 21.5% were recorded in Burgas, Stara Zagora and Tolbuhin, respectively.

3.8 POPULATION OF SELECTED CITIES
(x 1 000)

Town	1978	1980	1983	1985	1988
Sofia. capital	1 031.6	1 056.9	1 093.8	1 115.0	1 136.9
Plovdiv	332.9	350.4	373.2	342.2	364.2
Varna	278.8	291.2	295.2	302.2	306.3
Burgas	163.6	168.4	183.5	182.6	200.5
Ruse	168.7	172.8	181.2	183.7	190.7
Stara Zagora	130.8	136.2	144.9	150.9	158.2
Pleven	118.4	127.7	140.4	129.8	136.3
Tolbuhin	92.7	95.7	102.3	109.1	112.6
Sliven	94.8	97.7	102.0	102.5	109.4
Sumen	90.6	94.8	104.1	100.1	108.0
Pernik	90.5	92.7	96.4	94.9	97.9
Yambol	80.2	82.5	88.7	90.2	97.4
Haskovo	81.2	84.1	88.7	87.8	93.6
Gabrovo	77.7	78.3	82.2	81.5	80.9
Pazardzik	70.7	73.4	79.2	77.4	83.5
Vraca	66.1	66.0	74.8	75.5	82.0
Veliko Tarhovo	60.9	63.6	65.1	69.6	71.7
Blagoevgrad	55.7	59.2	67.2	64.9	74.2
Vidin	56.8	59.4	61.9	62.7	65.9
Kazanlak	55.5	57.7	60.4	61.2	63.8

According to western sources, the total population in the mid-1980s included a Turkish minority of approximately 8.5% and some 6% of other races, chiefly gypsies and Macedonians. There are no current official data on this in Bulgaria; the latest figures date from the 1956 census, the reason being Bulgaria's view that there are no minorities in the country and that all persons living in Bulgaria belong to the single Bulgarian nation. The group described as Turkish are regarded as Bulgarians who were assimilated in terms of religion and language during the 500 years of Ottoman rule. In addition, up to 1952 over a million Bulgarian citizens who regarded themselves as Turkish moved to Turkey under numerous resettlement schemes. During the ten/year validity of a 1968 agreement on the reuniting of families, a further 130 000 Bulgarian citizens resettled in Turkey. None the less, in May 1989 the then Bulgarian party leader called on Turkey to open its borders to those who wished either to visit the country or to settle permanently. Given the forced assimilation policy imposed since 1984, this lifting of restrictions led to an exodus of unexpected dimensions: up to the beginning of September 1989, when Turkey closed the border, 320 000 persons left the country, and only some of these had returned by the end of the year.

According to the following summary, approximately one-third of the population have a religion, 73% of whom belong to the Bulgarian Orthodox Church. Approximately 3% belong to other Christian churches and 24% are Muslims.

3.9 1990 POPULATION BY RELIGIOUS PERSUASION

Religion	No of adherents	Communities	Clergy	Places of worship
	1 000	Number		
Bulgarian orthodox	2 400	26 000	1 500	3 720
Islam	800	.	500	1 300
Roman Catholic	50	.	40	30
Armenian orthodox	20	12	10	11
Uniate [1]	10	25	20	17
Protestant	16	80	265	101
Jewish	4	3	.	3

1) Catholics of the Bulgarian Byzantine rite.

4 PUBLIC HEALTH

Until the end of the 1980s, medical and health care were free of charge for the entire population. In December 1989, however, a decision was taken to introduce a contributory health insurance scheme at the beginning of 1990 in order to improve the finances of the health service.

The health service is organized and run by the Ministry of Health. One of the Ministry's departments is the Medical Academy with its teaching and research facilities. At district level, the health services are administered by the state Health and Social Security Office.

Targets for the development of the health service -including basic health care- have been scheduled up to the year 2000 on the basis of annual and five-yearly stocktakings.

The aims of the national health policy are fully compatible with those of the Health 2000 strategy of the World Health Organization. As part of the management process, the suitability of the planned measures is systematically assessed at the various administrative levels and, where necessary, resources redistributed, new organizational structures introduced and the latest scientific discoveries and technical innovations put into practice.

Out patient medical care is organized on an area basis, the health centre forming the basic structural unit for the persons living in a particular area or belonging to a particular branch of industry. The health centre thus coordinates the work of the health team and provides the basis for the health care of the population. Out patient care is available at various levels: locally through the health centre, at municipal level through the municipal hospital, at district level through the district hospital, at regional level through facilities covering several districts and at national level through the Medical Academy and specialized hospitals. There are also special dispensaries which provide services for several districts.

The health of mothers-to-be and children under 14 years of age is monitored in special women's and children's clinics. Each local paediatrician is responsible for 1 000 children, while each school doctor cares for an average of 2 000-2 200 pupils. Chronically sick children can be accommodated in special schools with hospital facilities.

The medical emergency services have independent First Aid and emergency care centres as well as accident stations.

Basic health care gives priority to the following:

- fostering preventive health care of all kinds;
- progressive elimination of the current gap between the medical services for rural and urban populations;
- priority health care for mothers and children, schoolchildren and industrial workers;
- health education and measures for promoting healthy living;
- expansion of the social basis for health care.

The introduction mentioned above of a health insurance scheme in early 1990 took place in the context of a comprehensive reform of the Bulgarian Public health system designed to bring medical and technical diagnosis and therapy facilities up to an international standard. The domestic supplier industries to the health service were designated priority branches in an attempt to make up the shortage of medicines.

The medical care districts, currently caring for an average of 3 000-3 500 persons, are also to be reduced to 1 200-1 500. While maintaining the family doctor principle, the outpatient clinics are to provide better specialist services and receive improved equipment accordingly. A ministerial decree allowed medical practitioners to provide private services again from the beginning of 1990 after a 17-year gap; private medical practices are still prohibited, however.

The most commonly-recorded disease in 1988 was influenza, with three times the figure for the previous years. Chicken pox, rubella, viral hepatitis, streptococcal tonsillitis and scarlet fever were also particularly common.

4.1 REGISTERED DISEASES

Disease	1984	1985	1986	1987	1988
Typhoid fever and paratyphoid	1	4	5	3	.
Bacterial dysentery	4 597	6 137	4 878	5 060	3 956
Anthrax	15	17	33	8	16
Whooping cough	226	40	53	54	16
Streptoccal tonsillitis and scarlet fever	18 150	13 855	13 697	10 518	9 413
Meningococcal infection	105	136	150	161	142
Tentanus	13	12	8	5	4
Chicken pox	40 737	34 216	39 211	40 373	31 457
Measles	292	972	1 370	1 560	404
Rubella	24 731	29 383	8 498	14 345	24 719
Viral hepatitis	12 883	12 392	11 931	15 814	10 956
Mumps	852	1 170	68 613	33 628	446
Malaria	269	116	95	115	101
Leptospirosis	60	26	34	43	43
Meningitis	97	1 274	265	205	96
Influenza	6 119	78 105	7 041	13 150	39 330

Diseases of the cerebrovascular system were the most frequent cause of death in 1987 amongst those selected, with deaths varying between 22 000 and 24 000 from 1982 to 1987. The number of deaths caused by ischaemic heart diseases rose constantly between 1982 and 1986; the almost 22 000 deaths in 1986 exceeded the 1982 figure by 22% before 1987 saw a drop of 4% to around 21 000. The number of deaths from malignant neoplasms also increased continuously, the figure of 15 000 in 1988 being 11% higher than in 1982. Arteriosclerosis is another increasing cause of death, with almost 9 000 cases diagnosed in 1987 - 40% more than in 1982.

4.2 DEATHS BY SELECTED CAUSE

Cause of death	1982	1983	1985	1986	1987	1988
Infectious and parasitic diseases	715	734	633	700	677	623
Tuberculosis of the respiratory organs	323	310	237	226	211	.
Meningococcal infection	32	35	36	30	47	.
Sepsis	115	122	158	189	217	.
Malignant neoplasms including:	13 732	14 054	14 679	14 737	15 037	15 197
stomach	2 619	2 501	2 371	2 368	2 339	.
windpipe, bronchi and lungs	2 735	2 905	2 990	3 049	3 100	.
mammary gland	930	916	1 059	1 029	977	.
Diabetes mellitus	1 238	1 314	1 507	1 558	1 642	.
Hypertension and related diseases	1 939	2 210	2 278	2 211	2 768	.
Ischaemic heart diseases	17 808	18 162	21 767	21 759	20 873	.
Acute myocardial infarction	6 993	6 953	7 157	6 828	6 414	.
Diseases of the cerebrovascular system	22 128	22 025	23 637	22 536	22 136	.
Arteriosclerosis	6 439	7 300	7 112	7 914	8 994	.
Pneumonia	4 675	4 579	4 629	4 243	4 073	.
Bronchitis, emphysema and asthma	2 577	2 506	2 600	2 035	1 894	.
Chronic liver diseases and cirrhosis	1 180	1 247	1 550	1 551	1 554	.
Nephritis, nephrotic syndrome and nephrosis	595	558	554	600	708	.
Congenital anomalies	551	559	580	519	540	.
Infections [1]	785	662	568	591	516	.

[1] Of perinatal origin.

Almost all deliveries (99%) take place in maternity clinics; mothers' advice centres are responsible for baby care. Another important social policy measure is the provision of crèches and kindergarten facilities; over three-quarters of all children of the appropriate age can be accommodated.

The number of hospitals and similar establishments fell from 260 in 1970 to 248 in 1980 and then rose to 256 in 1989. At the same time the number of hospital beds rose steadily by 47% from approximately 60 000 to 87 000. The number of beds in out patient clinics and dispensaries fell from 1970 to 1989 by 52%, to approximately 1 800.

From 1970 to 1988 the number of hospital beds in towns increased by over 75%, while numbers in rural areas fell by more than 10%. The proportion of beds in rural areas fell from 43% of the total in 1970 to 27% in 1988.

4.3 MEDICAL ESTABLISHMENTS *)

Establishment	1970	1975	1980	1985	1988	1989
Hospitals etc,...	260	247	248	251	257	256
including: preventive health-care establishments	60	62	63	62	60	59
Out patient clinics etc,...	3 528	3 535	3 695	3 685	3 714	3 732
including: rural clinics	15	24	71	125	147	.
Mother and child centres 1)	537	952	1 162	1 159	1 108	1 106
Sanatoria, spas and convalescent homes	185	189	186	187	188	183
Other medical establishments	30	54	56	55	62	69

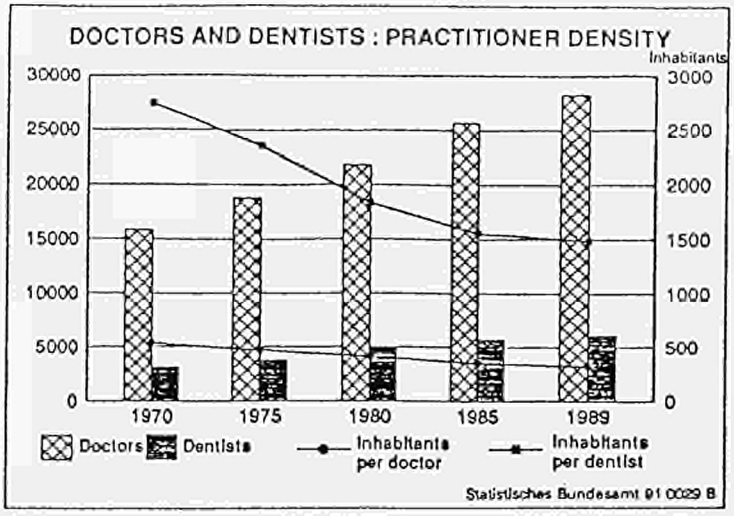
*) Structural changes in the Public health system (reclassification of health establishments, 1985) have been accounted for retrospectively.
1) Including weekly crèches and nurseries for sick children.

4.4 REGULAR BEDS IN MEDICAL ESTABLISHMENTS *)

Establishment	1970	1975	1980	1985	1988	1989
Hospitals etc,...	59 509	71 455	78 470	81 691	85 864	87 217
including: preventive health-care establishments	3 500	4 145	4 398	4 760	4 619	4 524
Out patient clinics etc,...	3 862	2 046	1 013	1 808	1 835	1 846
including: rural clinics	204	285	337	448	557	
Mother and child centres 1)	33 719	67 809	82 270	72 310	50 658	49 578
Sanatoria, spas and convalescent homes	16 310	18 333	18 554	21 338	22 032	22067
Other medical establishments	55	56	105	55	55	55

*) Structural changes in the Public health system (reclassification of health establishments, 1985) have been accounted for retrospectively.
1) Including weekly crèches and nurseries for sick children.

The number of doctors rose from almost 16 000 to approximately 28 000 from 1970 to 1989, which meant a reduction from 538 to 319 in the average number of inhabitants per doctor. Substantial increases also took place in this period in the number of dentists (94%), pharmacists (79%), nurses (100%) and midwives (28%).



4.5 DOCTORS AND DENTISTS

Item	1970	1975	1980	1985	1988	1989
Doctors	15 819	18 770	21 796	25 665	27 750	28 218
Inhabitants per doctor	538	465	407	349	324	319
Dentists	3 111	3 701	4 839	5 745	5 953	6 048
Inhabitants per dentist	2 737	2 359	1 834	1 558	1 510	1 487

4.6 OTHER MEDICAL STAFF

Category	1970	1975	1980	1985	1988	1989
Pharmacists	2 382	3 055	3 648	4 209	4 294	4 257
Nurses	30 259	40 162	52 804	58 496	61 019	60 557
male	4 994	5 479	7 355	7 691	7 816	7 433
female	25 265	34 683	45 449	50 805	53 203	53 124
Midwives	5 839	7 122	7 897	7 824	7 751	7 466

5 EDUCATION

Attendance at school is compulsory and free of charge in Bulgaria from six to 16 years of age. Schools are administered by the Bulgarian Ministry of Education. The actual running of individual schools, including nursery schools, on the other hand, is carried out by special departments of the local authorities. In the academic year 1981/82, a unified general syllabus was introduced into secondary schools in order to implement a three-stage school system for primary and secondary levels in accordance with the plans for restructuring the Bulgarian education system. The first stage comprises the first ten school classes. In the second stage, which takes 18 months, pupils obtain general vocational qualifications. In the third stage, which lasts six months, special vocational qualifications are awarded, combined with specific vocational training in industry. There are also vocational/technical schools for working persons, offering general and vocational training at various levels up to university level, and technical colleges giving specialist training for manufacturing industry, construction, transport, the distributive trades and Public health. Persons successfully completing a secondary course are able to continue their education in university-level establishments.

In addition to schooling, the education system also lays special emphasis on the education and care of pre-school children, chiefly in the form of the provision of places in crèches and nursery schools and considerably extended teacher training. Of approximately 5 900 nursery schools in 1981, some 60% were in rural areas and 40% in towns. In 1975, two-thirds of all children up to six years of age were cared for in such establishments, with approximately 20 children per teacher. By 1986 the proportion of children attending nursery school had risen to 83% of the age group concerned.

Between the academic years 1970/71 and 1989/90, the number of general technical schools fell by 17% and the number of vocational and technical middle schools by 27%. This was offset by increases in most other types of school.

5.1 SCHOOLS AND OTHER EDUCATIONAL ESTABLISHMENTS

Establishment	1970/71	1975/76	1980/81	1985/86	1988/89	1989/90
General technical schools	4 197	3 747	3 577	3 508	3 516	3 500
Special schools [1]	116	125	129	129	129	125
Vocational and technical schools	.	8	3	3	3	4
Vocational and technical middle schools	328	307	297	267	262	241
Technical and art colleges	246	246	234	232	265	264
Advanced technical colleges	20	28	24	21	26	29
Universities	26	24	28	30	30	30

1) For physically and mentally handicapped pupils.

The number of pupils in general technical schools was 89% higher in the 1987/88 academic year than in 1970/71. By 1989/90 numbers had fallen by 9% to 1 150 000. Numbers in vocational and technical middle schools, on the other hand, fell by 20% from 1970/71 to 1988/89, while numbers at technical and art colleges varied between 153 000 and 96 000. Numbers of university students increased by 42% to 126 000 between 1970/71 and 1988/89.

Efforts to promote women's education have led to very high proportions of women in higher education and science. In the second half of the 1980s, women accounted for 49% of the graduates of middle schools, colleges and universities and 37% of scientists. Women are also very strongly represented in certain professions (medicine, teaching, etc.) but still often grossly under-represented in highly-qualified posts.

5.2 PUPILS AND STUDENTS
(x 1 000)

Establishment	1970/71	1975/76	1980/81	1985/86	1988/89	1989/90
General technical schools	1 154.6	1 098.9	1 092.3	1 244.4	1 234.9	1 147.4
Special schools [1]	16.9	18.1	17.4	16.9	16.6	15.8
Vocational and technical schools	.	9.7	1.5	1.5	1.6	2.0
Vocational and technical middle schools	130.3	136.6	149.7	114.0	108.0	104.0
Technical and art colleges	152.9	140.7	97.6	95.7	125.0	135.6
Advanced technical colleges	10.3	19.8	14.0	9.5	18.5	19.9
Universities [2]	88.6	107.5	85.8	99.1	113.9	126.2

1) For physically and mentally handicapped pupils.
2) Including Bulgarians studying abroad.

Bulgaria, like all other socialist countries, placed great emphasis on adult education, one result of which was a wide range of evening and correspondence courses at all educational levels. At the end of the 1970s, however, it became clear that the demand for formal further education was in serious decline. Nevertheless, this trend was reversed in the 1980s, when increased numbers of pupils and students were recorded at virtually all levels. Particularly high rates of increase occurred between 1980/81 and 1988/89 in the advanced technical colleges (+265%) and universities (+64%).

5.3 PUPILS AND STUDENTS FOLLOWING EVENING AND CORRESPONDENCE COURSES

Type of establishment	1970/71	1975/76	1980/81	1985/86	1988/89
General technical schools	20 765	17 365	6 418	4 568	4 840
Vocational and technical middle schools	2 710	6 590	1 240	824	1 595
Technical and art colleges	45 900	37 577	23 131	24 069	33 008
Advanced technical colleges	1 026	4 644	1 099	1 050	4 012
Universities [1]	23 112	30 674	21 314	23 745	34 876

1) Including Bulgarians studying abroad

The following summary shows that numbers of teaching staff increased considerably at most levels of the Bulgarian school and university system in the period 1970/71 to 1989/90. The highest rates of increase were in the advanced technical colleges and universities, with increases of 177% and 170%, respectively. As a result, the average number of students per teacher in the advanced technical colleges fell from 19 to 13 and in the universities from 13 to 7 (1988/89). The largest absolute increase in teaching staff occurred in the general technical schools, where numbers grew by more than 16 000 to around 71 000 (+30%), bringing a fall in the average number of pupils per teacher from 21 to 16.

5.4 TEACHING STAFF

Establishment	1970/71	1975/76	1980/81	1985/86	1988/89	1989/90
General technical schools	54 068	56 082	59 067	70 545	73 794	70 529
Special schools [1]	2 155	2 293	2 373	2 342	2 404	2 299
Vocational and technical schools	.	180	63	50	50	56
Vocational and technical middle schools	8 454	9 245	9 372	7 571	7 101	6 952
Technical and art colleges	9 045	9 983	9 415	9 838	11 138	11 233
Advanced technical colleges	555	982	1 790	843	1 380	1 539
Universities	7 125	11 248	12 622	14 409	17 759	19 213

1) For physically and mentally handicapped pupils.

During the 1980s, the Soviet Union was the most frequent host country for students studying abroad, followed by the GDR and other Comecon countries.

5.5 STUDENTS ABROAD BY SELECTED HOST COUNTRY

Host country	1980/81	1985/86	1988/89
Soviet Union	3 451	3 961	4 841
GDR	366	451	392
Czechoslovakia	234	208	235
Hungary	141	156	173
Poland	167	67	55
Romania	56	31	10

6 EMPLOYMENT

The available official statistics contain no absolute figures on employment. The data on manual and non-manual workers in absolute terms (cf. Table 6.3) apply only to a proportion of the economically active population. This group includes all active manual and non-manual workers (in firms, State-owned agricultural holdings, official bodies, organizations and institutions) receiving a wage or salary. They do not include the remainder of the working population in agricultural cooperatives, private industrial firms, private agricultural holdings or religious institutions and organizations. Most of the workers not included belong to agricultural cooperatives.

The number of persons of working age remained relatively constant between 1970 and 1989. The proportion of men (aged between 16 and 59) is 53%, while women (aged 16 to 54) account for approximately 47%. The number of urban residents of working age rose by 24% between 1970 and 1988, while the equivalent number in rural communities fell by 31%. This meant that the proportion of the total population of working age living in towns rose from 58% to 71%.

The number of unemployed persons in the first half of 1990 was put at approximately 70 000 by the newly-formed independent trade union Podkrepa (with some 3.5 million members); the official figure was 18 000.

In the first quarter of 1990, the Bulgarian Parliament granted workers -other than those in the fields of health, energy, safety, communications and energy- the right to strike. There was a substantial increase in the number of spontaneous stoppages in early 1990.

6.1 POPULATION OF WORKING AGE *)
(x 1 000)

Population	1970	1975	1980	1985	1988	1989
Total	4 938.0	5 057.3	5 088.3	5 011.6	4 996.9	4 997.0
urban	2 872.3	3 148.1	3 415.1	3 460.4	3 562.6	.
rural	2 065.6	1 909.2	1 673.2	1 551.2	1 434.2	.
Male 1)	2 602.7	2 633.5	2 703.7	2 656.0	2 645.5	2 648.0
Female 2)	2 335.3	2 423.8	2 384.6	2 355.6	2 351.4	2 349.0

*) As at end of year.
1) Aged 16 to 59.
2) Aged 16 to 54.

The figures on workers by economic sector reflect the structural change in the national economy, brought about essentially by industrialization. They show a shift of emphasis in both production and employment from agriculture to industry and a few other sectors of the economy. This was clear from State investment policy, which gave preference to manufacturing industry.

The liberation of agricultural workers was accelerated by cooperation and fusion between holdings. In 1948 agricultural workers still made up 82% of the total workforce; by 1970 the figure was 36% and by 1988 19%. (The number of manual and non-manual workers in agriculture nevertheless rose very steeply during the 1970s (cf. Table 6.3) owing primarily to changes in labour law, which turned cooperative farmers into manual or non-manual workers on industrial-scale holdings.

The reason for the still relatively high proportion of agricultural workers in the total working population, despite the structural change described above, and the average of 13.5 workers per 100 ha utilized agricultural area in 1988 lies, to some extent, in the specific nature of Bulgarian agricultural production; the labour-intensive and still inadequately mechanized production of tobacco, fruit, vegetables, scents and aromatic plants was partly responsible for the relatively high labour requirement.

The number of persons employed in material production as a whole fell continuously, while the proportion in non-material production increased. The number of workers rose most sharply between 1970 and 1988 in manufacturing industry, health and social services, education and the arts, the distributive trades, primary purchasing and equipment and technology supply.

6.2 LABOUR DISTRIBUTION BY SELECTED ECONOMIC SECTOR
(%)

Economic sector	1970	1975	1980	1985	1988
Material production including :	86.9	84.3	83.0	82.2	81.5
Agriculture and forestry	35.7	28.2	24.2	20.8	19.3
Manufacturing industry	30.3	33.5	35.2	37.3	38.0
Construction industry	8.4	8.0	8.2	8.4	8.3
Distributive trades and primary purchasing [1]	6.1	7.8	8.0	8.4	8.7
Non-material production including :	13.1	15.7	17.0	17.8	18.5
Housing and local government, services	2.1	2.1	2.1	2.2	2.3
Education, culture and the arts	5.0	6.2	6.7	7.1	7.2
Health and social services, sport, travel	2.7	3.6	4.3	4.5	4.7

1) Including equipment and technology supply.

During the 1970s the number of manual and non-manual workers rose by 49%, largely as a result of the change in labour law mentioned above. From 1980 to 1985 there was only a 2% increase, followed by a drop of about 1% over the next two years. Of the 4.1 million manual and non-manual workers in 1989, 38% worked in manufacturing industry, 18% in agriculture, 8.3% in the distributive trades, primary purchasing and equipment and technology supply, 8.6% in the construction industry and 7.9% in education, the arts and culture.

6.3 MANUAL AND NON-MANUAL WORKERS BY SELECTED ECONOMIC SECTOR *)
(x 1 000)

Economic sector	1970	1975	1980	1985	1988	1989
Total	2 748.7[a)]	3 636.6	4 024.8	4 094.7	4 077.6	4 060.7
including:						
Agriculture and forestry	294.3[a)]	810.7	973.6	895.2	814.6	723.4
Manufacturing industry	1 155.3	1 296.6	1 368.9	1 411.1	1 451.0	1 562.9
Construction industry	303.8	316.8	341.2	360.6	354.3	348.9
Transport	192.7	231.5	258.7	257.0	255.7	242.6
Distributive trades and primary purchasing [1)]	232.1	308.5	331.6	355.2	358.6	338.0
Housing and local services	77.1	74.3	51.8	54.4	62.3	59.3
Sciences and scientific services	46.7	60.5	62.4	82.1	89.9	95.3
Education, the arts and culture	203.4	265.7	288.1	311.7	318.7	318.9
Health and social services, sport, travel	110.6	153.7	185.5	201.0	210.7	210.4
Public administration	59.0	62.3	61.1	54.1	55.3	53.1

*) Annual average
1) Including equipment and technology supply (trade in means of production).
a) Excluding agricultural cooperatives.

Nearly 50% of all manual and non-manual workers in 1988 were women. Women were most numerous in the fields of health and social services, sport and travel at 76%, education, the arts and culture at 74% and the distributive trades, primary purchasing and equipment and technology supply at 72%. The proportion of women in agriculture is slightly below average, but rising.

The proportion of workers in agriculture with university-level qualifications rose from 1970 to 1988 by only 23% as a result of the downward trend since 1980. The number of agricultural workers with vocational qualifications rose by 53%.

In the mid-1980s, Bulgarian publications drew attention to the poor level of education of agricultural workers, which was regarded as too low in approximately one-third of cases. Efforts have been made for some years to stabilize the labour situation in Bulgarian agriculture and to improve the structure and qualifications of the workers. The main aim is to reduce the average age of workers (in 1978, 47% were over 50 as compared with 41% in 1980) by accelerating the intake of young workers and increasing the proportion of workers with vocational and university qualifications.

In order to acquaint agricultural workers with the latest developments in science and technology, there are further education measures such as courses on crop and livestock production, veterinary skills and agricultural economics and management. Graduate employees in agriculture are able to further their education at various universities.

6.4 FEMALE MANUAL AND NON-MANUAL WORKERS BY SELECTED ECONOMIC SECTOR *)
(x 1 000)

Economic sector	1970	1975	1980	1985	1988
Total including:	1 248.0	1 744.3	1 917.8	1 979.4	2 048.4 a)
Agriculture and forestry	179.2	380.2	458.7	410.0	386.2
Manufacturing industry	524.1	631.7	642.9	679.0	709.6
Construction industry	44.8	58.8	60.3	65.8	73.0
Transport	30.1	41.0	44.8	49.8	54.2
Distributive trades and primary purchasing 1)	133.3	194.2	206.8	225.9	242.5
Housing and local services	38.1	40.2	32.3	35.7	36.2
Sciences and scientific services	21.7	32.1	33.0	42.1	49.3
Education. the arts and culture	136.0	174.9	204.3	222.2	236.8
Health and social services, sport, travel	82.1	112.5	140.7	149.1	158.4
Public administration	19.3	28.0	31.6	30.2	32.3

*) Figures as on 1 August.
1) Including equipment and technology supply.
a) 1989: 1.99 million.

The higher technical standards resulting from increased industrialization and mechanization brought with them an increased demand for qualified staff. The result of this was a more vocational approach in educational establishments (schools, technical colleges and universities) and more intensive in-service training. The number of qualified staff working in the national economy as a whole rose between 1970 and 1988 by 97% to 1.03 million, while staff with university qualifications increased by 106% to 0.34 million.

6.5 QUALIFIED EMPLOYEES BY SELECTED ECONOMIC SECTOR *)
(x 1 000)

Economic sector	1970	1974	1980	1983	1986	1988
Total	521.4	658.6	858.4	931.8	1 014.1	1 027.5
including:						
Agriculture and forestry	39.8	44.9	54.7	59.3	61.2	61.0
Manufacturing industry	132.9	169.6	230.3	259.1	284.4	289.0
Construction industry	42.8	55.7	68.8	74.3	80.7	79.4
Transport	21.0	28.1	40.0	45.0	48.7	48.9
Distributive trades and primary purchasing 1)	30.9	42.3	58.8	63.7	67.7	71.1
Housing and local services	26.1	38.0	45.1	51.3	56.3	64.5
Sciences and scientific services	110.8	127.3	155.8	162.2	180.9	178.5
Education, the arts and culture	7.6	13.0	18.0	20.8	23.0	23.1
Health and social services, sport, travel	57.9	71.1	100.9	108.7	117.1	118.7
Public administration	23.3	31.8	39.2	35.6	34.3	35.7

*) As on 1 November.
1) Including equipment and technology supply.

6.6 GRADUATE EMPLOYEES BY SELECTED ECONOMIC SECTOR *)
(x 1 000)

Economic sector	1970	1974	1980	1983	1986	1988
Total	163.2	199.8	275.0	302.8	323.6	336.5
including:						
Agriculture and forestry	15.8	17.7	20.7	21.1	20.1	19.4
Manufacturing industry	29.7	35.2	52.8	59.6	60.8	63.3
Construction industry	13.6	16.3	23.4	25.7	26.1	25.9
Transport	4.2	5.2	7.6	9.4	9.9	9.9
Distributive trades and primary purchasing 1)	9.7	11.5	15.9	17.6	17.6	18.0
Housing and local services	15.0	21.9	28.5	32.7	36.0	40.8
Sciences and scientific services	28.7	34.4	48.6	53.7	66.4	70.2
Education, the arts and culture	4.4	5.9	9.1	10.5	11.5	11.3
Health and social services, sport, travel	17.0	19.4	26.7	30.4	33.7	34.8
Public administration	16.3	21.4	24.4	21.8	20.0	20.9

*) As on 1 November.
1) Including equipment and technology supply.

7 AGRICULTURE, FORESTRY AND FISHERIES

For historical reasons, agriculture in Bulgaria still exerts a strong influence on the entire economy of the country. This is illustrated by the fact that, in 1988, agriculture generated 12.1% of produced national income and employed a little over 19% of the working population.

After the Second World War Bulgaria, like the other former State-trading countries, took an approach to agriculture which involved land reform followed by the formation of industrial-scale holdings by incorporating the farms into cooperatives. This process was essentially completed by 1958. Concentration and centralization of existing agricultural cooperatives continued in the years that followed. Cooperatives originally consisting of 500-700 ha utilized agricultural area (UAA) were combined into mega-cooperatives of 6 000-7 000 ha UAA. In line with Communist Party policy, a further concentration and specialization of agricultural production was introduced in 1970, affecting all forms of ownership and economic activity within the country's existing administrative units. In the early 1970s, 170 territorial agro-industrial complexes (AICs) with a UAA of 30 000-40 000 ha were formed. These amalgamated all farm holdings (cooperatives and State-owned farms), agricultural suppliers, repair shops and primary purchasing and processing businesses under different forms of ownership within a district and virtually eliminated previous forms of ownership.

The AICs were the dominant type of enterprise, supplemented by the personal family production of the farmers and farm labourers comprising the AICs. Separate holdings continued to exist in areas whose location made them unsuitable for large-scale exploitation.

The combination of organizational, scientific and technical innovations within these combines, such as large-scale cultivation, the use of large-scale machinery and modern technologies, centralized management and organization, etc. at first brought a marked increase in production which helped both to improve supplies to the population and to boost agricultural exports. The disadvantages were the sheer size of the large-scale production complexes, the removal of links between producers and their original holdings and the use of forms of payment and remuneration which were not directly linked to results and thus undermined material incentives and improvements in output. Thus by the mid-1980s there were already problems with production which had an adverse effect on both supplies to the population and exports of traditional agricultural produce.

The political and economic reforms adopted in 1987 also brought changes in the agricultural sector with regard to the organizational and management structure of the AICs and to the forms of tenure and ownership. Within the existing AIC framework, the previously unified forms of State (State farms and State-owned enterprises) and cooperative (agricultural cooperatives) ownership were to regain their independence. Furthermore, new forms were to be permitted within the AIC, such as share-owning (by the labour collective), leasehold and performance-related contracts.

The various forms of socialist property were given equal opportunities, including autonomy and self-management in all business affairs.

The process begun in 1987 to halt the stagnation which was already becoming apparent in agricultural production and the decline in efficiency. At its plenary session in May 1989, the Communist Party attempted to redefine agricultural policy in line, failed, however, with the need for restructuring. This included a critical assessment of the viability of the AICs as they stood and arguments in favour of new forms of economic activity, placing specific demands on the organization and management of agricultural production. It was decided to redivide the AICs into manageable production units known as firms which would be legally and economically independent. These constitute a kind of agricultural producers' cooperative composed of job or tenant units. The right to set up farm businesses on leased land and in mountainous areas was also granted.

The new agricultural policy was accompanied by proposals for a changed economic mechanism reflecting the rejection of administrative management methods which would apply economic regulators to guarantee the economic independence of businesses, allowing them more autonomy and responsibility for their own affairs.

This attempt to foster material incentives to production and hence boost productivity -while maintaining the unity and indivisibility of socialist property- failed to bring the hoped-for upswing in agricultural production. As the 1990s approached the crisis in agriculture deepened. Bulgaria, hitherto a traditional agricultural exporter, became an importer of the main agricultural products. The food supply to the population deteriorated and rationing of staple products was introduced in 1990. The debts of the agricultural sector amounted to Lv 2 000 million . This state of affairs generated a wave of attempts to change the whole economic framework.

In May 1990 the law on agricultural land was passed, its basic principle being to grant every Bulgarian citizen the right to own land. The intended maximum size of properties in lowland areas is 20 ha and in mountainous, foothill or frontier areas 30 ha. Foreign nationals and corporate bodies may apply for permission to own land. The conditions for land ownership thus underwent substantial changes which will determine the future socio-economic policies and organization of agriculture. Against the background of the first steps in a transition to a market economy and the intended privatization of parts of the economy, the law on agricultural land opens the way to effective schemes for increasing farm production and efficiency.

The utilized agricultural area (UAA) in 1989 was 6.17 million ha, or 55.6% of the total area of Bulgaria.

Bulgaria's land resources include a high proportion of fertile to very fertile soil, including approximately 40% chernozem soils. Its topology divides the country into several climatic zones, which make it possible, depending on the fertility of the soil, to grow a wide variety of crops. However, the sometimes low precipitation (600 mm in northern Bulgaria and a maximum of 500 mm in eastern Bulgaria) and its unfavourable distribution over the year cause irrigation problems during the growing season. Approximately 3.5 million ha, or 57% of the UAA, require irrigation. The target of expanding irrigated areas to 1.9 million ha by 1985 was not achieved. Some 80% of the UAA is affected by surface erosion, partly as a result of heavy downpours in the summer months, which removes about 130 million tonnes of topsoil each year. By the beginning of the 1980s, the deterioration of the water balance and the humus content of the soil had become a problem which could no longer be ignored. Bad-weather years brought with them substantial slumps in yields of important crops.

Corrective action was attempted by means of complex measures such as improvements to the water balance, erosion protection, scientifically-based crop rotation, the use of organic fertilizers and green manure, liming and the reduction of soil compression caused by farm machinery.

To protect and maintain the utilized agricultural area, the government had in the past taken measures to limit the loss of farmland and open up suitable new areas for agriculture; as a result, withdrawals and additions balanced each other out and the total utilized agricultural area increased slightly.

Of the areas in use, arable land was lost in favour of permanent meadow and pasture. Of the two ownership categories in agriculture, individual holdings showed an increase both in arable land and in permanent crops and pasture. On holdings in social ownership, arable land and permanent crops declined while pasture increased.

In 1988, about 86% of the UAA and nearly 88% of arable land belonged to farms in the socialist sector or to subsidiaries of industrial and construction firms. Their shares of permanent crops and pasture were 70% and 62%, respectively.

Approximately 10% of the UAA is worked by individual holders, including the personal family plots of agricultural workers and manual and non-manual workers from other economic sectors. In recent years almost 30% of Bulgaria's gross agricultural product has been produced on this land, primarily because of the highly intensive nature of production on smallholdings and support from the socialist sector: some of the privately held land was worked using machinery from the large farms, and new cultivation methods, high-quality seed and effective fertilizers and pesticides were applied. Individual holdings also received a stable supply of fodder and young animals and veterinary care was provided, which enabled relatively large numbers of animals to be kept on family plots.

The concentration process completed in the 1960s and 1970s went hand in hand with the introduction of a distribution of agricultural production which was regarded as particularly favourable. The desired locations for branches of crop and livestock production were obtained and local self-sufficiency in supplies of staple farm products was at first successful.

In view of the inadequate growth in production from the mid-1980s, however, the government was forced to change the self-sufficiency system. In 1987 an order was issued extending the list of the main agricultural products in which the AICs had to be self-sufficient by 20 items, including fruit, vegetables, pulses, milk, eggs, meat, etc.

7.1 LAND USE *)
(x 1 000 ha)

Type of use	1975	1980	1985	1987	1988	1989
Arable land	3 957	3 827	3 810	3 825	3 840	3 848
Permanent crops 1)	382	350	320	302	296	294
Permanent meadow	279	292	294	293	291	290
Permanent pasture	1 215	1 520	1 516	1 515	1 508	1 518
New land 2)	122	197	229	231	227	218
Wooded areas	3 797	3 845	3 867	3 868	3 868	3 868
Other	1 347	1 068	1 063	1 065	1 069	1 063
Irrigated land	1 128	1 197	1 229	1 257	1 242	.

*) As on 1 July.
1) Fruit, vine, rose and mulberry plantations.
2) Mostly pasture.

7.2 UTILIZED AGRICULTURAL AREA BY SELECTED TYPE OF FARM *)
(x 1 000 ha)

Type of use	1975	1980	1985	1987	1988	1989
Agricultural organizations and holdings						
Total	5 320.4	5 522.2	5 340.5	5 327.7	5 322.4	5 348.8
Arable land	3 504.1	3 379.6	3 337.5	3 347.3	3 360.4	3 395.2
Permanent crops 1)	307.6	268.6	231.8	213.2	207.0	204.0
Permanent meadow	202.5	194.1	184.2	181.9	179.4	175.9
Permanent pasture	1 188.1	1 487.0	1 368.6	1 366.2	1 359.6	1 367.1
New land 2)	118.1	192.9	218.4	219.1	216.0	206.6

For footnotes, see end of table.

7.2 UTILISED AGRICULTURAL AREA BY SELECTED TYPE OF FARM *)
(x 1 000 ha)

Type of use	1975	1980	1985	1987	1988	1989
	Individual ancillary holdings 3)					
Total	569.2	598.0	609.4	616.3	619.9	.
Arable land	426.8	426.6	433.5	438.4	441.1	.
Permanent crops 1)	72.1	78.4	77.4	77.5	78.1	.
Permanent meadow	69.2	93.0	98.5	100.4	100.7	.
Permanent pasture	1.0	-	-	-	0	.
New land 2)	0.1	-	-	-	0.1	.

*) As on 1 July.
1) Fruit, vine, rose and mulberry plantations.
2) Mostly pasture.
3) On own or leased land for own consumption.

In the 1970s, the level of equipment in agricultue was considerably improved, with increased numbers of tractors, combine harvesters, harvesting machines for various crops, and equipment and technology for animal husbandry, etc. The greater availability of machinery formed the basis for the mechanization of important technological processes and to some extent for complex mechanization and the introduction of industrial-scale production methods.

At the end of the 1970s stocks of some types of farm machinery began to decline. A lack of tractors, combine harvesters, etc. was partially offset by the greater efficiency of new technology. However, the inadequate supply of small and medium-sized tractors had a particularly bad effect on the mechanized cultivation and harvesting of fruit, vegetables and tobacco and on work in fodder and livestock production. In the early 1980s a qualitative improvement in the combine harvester fleet was achieved by the introduction of more powerful machines. The average power rating per new-generation combine harvester was 130 PS at a throughput of 5-8 kg/sec.

Between 1975 and 1989 the number of tractors fell by 17% from 64 689 to 53 653 and the number of combine harvesters by 22% from 10 340 to 8 051.

Bulgarian experts consider the current level of equipment in agriculture to be inadequate because technological renewal in the past was limited and not sufficiently effective. By the end of the 1980s the farm machinery available was of a relatively low technical standard, with some 45% of the equipment either obsolete or worn out.

Despite this state of affairs, the increased use of technology in the past had helped to mechanize important processes and sometimes whole production stages.

Since the early 1980s, soil preparation, the sowing of grain, oilseeds, sugar beet and industrial crops and the harvesting of cereals and coarse fodder crops have been fully mechanized. Industrial-scale technologies were adopted in cereal and oilseed cultivation. Other work processes, on the other hand, such as the sowing of potatoes, tilling of sugar beet and maize and haymaking, remained under-mechanized. The same was true of fruit, vegetables and special crops.

The various branches of animal husbandry also show varying levels of mechanization of the different work processes. Most progress has been achieved in poultry, egg and pigmeat production. The transition to mechanical milking of cows and sheep is complete.

Most animal husbandry is still carried out in the traditional way with minimal equipment, despite the construction of industrial-scale plants since the early 1970s; some 50% of stalls need to be replaced for structural or technical reasons.

The industrial-scale livestock installations are likewise largely obsolete and require modernization.

The mechanization of work processes in agriculture, particularly in animal husbandry but also in the irrigation, drying and processing of fodder crops and in the greenhouse sector, added substantially to electrical energy consumption.

7.3 MACHINERY *)

Type of machinery	1970	1975	1980	1985	1988	1989
Tractors	53 618	64 689	61 968	55 161	53 679	53 653
Combine harvesters	9 340	10 340	9 682	8 492	7 919	8 051
Milking machines	.	4 971	5 302	5 152	.	.

*) Figures as at end of year.

Substantial changes have taken place in the last few decades in the provision of mineral fertilizers. Supplies to agriculture increased up to the early 1980s. From 1983 to 1989, however, they fell from 164 to 127 kg of pure nutrient per hectare of UAA. There was also a deterioration in the pure nutrient ratio: the phosphate content in pure nutrients as a whole fell. This had a negative effect on the efficiency of nitrogen and potassium fertilizers and became a limiting factor in raising yields.

The use of chemical phytosanitary products and pesticides increased up to 1986. Recently, ecological considerations have led to more combined use of chemical and biological plant protection products and pesticides.

7.4 CONSUMPTION OF COMMERCIAL FERTILIZERS AND PESTICIDES

Item	Unit	1983	1984	1985	1986	1988	1989
Commercial fertilizer	1 000 t pure nutrient	970	977	865	795	781	786
nitrogenous	1 000 t pure nutrient	501	512	501	436	427	458
phosphatic	1 000 t pure nutrient	350	356	269	250	258	239
potassic	1 000 t pure nutrient	119	109	94	109	95	89
Pesticides	t	33 894	35 570	35 614	36 473	26 283	.

Agricultural production stagnated in the second half of the 1980s. Crop production showed a marked downward trend, exacerbated by the poor harvests in 1983, 1985 and 1987, while livestock production continued to increase, though at a markedly slower rate than in the 1970s. Livestock production thus increased as a proportion of gross agricultural production, reaching 55.6% in 1988.

As a result of this development and a further growth in the population, per capita agricultural production was down by 1% in 1987/88 compared with the 1979-81 average. The resulting decline in the food supply was partially alleviated by increased imports of grain and oilseeds, so that the food supply was maintained in 1987/88 at its average 1979-81 level, or even a little above.

7.5 INDEX OF AGRICULTURAL PRODUCTION
(1979-81 average = 100)

Type of index	1984	1985	1986	1987	1988
Total production	108	95	105	100	100
per inhabitant	106	94	104	99	99
Food production	109	95	107	101	103
per inhabitant	107	94	106	100	102

The food problem, which has existed for years, is determined by an unfavourable nutrition structure and a high calorie intake, which was 3 953 kcal per person per day, or 144% of the requirement, in 1985 according to the FAO. This excessive energy intake is traditional and consists of a high consumption of animal and vegetable fats and carbohydrates. To improve the nutrition structure, the population requires an adequate supply of animal protein, including sufficient fish and fish products, together with fruit and vegetables.

The system of local self-sufficiency laid down the following minimum consumption standards in 1988: 76.5 kg meat, 227 litres milk, 265 eggs, 135 kg fruit in total, 128 kg vegetables in total; this represented an increase over previous years for all products except fruit. The per capita consumption in that year of 73.3 kg meat, 225 litres milk, 273 eggs, 110 kg fruit and 115 kg vegetables failed to meet these targets except where eggs were concerned. The food supply deteriorated in 1989/90 and with it the nutritional balance.

Grain production is a central component of Bulgarian agriculture. The target is a stable average production of 10 million tonnes of grain annually. A successful solution to the food problem will depend to a large extent on adequate and stable grain production. The primary way of achieving this is to raise the yield per hectare, by cultivating new high-yield varieties and hybrids and by introducing modern technology and appropriate management methods.

A total grain harvest of some 10 million tonnes has been achieved only once, in 1982, although initial results indicate that the grain yield in 1989 also reached roughly this level, chiefly as a result of the good wheat and maize harvests. From 1984 to 1988 quantities of grain, particularly wheat, barley and maize, fluctuated widely. Production of sunflower seeds, soya beans, sugar beet, tobacco, hay and a large number of fruit and berry varieties also fluctuated, showing a general downward trend.

7.6 YIELDS OF SELECTED CROPS
(x 1 000 t)

Product	1984	1985	1986	1987	1988	1989
Wheat	4 836	3 068	4 327	4 149	4 743	5 402
Rice	61	55	62	53	46	50
Barley	1 279	800	1 144	1 091	1 313	1 568
Maize	2 994	1 350	2 848	1 858	1 557	2 421
Rye	37	49	52	49	61	51
Oats	25	41	42	41	53	104
Potatoes	418	439	491	316	358	538
Beans, dried	46	43	46	30	29	46
Peas, dried	20	17	24	35	46	.
Lentils	9	10	12	18	16	.
Soya beans	72	37	54	33	17	.
Sunflower seeds	462	365	489	410	374	447
Cotton seed	10	9	12	13	9	.
Cabbage	143	102	120	117	134	.
Tomatoes (including greenhouse)	905	781	760	828	806	850
Pumpkins	59	48	62	66	72	.
Gherkins	169	150	125	165	155	.
Aubergines	29	30	33	34	30	.
Chillies, green	247	222	207	235	246	.
Onions, dried	62	77	88	81	96	.
Garlic	21	19	19	19	25	.
Beans, green	18	16	23	17	15	.
Peas, green	17	11	10	18	20	.
Carrots	25	19	24	19	29	.
Melons and water melons	274	260	315	362	318	.
Grapes	1 120	905	924	943	922	754
Sugar beet	1 133	824	870	736	626	912
Apples	526	336	543	339	334	398
Pears	92	84	84	74	73	.
Peaches and nectarines	82	73	56	58	63	.
Plums	123	148	116	103	139	.
Apricots	24	57	26	18	34	.
Strawberries	20	11	15	13	15	17
Raspberries	6.9	5.6	6.8	5.4	4.1	.
Walnuts	25.4	26.9	27.1	28.6	28.1	.
Tobacco, green	141	126	126	133	116	83
Raw cotton, ginned	5	5	4	4	4	.
Fodder beet	277	252	246	255	227	337
Maize for silage and green fodder	5 536	5 544	6 227	6 079	5 040	5 910
Alfalfa	1 978	1 548	2 123	1 953	1 805	.
Hay from permanent meadows	603	492	558	532	590	526

The decline up to 1988 is even more evident in the yields per hectare for major crops. Yields of most cereals fell, after which, according to initial figures, there was a substantial improvement in 1989. Yields of potatoes, sugar beet, pulses, oilseeds and some vegetables (tomatoes and cabbage) also dropped.

The main cause of these negative trends in the second half of the 1980s, exacerbated by several years of drought, was the low level of intensification in farm production. The prime limiting factor for yields was inadequate irrigation and falling soil fertility. Socio-economic problems in rural areas, poor organization, management and planning in agriculture and a lack of worker motivation also hampered production.

7.7 YIELDS PER HECTARE OF SELECTED CROPS
(dt/ha)

Product	1984	1985	1986	1987	1988	1989
Wheat	42.9	28.7	38.4	38.2	40.1	47.4
Rice	38.2	42.5	47.1	37.5	32.3	36.6
Barley	40.6	30.7	36.0	37.0	38.0	43.5
Maize	55.0	30.7	49.4	37.2	31.7	42.9
Rye	14.1	14.9	16.5	16.6	18.3	20.2
Oats	10.5	13.9	14.4	14.8	19.2	26.7
Potatoes	104.9	108.8	123.1	85.5	97.3	133.0
Beans, dried	7.4	7.0	9.1	6.6	6.3	9.4
Peas, dried	15.5	11.1	11.5	13.0	13.6	.
Lentils	9.0	7.5	6.5	10.0	7.5	.
Soya beans	10.0	5.2	10.5	9.2	7.2	.
Sunflower seeds	18.2	13.6	19.1	15.4	15.7	18.5
Cabbage	377	285	302	283	318	.
Tomatoes	309	264	258	281	270	.
Pumpkins	236	214	265	234	224	.
Gherkins	357	327	288	323	333	.
Aubergine	215	215	211	209	211	.
Chillies, green	132	117	113	132	129	.
Onions, dried	59.5	65.7	75.6	80.9	95.1	.
Garlic	50.8	45.7	46.6	45.6	53.1	.
Beans, green	31.9	29.8	31.8	26.0	30.2	.
Peas, green	19.7	12.5	10.4	19.7	26.7	.
Carrots	126	97	104	84	150	.
Melons and water melons	121.0	108.8	124.5	139.5	125.6	.
Grapes	76.5	62.7	66.7	68.8	67.3	.
Sugar beet	223	168	203	188	161	232
Tobacco, green	13.6	12.4	12.2	14.7	13.4	11.4

The total livestock population declined and changed in structure. The proportion of cattle (including buffalo), sheep and goats fell, while the proportion of pigs increased.

This change in structure was due primarily to the economic and technological advantages of pig-rearing, combined with an increase in the use of grain to the detriment of field fodder.

7.8 LIVESTOCK AND BEE POPULATIONS *)
(x 1 000)

Species	1980	1985	1987	1988	1989	1990
Horses	120	118	121	123	122	110
Mules	30	27	26	25	24	.
Donkeys	337	349	341	333	329	.
Cattle	1 787	1 751	1 678	1 649	1 613	1 577
Dairy cows	696	666	632	625	632	.
Buffalo	52	33	26	24	23	23
Pigs	3 830	3 734	4 050	4 034	4 119	4 352
Sheep	10 536	10 501	9 563	8 886	8 609	7 988
Goats	433	474	441	428	436	430
Rabbits	317	337	358	365	371	.
Poultry	41 003	42 277	39 735	41 424	41 805	40 403
Number of bee hives	622	582	598	613	634	605

*) As on 1 January.

The number of animals slaughtered per year declined during the period for most livestock species, with the exception of sheep and goats.

7.9 ANIMALS SLAUGHTERED
(x 1 000)

Species	1984	1985	1986	1987	1988
Cattle and calves	668	694	649	660	627
Buffalo	11	10	10	8	8
Pigs	5 278	4 582	5 101	5 086	4 997
Sheep and lambs	4 784	5 705	5 377	5 907	5 481
Goats	321	385	385	413	404

Total meat production (carcass weight) was 17% higher in 1988 than in 1980, entirely as a result of higher carcass weight per animal.

The rates of increase in cows' milk and eggs were 19% and 18%, respectively. Honey production stagnated. Wool production fell by 20% between 1980 and 1989. The production of silk cocoons fell by approximately half. As with selected plant production, family plots also account for a high percentage of livestock products.

With 24.1% of the cattle population and 17.3% of pigs (1988), family plots and individual holdings accounted for 45.3% of meat production as a whole, with 32% of beef and approximately 41% of pork production. Their shares of poultry meat (56%), eggs (49%) and honey (83%) were exceptionally high.

Virtually 100% of silk cocoons were produced by this type of holding, but production fell by almost 50% as a result of inadequate stimulation.

7.10 PRODUCTION OF SELECTED ANIMAL PRODUCTS

Product	Unit	1980	1985	1986	1987	1988	1989
Total							
Meat	1 000 t	683	737	775	773	800	.
including:							
Beef, veal and buffalo meat	1 000 t	126	136	133	133	130	.
Pork	1 000 t	318	334	372	372	394	.
Poultry	1 000 t	145	158	167	169	183	.
Offal	1 000 t	98	106	111	110	112	.
Milk	Mio. l	2 151	2 462	2 523	2 513	2 493	2 427
Cows' milk	Mio. l	1 775	2 056	2 109	2 117	2 105	.
Eggs	Mio.	2 434	2 781	2 854	2 867	2 874	2 731
Honey	1 000 t	9.9	9.7	10.6	10.5	10.6	9.5
Wool, raw (greasy)	1 000 t	35.1	33.8	33.2	31.6	30.2	28.0
Silk cocoons	t	1 408	1 443	1 275	796	736	801
Individual holdings							
Meat	1 000 t	267	329	323	318	363	.
including:							
Beef, veal and buffalo meat	1 000 t	33	46	41	42	41	.
Pork	1 000 t	136	147	154	153	161	.
Poultry	1 000 t	52	70	64	63	103	.
Offal	1 000 t	38	47	46	46	47	.
Milk	Mio. l	560	655	650	631	624	.
Cows' milk	Mio. l	351	415	411	402	407	.
Eggs	Mio.	1 332	1 456	1 442	1 444	1 412	.
Honey	1 000 t	8.0	7.7	8.6	8.7	8.8	8.4
Wool, raw (greasy)	1 000 t	9.9	11.0	10.3	9.9	9.3	.
Silk cocoons	t	1 357	1 390	1 227	748	720	.

Forests totalled approximately 3.9 million ha in 1988. Wooded areas accounted for a total of 3.3 million ha. In all, some 30% of the total area of Bulgaria was wooded, with the proportion of wooded areas in the various regions varying between 5.5% and 64.1%.

Woodland can be divided into productive woodland for timber production and woodland with special functions, such as woods in erosion zones and along mountain torrents, recreational woods, green belts round towns and villages, national protective forest belts and nature reserves. All woodland and forest in Bulgaria, with few exceptions, is State property and managed centrally by specialist staff only.

Coniferous woodland accounted for some 1.2 million ha or 36% of the total in 1988. The main coniferous trees are pine, spruce, silver fir, greybark pine and larch.

Deciduous woodland accounted for 2.1 million ha or 64% of all woodland. The main deciduous species are oaks, beech, poplar, false acacia and linden. The target for 1990 is to establish a balance of 61.4% deciduous and 38.6% coniferous trees.

Since the average age of the trees is currently 38 years, large stretches have to be afforested each year. During the 1980s the average annual area afforested was 46 000 ha.

7.11 FORESTS, WOODED AREAS AND AFFORESTATION
(x 1 000 ha)

Item	1980	1985	1986	1987	1988
Forests	3 845	3 867	3 867	3 868	3 868
Coniferous	1 250	1 307	1 320	1 327	1 332
Deciduous	2 595	2 560	2 547	2 541	2 536
including:					
Wooded areas	3 293	3 342	3 323	3 322	3 321
Coniferous	1 125	1 194	1 187	1 188	1 193
Deciduous	2 168	2 148	2 136	2 134	2 128
Afforestation	47	40	.	46	46

Approximately one-third of the total area is subject to industrial felling. The annual amount felled declined during the 1980s from 4.9 million m^3 in 1980 to 4.1 million m^3 in 1988. Deciduous trees predominated, accounting for 75%.

Firewood accounted for a very high proportion of the timber felled, with an average of 50%.

Felling and processing are highly mechanized, but efficiency is limited by the very low level of mechanization of yarding and transport. Greater use of cable transport is planned and large central sawmills are to be established.

Part of the demand for timber and timber products can be met only by imports. The largest supplier is the USSR which, in 1986 for example, exported approximately 530 000 m^3 log timber and coniferous sawn wood to Bulgaria.

7.12 FELLING
(1 000 m^3)

Item	1980	1985	1986	1987	1988
Total	4 937	4 643	4 263	4 188	4 104
Coniferous	1 211	1 123	931	1 029	1 034
Deciduous	3 726	3 520	3 332	3 159	3 070
Industrial timber	2 544	2 360	2 091	2 073	2 051
Firewood and wood for charcoal	2 393	2 283	2 172	2 115	2 053

Fishing is of considerable importance in increasing the food supply: the annual catch between 1980 and 1987 was 14-17 kg per head of population. Until the mid-1960s, fishing was largely confined to home waters (the Black Sea, the Danube, coastal lakes and reservoirs). Only when seagoing trawlers were acquired and the fishing fleet was expanded was fishing extended to international waters.

The fishing fleet was increased by a factor of 2.3 between 1970 and 1988, particularly in the larger size categories. Total tonnage doubled in the same period, with 99.3% of total capacity in 1988 consisting of vessels in the size class of 2 000 GRT, or over.

7.13 FISHING VESSEL FLEET BY SIZE CLASS *)

Size from ... to ... GRT	Unit	1970	1975	1980	1985	1988
Ships	Number	14	28	34	32	32
100 - 499	Number	.	.	4	4	4
2 000 - 3 999	Number	14	28	30	28	28
Tonnage	1 000 GRT	37.6	72.2	78.0	73.5	73.5
100 - 499	1 000 GRT	.	.	0.6	0.6	0.6
2 000 - 3 999	1 000 GRT	37.6	72.2	77.4	73.0	73.0

*) As on 1 July.

Improvements to fishing equipment resulted in increased catches up to the mid-1970s, after which quantities declined, to a level of 110 500 tonnes in 1987 according to FAO figures. National data put the catch substantially higher: 142 000 tonnes for 1987, followed by a drop to 138 000 tonnes in 1988 and 121 000 tonnes in 1989.

In the 1980s catches consisted primarily of saltwater fish (80 to 88%), with 10-12% freshwater fish.

7.14 CATCHES
(x 1 000 t)

Type of fish	1983	1984	1985	1986	1987
Total	121.1	112.9	100.2	109.2	110.5
Freshwater fish	12.1	12.1	10.7	12.7	11.3
Carp	11.5	11.0	9.9	10.4	10.0
Brackish-water fish	1.7	1.0	1.8	1.5	1.6
Saltwater fish	107.0	94.8	79.6	87.6	94.4
including:					
Mackerel	83.0	66.2	45.9	49.4	50.2
Sprats	12.0	13.9	15.9	11.7	11.0
Crustaceans	0.3	.	0.3	0.0	0.0
Molluscs	.	5.1	7.8	7.5	3.3

Of the catch areas, inland waters regularly accounted for over 10% of catches and the Mediterranean and Black Sea for 10-17% annually. Fishing in the Eastern Atlantic and South-East Pacific has been discontinued. Nowadays the South-East Atlantic predominates with 40% of catches; the South-West Atlantic and the North Atlantic are becoming increasingly important.

7.15 CATCHES BY AREA
(x 1 000 t)

Area	1983	1984	1985	1986	1987
Total	121.1	112.9	100.2	109.2	110.5
Europe (inland waters)	13.7	13.0	11.9	14.1	12.9
Mediterranean and Black Sea	13.5	15.4	17.0	12.9	12.0
North-East Atlantic	0.3	3.0	7.7	12.1	13.5
East Atlantic	10.5	.	.	.	.
South-West Atlantic	.	10.0	17.8	20.9	22.8
South-East Atlantic	58.0	56.7	43.5	49.0	49.4
South-East Pacific	25.1	14.7	2.3	.	.

Ecological aspects of agriculture and forestry

Environmental protection has been a prime concern for more than 20 years. The mountainous nature of the country and thus the constant danger of erosion demanded effective coordinated measures. As early as 1971, Bulgaria founded a Committee for Environmental Protection. The first nature protection organization, the Union for Nature Protection, was founded considerably earlier, in 1928. The Bulgarian State Council has a standing Environmental Protection Commission whose main task is to formulate environmental and nature protection policies. There is a dense network of legislation on environmental protection. In 1977 the State Council laid down Guidelines for the protection and preservation of the natural environment and in 1982 endorsed the Ecological requirements in agricultural development. The passing of the Law on the protection and reproduction of the natural environment in October 1989 largely met the increased demands on environmental protection and management arising from the growing burden on the environment. Experts regard the level of environmental protection in Bulgaria as relatively high compared with other countries in Eastern Europe.

Expenditure on environmental protection from the State budget has increased each year. In 1987, total State expenditure in this field was 1.2 times higher than in 1980, with capital expenditure 1.1 times higher. Lv 248.3 million were spent on the protection of the agro-biosphere in 1987, Lv 157.0 of which were capital expenditure. Of the amounts invested, 39.1% were for water protection, 24.3% for soil protection and 3.5% for combatting air pollution. In addition to capital expenditure, an additional Lv 70-90 million per year was used on specific measures such as erosion protection, recultivation of the soil, afforestation, etc.

Despite great efforts, the harmful effects of economic activity on the environment were only partially prevented. Increased industrial production, progressive urbanization, the establishment of new industries and settlements and, not least, the growing intensification of agriculture and forestry, particularly in the last few decades, meant more strain on the environment, soil erosion and air and water pollution.

Land improvement systems, which are currently of low quality and in poor condition, represent a threat to the environment. Only some 40% of the 1.22 million ha of irrigated land at the end of the 1980s was suitable for intensive cultivation. The other land improvement schemes are ecologically unacceptable for various reasons (physical wear and tear, excessive environmental pollution, water erosion, gradient of slopes, etc.). Where gradients are too steep and water consumption is excessive, some 15 Mio. tonnes of valuable soil are washed away from irrigated areas each year.

Salinization of the soil is increasingly common.

The increasing mechanization of crop production processes has exacerbated such unwanted ecological effects as erosion and soil compaction. Displacement of large wooded areas by the expansion of agriculture also led to erosion. In northern Bulgaria, on the Danube plains, the formerly uninterrupted woods are today completely deforested except for a few isolated stands. The overall increase in wooded areas indicated by statistics is explained by the afforestation of sites which are frequently unsuitable.

The use of chemicals in agriculture and forestry has reached levels at which there is a greatly increased risk of undesirable consequences. Although the use of fertilizer declined in the late 1980s (in 1987 it was approximately 121 kg/ha UAA), poor transport and storage procedures and uneven spreading on the land placed a further burden on the agro-biosphere. Areas under intensive cultivation show local groundwater pollution and high nitrate concentrations in some agricultural products.

The use of pesticides is regarded as particularly harmful to the environment; it is strictly controlled and is being systematically restricted and replaced by modern plant protection methods. Great emphasis is placed on the use of improved pesticide application methods and integrated and biological plant protection.

The transition to industrial-scale livestock production led to the establishment of large complexes and installations with big concentrations of livestock: 50 000-100 000 animals in pig production, 100 000-400 000 laying hens and 1-3 million broilers in poultry production, 1 200-6 000 cows in dairy production and 4 000 head in heifer-rearing and cattle fattening. A lack of reliable and effective procedures for waste disposal and utilization means that the large complexes become sources of environmental pollution from ammonia, nitrates, microbes and specific odour emissions.

One serious problem in industrial-scale livestock-rearing is the use or disposal of dung or slurry. Some 31 million tonnes of excrement are produced each year in these complexes, 73% in the form of slurry. Only 25% of this is currently used as fertilizer, while the rest constitutes a source of pollution, particularly soil degradation.

More than 700 livestock holdings in Bulgaria with slurry manure removal are currently classed as particularly ecologically harmful. To alleviate the damage caused by slurry to neighbouring watercourses, processing plants have been built at 50 large complexes. These plants are still unreliable and their cleansing effect is inadequate. It is intended that bio-gas plants should also help make industrial-scale livestock production more ecologically acceptable; the first industrial bio-gas plant was put into operation in 1986.

Under present economic conditions, production units are financially in no position to purchase ecological equipment on their own. Of the 115 installations built by the end of the 1980s, 81% were fully or partially financed from State funds. This targeted financing will remain essential in the next few years if ecological policies are to be implemented.

8 MANUFACTURING INDUSTRY

Following the nationalization of industry begun in December 1947, small firms were amalgamated into larger production units. The systematic industrialization of a country which had hitherto been predominantly agricultural began in December 1948. The characteristic feature of the development of Bulgarian industry was concentration and specialization of production. Large combines, plants and enterprises specializing in a relatively narrow area of production became predominant in every branch of industry.

Of the 2 400 or so industrial firms (excluding construction), 91% were State-owned in 1988 an increase of 17% over the 1970 figure.

The number of workers in industry (excluding construction) rose by 26% to 1.44 million between 1970 and 1988. At the same time the proportion of workers in State-owned enterprises rose from 89% to 93%. Measured by the number of workers, the engineering and metalworking industry is the most important, employing 19% of manual and non-manual workers in State-owned manufacturing industry in 1988. Next came the food and beverages industry and electrical engineering, each with 13%, and the textile industry with 9%.

Under the division of labour in the socialist bloc, Bulgaria was allocated in particular the electronics branch, which was developed at great expense. Thus Bulgaria, which had relatively little competition from western industrialized countries on the East European market, became the world's sixth largest exporter of computers in the mid-1980s and the third largest net exporter after Japan and the USA. The inflated prices practised in foreign trade within the CMEA compared with the world market must have played a decisive role here. For example, computers of a similar design to those sold in Asia for US$ 400 are priced at 12 000 transfer roubles (approximately US $12 000) in East European trade. Because of the very cost-intensive production and their technological backwardness, however, experts give Bulgarian computers little chance on the world market.

The motor industry is another relatively young branch. Earlier experiments in domestic car manufacture (the Bulgarian Renault) were unsuccessful. The state industrial association responsible, AVTOPROM, and the coordinated foreign trade company AVTOIMPEX became active again only in 1968, concentrating on the assembly of Soviet Moskvitch cars and the GAS 67 HGV. Buses and coaches were also produced in collaboration with Czechoslovakia and the Federal Republic of Germany.

Unlike the motor industry, the manufacture of agricultural machinery (with a wide range of cultivation and harvesting machines) became a significant factor. As well as tractor production, the manufacture of accessories was pushed particularly hard.

Bulgarian shipbuilding, which began to develop only in the late 1950s, became an important branch of mechanical engineering. The largest shipyards in the country are in Varna, Ruse, Burgas and Micurin; supertankers up to 300 000 tonnes can be built in Varna. In agreement with the CMEA countries, twenty-five to thirty different ship designs are produced.

Electrical engineering, the manufacture of heavy-current and light-current equipment, electronics, radio and TV, telecommunications, electrical appliances, plant engineering and the manufacture of machinery for the food and beverages industry also accounted for a high proportion of the development and production of the Bulgarian engineering industry. In addition to the quantitative expansion of production, the Bulgarian mechanical engineering sector has placed increasing emphasis on the qualitative improvement of its products.

Bulgaria's chemical industry (apart from fertilizer manufacture) began its expansion later than other branches and, not least for this reason, was for a time one of the fastest-developing branches of industry.

At the beginning of complex industrialization in the late 1940s, chemicals manufacture (based on domestic raw materials) was for the domestic market. The first large-scale plants manufacturing inorganic products and mineral fertilizers appeared in the 1950s. The Dimitrovgrad chemical combine set up in 1951 is Bulgaria's oldest chemical works, apart from the Ruse refinery established in 1934. The second large nitrogenous fertilizer works is in Stara Zagora; the Vraca chemical combine north of Sofia, which produces approximately the same quantity of nitrates as Stara Zagora and Dimitrovgrad, is more recent.

The domestic demand for nitrogenous fertilizers was thus met in full from own production and over 50% of that for phosphate fertilizers. Phytosanitary products are also manufactured for agriculture. However, the limited supply of raw materials means that the country is still dependent on imports from the Soviet Union.

While the emphasis in the initial development phase of the chemical industry was on building up capacity for supplying fertilizer to agriculture and the production of basic raw materials for manufacturing industry, later petrochemical, pharmaceutical and other chemical branches became increasingly important; the combines in Svishtov, Burgas, Yambol and Vidin became major suppliers of synthetic fibre products.

The Devnya chemical complex grew into one of the largest producers of soda ash in the world. This fertilizer factory manufactures over 1.2 million tonnes of fertilizer a year, using nitrogen produced by its own ammonia plant. Newer manufacturing plants were set up with the help of the Soviet Union, Czechoslovakia, the German Democratic Republic and Hungary, but firms in the Federal Republic of Germany also supplied entire plants.

A precondition for the development of an efficient petrochemicals industry was long-term security of supplies of petroleum and natural gas from the Soviet Union. The refineries in Burgas and Pleven and the petroleum works in Ruse are the basis of the Bulgarian petrochemicals industry. The Ruse combine manufactures not only petroleum derivatives (motor and heating fuels) but also plastics, synthetic rubber, polyacrylic fibres and other organic compounds. The petrochemicals industry was built up using long-term credit from the Soviet Union, which supplied 70% of the machinery installed in Burgas, but also with the help of hard-currency countries such as France, Italy and the Federal Republic of Germany, from whom a series of installations had to be obtained for technological reasons. Burgas became the main site of the State industrial association NEFTOCHIM, which also took over the plants in Pleven and Ruse.

As in other socialist countries, light industry in Bulgaria was a poor relation when it came to investment during the years of industrial development. Top of the list were the producer goods industry and agriculture; not until the Fourth Five-Year Plan was there a substantial increase in funds for capital expenditure in light industry. The primary reasons for the drive to build up light industry were a need to absorb the rising purchasing power of the population and efforts to improve the quality of life. Although the government forecast that gross fixed capital formation as a whole would decline by some 20% in 1990, a substantial boost was to be given to investment in light industry and the food and beverages industry, which is in need of modernization.

Development of the food and beverages industry is beset with a range of problems which tend to block any growth in production and efficiency. In terms of equipment, the level of mechanization and automation of processes and the degree of technological progress, the industry is noticeably behind other branches of the economy.

Because of the relatively low sophistication of the equipment used in the food industry, some of which is also suffering from wear, losses of agricultural produce are often high, averaging 20-25%. As much as 30% of fruit, vegetables and potatoes may be lost. Nor can the desired quality of finished products be met. Because of inadequate quality, a restricted range and a lack of suitable filling and packing equipment, Bulgarian processed products have only limited chances of competing on foreign markets.

Modernizing food technology is therefore an objective for the decades to come. Preparations are being made for the introduction of automated production processes to modernize existing installations and to equip new plants in various branches of the industry. Existing measurement and control systems are to be improved and, in parallel with the retooling process, production and labour management are to be reorganized. Optimum use of raw materials and a reduction in manufacturing costs are further targets.

8.1 ENTERPRISES BY TYPE AND BRANCH *)

Enterprise type/branch	1970	1975	1980	1985	1988	1989
Total	2 471	2 407	2 105	2 196	2 429	2 706
State enterprises	1 926	2 010	2 201	2 437		
Including:						
Electrical and thermal energy production	31	34	19	18	19	23
Coalmining	13	11	6	6	7	8
Iron and steel industry 1)	5	4	5	6	9	10
Mechanical engineering and metalworking industry	345	452	425	450	503	576
Electrical and electronics industry	100	128	144	165	204	264
Chemical and rubber industry	82	86	74	94	109	118
Building materials industry	123	151	134	131	135	146
Logging and wood processing industry	293	307	276	269	265	272
Cellulose and paper industry	15	18	18	18	20	20
Glass, porcelain and earthenware industry	17	16	20	20	20	21
Textile industry	123	145	127	133	140	141
Clothing industry	37	41	46	73	86	99
Leather, footwear and tobacco industry	27	27	29	38	47	52
Printing and duplicating industry	31	39	36	36	36	35
Food and beverages industry	335	328	291	308	333	362
Cooperative enterprises	644	345	179	186	228	269

*) Excluding the construction industry. Figures as at end of year.
1) Including ore extraction.

8.2 MANUAL AND NON-MANUAL WORKERS BY TYPE OF ENTERPRISE AND BRANCH *)
(x 1 000)

Enterprise type/branch	1970	1975	1980	1985	1988	1989
Total	1 147.7	1 285.0	1 350.6	1 395.9	1 442.5	1 562.9
State enterprises	1 019.1	1 171.3	1 258.6	1 303.8	1 345.1	.
Including 1):						
Electrical and thermal energy production	17.0	19.5	25.4	30.2	35.4	35.1
Coalmining	47.2	40.4	43.1	46.0	47.8	46.7
Iron and steel industry 2)	29.2	31.0	34.4	35.1	38.1	39.2
Mechanical engineering and metalworking	171.3	212.8	233.4	246.6	249.3	.
Electrical and electronics industry	74.0	107.4	126.1	147.1	168.7	.

For footnotes, see end of table.

8.2 MANUAL AND NON-MANUAL WORKERS BY TYPE OF ENTERPRISE AND BRANCH *)
(x 1 000)

Enterprise type/branch	1970	1975	1980	1985	1988	1989
Chemical and rubber industry	58.2	75.4	84.7	94.6	94.0	.
Building materials industry	48.6	59.2	62.5	64.8	62.4	59.0
Logging and wood processing industry	73.6	75.7	68.1	67.9	66.3	.
Cellulose and paper industry	10.3	14.0	14.3	16.0	16.1	.
Glass. porcelain and earthenware industry	19.6	23.3	26.2	25.9	26.3	.
Textile industry	111.1	128.9	127.5	120.7	119.9	.
Clothing industry	39.1	44.9	47.3	59.1	63.9	.
Leather. footwear and tobacco industry	24.2	26.6	27.6	32.3	33.0	.
Printing and duplicating industry	8.7	9.7	11.4	10.7	9.4	9.7
Food and beverages industry	172.6	175.4	168.6	166.4	169.8	.
Cooperative enterprises	128.6	113.7	92.0	92.1	97.4	.

*) Excluding construction industry; annual average.
1) State and cooperative enterprises.
2) Including ore extraction.

According to the production index for manufacturing industry, published by the Bulgarian Statistical Office, overall production increased by 20% between 1984 and 1989. The mechanical engineering, electrical and electronics branch lay well above the average with 41% growth. The leather, footwear and tobacco industry also showed clearly above-average growth at 54%. The building materials industry, on the other hand, was in stagnation and in 1989 was only 9% above its 1980 level.

The food and beverages industry also showed relatively low growth of 8% between 1984 and 1989, the main reason being the relatively low level of equipment, mechanization and automation and the consequent high processing losses (up to 30% of fruit, vegetables and potatoes).

According to current figures, the nominal overall growth of manufacturing industry fell from 5.2% in 1988 to 2.1% in 1989, and it was acknowledged that in real terms the sector had shrunk. This negative real growth for 1989 was estimated by experts at between 5% and 10%, according to the inflation rate applied. This assessment suggested that earlier values should also have been adjusted by applying an appreciable inflator; it was thus suspected that growth had already been negative.

According to first estimates, negative growth continued in 1990. Production of industrial goods fell by 10% in the first four months of 1990 (measured by the volume of production in lev) compared with the equivalent period in the previous year; adjusted for inflation the fall has been even more serious. The sharpest declines were in the production of non-ferrous metals and steel and in the chemical industry (including the petroleum industry): 15% in each case. The metalworking industry (including mechanical engineering) also showed a much greater-than-average decline at 12%. This sector alone accounts for approximately one-third of the value of the country's entire industrial goods production. Glass, ceramics and leather goods manufacturing and energy production remained at their levels of the previous year (though coal production was sinking). The only growth between January and April 1990 occurred in the textile and clothing industry and the graphical trade.

The country's economic authorities are making efforts to promote development selectively. Special promotion is to be given to light industry and the food and beverages industry, while appreciable restrictions (including job losses) are planned for the mechanical engineering and metal extraction industries. Despite these targets, the food and beverages industry is hardly likely to reach the previous year's level; production in this branch was already around 9% below that of the previous year in the first four months of 1990.

The official reasons given for this falling production were an intensified direction of exports towards Western countries and production restrictions as part of the strategy for improving living conditions at particularly polluted sites. Western experts, on the other hand, see the prime cause in the fact that Bulgarian industry is largely cut off from its suppliers. There is a shortage of raw materials and half-finished goods from the CMEA countries, and these cannot be replaced by substantial supplementary imports from the West because the required currency is not available. Since Bulgarian industry's strong dependence on imports cannot be reduced much in the short term, the struggle for a slice of the available resources is expected to intensify, possibly with serious consequences for whole branches of the economy.

According to government forecasts, gross fixed capital formation will be substantially less in 1990 than in 1989. The completion of projects already under way is to be given priority over new schemes. The Belene nuclear power station project has been shelved by the government for the time being. Investments in the food and beverages industry, light industry and the export-oriented branches are to be specially promoted.

8.3 INDEX OF INDUSTRIAL PRODUCTION
(1980 = 100)

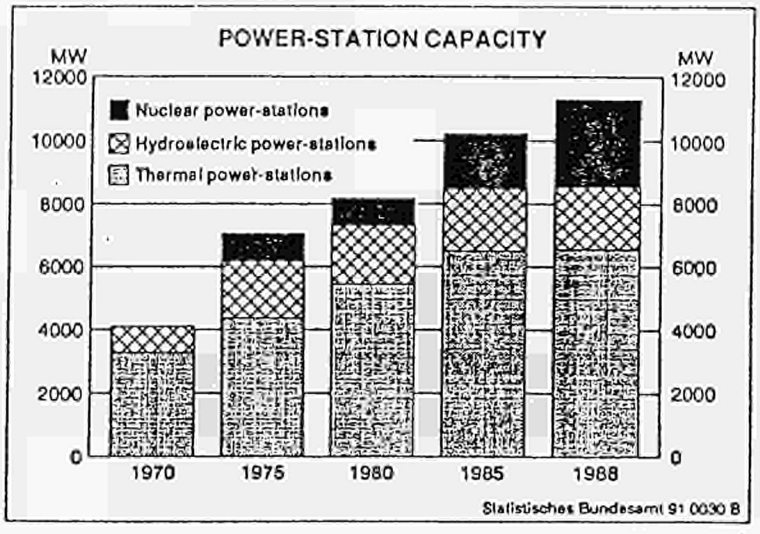
Type of index	1984	1985	1986	1988	1989
Total	120	124	129	141	144
Including :					
Electrical and thermal energy production	132	124	127	140	137
Coalmining	104	104	114	116	115
Iron and steel industry [1]	116	114	119	122	119
Mechanical engineering, electrical engineering and electronics industry	139	154	165	195	196
Mechanical engineering and metalworking industry	127	137	142	151	152
Electrical and electronics industry	162	187	209	278	280
Chemical and rubber industry	135	140	147	163	168
Building materials industry	111	107	113	111	109
Logging and wood processing industry	113	115	116	122	129
Cellulose and paper industry	114	118	118	123	120
Glass, porcelain and earthenware industry	108	110	110	116	120
Textile and knitwear industry	116	117	120	131	138
Clothing industry	115	120	127	134	136
Leather, footwear and tobacco industry	124	134	139	160	191
Printing and duplicating industry	110	114	114	118	132
Food and beverages industry	111	111	113	115	120

1) Including ore extraction.

One prerequisite for Bulgaria's industrialization was development of the country's energy industry: immediately after the Second World War only 13% of all localities had mains electricity. Bulgaria's own energy sources are scarce, consisting chiefly of low-quality, highly sulphurous lignite. Bulgaria has scarcely any oil or natural gas of its own and is dependent on costly imports in this sector.

Since its potential for hydroelectric power had been largely exhausted by the mid-1980s, Bulgaria continued in the late 1980s to bank chiefly on the exploitation of its own coal and the expansion of nuclear energy, without succeeding in reducing its strong dependence on oil and gas imports from the Soviet Union in particular. As part of a more thrifty investment policy, the large nuclear power station project at Belene was shelved for the time being by the Bulgarian Government. Other major reasons for this were technical problems and the increasing controversy over safety in nuclear power plants following the Chernobyl disaster.

Power-station capacity as a whole rose by 175% to 11 309 MW between 1970 and 1988, before falling by 2% to 11 103 MW in 1989. Thermal power-station capacity rose by 99% to 6 574 MW up to 1988, while hydroelectric capacity rose by 142% to 1 975 MW. Nuclear power-station capacity was approximately 880 MW in 1975, rising by 214% to approximately 2 800 MW in 1988. Of total installed capacity in 1988, therefore, 58% was in thermal power-stations, 18% in hydroelectric power-stations and 24% in nuclear power-plants.



8.4 INSTALLED CAPACITY OF POWER-STATIONS
(MW)

Type of power-station	1970	1975	1980	1985	1988	1989
Total	4 117	7 060	8 197	10 243	11 309	11 103
Thermal power-stations [1]	3 301	4 387	5 449	6 508	6 574	.
Hydroelectric power-stations	816	1 793	1 868	1 975	1 975	1 975
Nuclear power-stations	-	880	880	1 760	2 760	.

1) Including companies' own power-stations.

Electricity production rose by 131% to 45 000 million kWh between 1970 and 1988. In 1989 production dropped back to 44 000 million kWh, of which 61% was produced in thermal stations, 6% in hydroelectric stations and 33% in nuclear power-plants.

According to Bulgarian press reports in early 1990, the country's energy system has operated for some time without any appreciable reserves; if serious malfunctions occur, the energy supply to certain districts or destinations has to be cut. The main reasons given for this crisis are the high energy consumption of the Bulgarian economy and the failure to complete the power-station maintenance and construction programme. The potential capacity of the Bulgarian energy system is quoted as 11 700 MW in 1990, while in practice it is only 8 900 MW. It has been possible to exploit the potential for domestic energy-saving, since electric light bulbs, refrigerators, washing machines, domestic heaters and other electrical appliances are not designed to save energy.

The supply crisis worsened during 1990; it was reported in September that mains electricity had to be cut off for an hour four times a day in Sofia, affecting both households and industry. Even longer power cuts were said to be necessary in rural areas.

8.5 ELECTRICITY PRODUCTION *)
(1 000 000 kWh)

Type of power-station	1970	1975	1980	1985	1988	1989	1990 [1]
Total	19 513	25 235	34 831	41 629	45 036	44 324	22 588
Thermal power-stations [1]	17 361	20 229	24 953	26 262	26 432	27 071	.
Hydroelectric power-stations	2 152	2 452	3 713	2 236	2 574	2 690	.
Nuclear power-stations	-	2 554	6 165	13 131	16 030	14 563	.

*) Total production, including own consumption by the power-station and transformation losses.
1) First six months.

Coalmining is of considerable importance to the Bulgarian economy. Many new brown coal, lignite, hard coal and anthracite pits have been opened up in the past 30 years. The Marica-Istok lignite field, in which approximately half of Bulgaria's total production is mined, is of prime importance to the country's fuel balance. Total production in 1988 was approximately 29 million tonnes, a drop of 7% compared with the previous year (1987: 31.4 Mio t).

Further important mining products are iron ore or iron concentrate and manganese ore, production of which nevertheless, with some fluctuations, declined from 1983 to 1988.

8.6 MINING AND QUARRYING
(x 1 000 t)

Product	1983	1984	1985	1986	1988	1989
Hard coal [1]	411	373	381	368	380	.
Brown coal [1]	6 526	6 832	6 736	6 443	6 128	5 848
Lignite [1]	26 805	26 617	25 272	29 896	29 168	.
Anthracite [1]	87	91	91	85	72	.
Iron ore (Fe-content)	554	622	607	661	528	482
Iron concentrate (gross output)	824	913	917	986	629	.
Manganese ore (Mn-content)	13.1	13.0	11.3	11.2	9.9	.
Salt	87	89	89	91	103	.

1) Unwashed

The structure of manufacturing industry is highly diversified. Group A production (producer goods manufacture) rose during the 1970s more sharply than Group B production (consumer goods), which was more strongly promoted in the 1980s. Experts forecast that large sections of the production spectrum will have difficulty in competing with foreign products under the changed conditions of the 1990s.

8.7 PRODUCTION OF SELECTED MANUFACTURED GOODS

Product	Unit	1984	1985	1986	1988	1989	1990 [1]
Coke, 6% moisture	1 000 t	1 186	1 087	1 156	1 457	1 561	.
Cement	Mio. t	5.7	5.3	5.7	5.5	5.0	2.4
Bricks	Mio.	1 376	1 122	1 145	1 049	1 044	.
Pig iron and ferro-alloys	1 000 t	1 621	1 754	1 651	1 483	1 523	651
Pig iron for steel production	1 000 t	1 578	1 702	1 597	1 437	.	.
Steel	1 000 t	2 878	2 944	2 965	2 875	2 899	1 221
Rolled products	1 000 t	3 354	3 326	3 347	3 320	3 037	1 146

8.7 PRODUCTION OF SELECTED MANUFACTURED GOODS

Product	Unit	1984	1985	1986	1988	1989	1990 [1]
Machine tools	number	15 221	17 191	19 650	17 732	16 515	7 193[a]
Lathes	number	5 564	5 477	5 912	4 953	5 452	.
Tractors	number	5 784	5 350	5 094	5 309	4 956	1 727
Railway carriages	number	2 920	2 904	2 647	1 933	2 204	1 031
Electric trucks	1 000	45.9	47.0	47.7	47.4	47.5	23.2
Motor trucks	1 000	34.5	38.4	37.1	35.1	37.0	10.4
Electric overhead cranes	1 000	131.9	135.0	135.9	136.7	138.2	60.5
Heavy-current transformers	number	9 522	9 357	9 117	13 928	7 891	.
Electric engines	1 000	1 411	1 401	1 465	1 891	1 919	.
Typewriters	1 000	102.1	115.3	110.3	166.0	.	.
Passenger cars	1 000	15.5	15.0	20.0	14.7	14.2	7.6
HGVs	number	6 456	6 860	6 748	6 811	7 849	3 839
Buses and coaches	number	2 501	2 650	2 638	2 400	2 141	.
Bicycles	1 000	94.4	89.7	85.5	92.5	.	.
Motor-driven pumps	1 000	145.2	116.7	127.8	105.6	.	.
Domestic refrigerators	1 000	135	122	118	111	102	50
Domestic washing machines	1 000	141	156	159	169	177	63
Radio sets	1 000	40.1	41.5	38.0	30.5	52.1	20.4
Television sets	1 000	112.6	110.6	153.7	181.2	185.4	116.7[b]
Colour TV sets	1 000	30.2	44.2	94.5	124.3	155.3	.
Telephones	1 000	1 238	1 150	1 230	1 230	1 192	.
Asbestos-cement pipes	1 000 m	1 939	2 367	2 411	1 252	.	.
Sulphuric acid (100% H_2SO_4)	1 000 t	908	810	807	840	770	305
Soda ash (98% Na_2CO_3)	1 000 t	1 212	1 037	1 054	1 100	1 153	593
Caustic soda	1 000 t	170	157	144	134	118	54
Synthetic ammonia (100% N)	1 000 t	1 138	1 138	1 091	1 342	1 326	681
Commercial fertilizer	1 000 t						
pure nutrient		690	641	580	767	724	327
Nitrogenous	1 000 t						
pure nutrient		479	469	448	588	555	293
Phosphatic	1 000 t						
pure nutrient		211	172	132	179	169	35
Urea (100% N)	1 000 t	357	369	370	368	371	.
Window glass (2 mm)	Mio. m^2	20.6	23.5	19.5	18.4	16.1	7.5
Plywood	1 000 m^3	52.8	50.7	47.5	46.0	50.6	.
Sawn and barked timber	1 000 m^3	3 061	3 041	2 718	2 793	2 671	.
Veneering wood	Mio. m^2	32.6	31.1	31.7	28.9	27.6	.

For footnotes, see end of table.

8.7 PRODUCTION OF SELECTED MANUFACTURED GOODS

Product	Unit	1984	1985	1986	1988	1989	1990[1]
Paper	1 000 t	362	370	337	396	379	.
Cellulose	1 000 t	195	174	162	191	173	54
Tyres [2]	1 000	1 666	1 659	1 668	1 693	1 884	.
Footwear (excluding slippers)	Mio. p	21.6	23.9	24.3	26.4	.	.
Cotton fabric	Mio. m	368	351	349	361	357	.
Wool fabric	Mio. m	41.5	41.9	47.1	34.4	36.8	.
Spun hemp and linen	1 000 t	9.8	9.5	8.5	8.2	7.6	.
Silk fabric	Mio. m	37.2	36.4	37.2	32.0	42.4	.
Preserved fruit (excluding pulp)	1 000 t	282	275	311	255	269	78
Preserved vegetables	1 000 t	432	379	324	346	287	54
Confectionery	1 000 t	113	114	114	119	116	.
Butter	1 000 t	24.7	24.6	24.4	23.6	21.9	.
Brine cheese	1 000 t	107.4	102.0	110.0	113.9	112.8	.
Hard cheese (Kashkaval)	1 000 t	28.0	27.5	31.3	33.3	34.5	.
Edible vegetable oil	1 000 t	160	162	152	157	159	.
Wine	1 000 hl	3 704	3 043	3 259	3 150	2 314	.
Tobacco	1 000 t	117	137	135	127	.	.

1) First six months.
2) Excluding bicycle tyres.
a) Excluding lathes.
b) Excluding colour TV sets.

The construction industry is important in the Bulgarian economy. As in almost all East European countries, the lack of living space in Bulgaria is a major problem, particularly in the conurbations.

The construction sector experienced constant growth in the 1970s, as can be seen from the number of new dwellings completed each year, which rose by 63% to 74 000 between 1970 and 1980. In the 1980s, however, there was a fall-off of around 46% between 1980 and 1989 to some 40 000 units per year. The housing stock, which had increased by 24% between 1970 and 1980, nevertheless rose by a further 18% in the nine-year period 1980 to 1989.

The average useful floor area of dwelling units rose between 1970 and 1989 from 50 m^2 to 59 m^2. 63% of the total housing stock was in towns and cities in 1989 a noticeable increase of 47% over 1970, reflecting the continuing urbanisation process.

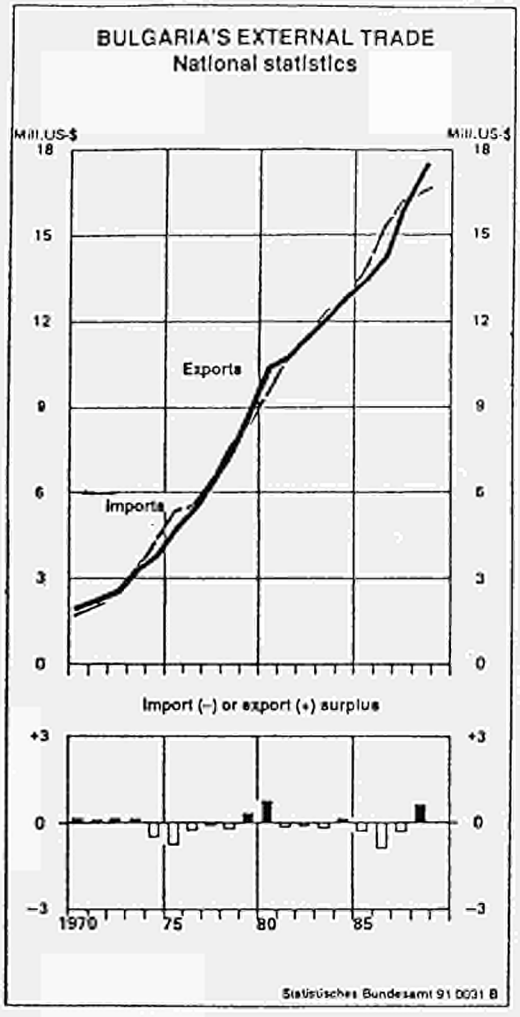
8.8 HOUSING STOCK

Item	Unit	1970	1975	1980	1985	1988	1989
Dwellings	1 000	2 283	2 510	2 839	3 152	3 326	3 363
in towns and cities	1 000	1 073	1 350	1 657	1 906	2 073	2 103
Useful floor area	Mio. m^2	115	137	157	183	195	197
in towns and cities	Mio. m^2	52	72	90	106	117	119
Habitable area	Mio. m^2	96	116	132	150	159	161
in towns and cities	Mio. m^2	44	60	74	86	95	96

8.9 DWELLINGS COMPLETED

Item	Unit	1970	1975	1980	1985	1988	1989
Dwellings	Number	45 656	57 151	74 308	64 870	62 785	40 154
in towns and cities	Number	35 857	51 210	66 658	56 527	53 125	33 565
Useful floor area	1 000 m^2	2 909	3 585	4 387	4 219	4 283	28 430
in towns and cities	1 000 m^2	2 273	3 188	3 875	3 657	3 587	2 371
Habitable area	1 000 m^2	2 243	2 741	3 328	3 191	3 211	2 135
in towns and cities	1 000 m^2	1 751	2 434	2 932	2 767	2 690	1 778

Information on Bulgaria's foreign trade can be obtained from the Bulgarian (national) and German foreign trade statistics. The national statistics give details of Bulgaria's trade relations with partners throughout the world. The German statistics offer data on the bilateral trade relations between the Federal Republic of Germany and Bulgaria. Bulgarian and German statistics on trade between the two countries are not necessarily identical: discrepancies are due to the use of different concepts and methodologies. Bulgarian foreign trade data refer to general trade in the calendar year concerned (imports for domestic consumption and imports for warehousing; exports of domestic products including all re-exports).



The survey area comprises the national territory. Country data for imports refer to the selling country and for exports to the purchasing country. Value data represent the frontier-crossing value of the goods (fob values for imports and exports).

The German foreign trade statistics show Germany's cross-border trade in goods (special trade) with Bulgaria as the country of origin or destination. The values are frontier-crossing values, i.e. the values free at the frontier of the statistical territory, in the case of imports without the German dues payable on entry. Goods are broken down according to the Standard International Trade Classification (SITC).

Until the 1980s Bulgaria's foreign trade, like its whole economy, was under State monopoly. This was implemented by the State foreign trade offices for each branch of the economy, which were responsible either directly to the Ministry for Foreign Trade, or to the ministry responsible for the field or a State trade association. Foreign business partners were allowed contacts with Bulgarian customers or suppliers only with prior approval from the foreign trade office or ministry responsible.

For some years now Bulgaria has been moving towards decentralization of the economy, combined with extended use of market mechanisms or competition. As part of this process, external economic relations were declared towards the end of the 1980s to be the province of the manufacturers concerned, which meant de facto abolition of the State monopoly on foreign trade.

Firms which are legal persons were thus granted the right to establish and organize their own foreign trade relations without official restrictions, purely in their own economic interests. They thus assumed ultimate responsibility for the legal and economic consequences of their foreign trade activities. The role of the State was restricted to the formulation of foreign trade policy, international relations, the use of economic instruments to regulate foreign trade activities and the provision of support for firms where necessary. Planned measures included the introduction of export taxes and a restructuring of the customs system to increase its effectiveness as an instrument for regulating imports.

Between 1983 and 1988 Bulgaria's foreign trade turnover increased by a total of 38% to US $ 33 800 million. While the volume of imports grew by only 35% to US $ 16 600 million, exports showed a growth of 42% to US $ 17 200 million. With the exception of 1984 and 1988, each year of this period showed import surpluses from the Bulgarian viewpoint, varying between US $ 200 million (1983) and US $ 1 100 million (1986). By contrast, 1984 and 1988 showed export surpluses of US $ 100 and 600 million, respectively.

In the opinion of Western experts, Bulgaria's foreign trade has been severely damaged by the recent developments in Eastern Europe. This is borne out by the available data for 1989 on trends in foreign trade in national currency. These difficulties were caused primarily by the break-up of the CMEA with its system of accounting in transfer roubles.

Bulgaria's main East European partners are in future prepared to trade only in hard currency. Moreover, experts consider that only a relatively small proportion of Bulgarian exports are of world market quality, whereas exports from the Soviet Union, for example (chiefly raw materials) are mainly classified as saleable for hard currency.

9.1 TRENDS IN FOREIGN TRADE

Imports/exports	1983	1984	1985	1986	1987	1988	1989
				US $ 1 000 000			
Imports	12 283	12 714	13 656	15 249	16 211	16 582	.
Exports	12 130	12 850	13 348	14 192	15 905	17 223	.
Import (-) or export (+) surplus	- 153	+ 136	- 308	- 1 057	- 306	+ 640	.
				LV 1 000 000			
Imports	11 966	12 842	14 067	14 353	14 067	13 928	12 552
Exports	11 818	12 987	13 739	13 351	13 802	14 417	13 506
Import (-) or export (+) surplus	- 148	+ 145	- 327	- 1 003	- 265	+ 489	+ 955

The foreign trade volume indices, calculated in national currency, show a 44% increase in imports between 1980 and 1988 compared with an increase of 42% in exports; 1989 figures showed falls in imports and exports of 6% and 3%, respectively.

9.2 FOREIGN TRADE VOLUME INDICES *)
(1980 = 100)

Year	Imports	Exports
1980	100	100
1982	113	121
1983	119	126
1984	121	132
1985	134	142
1986	139	136
1987	137	139
1988	144	142
1989	135	137

*) Calculated in national currency.

The main imported goods in value terms in 1988 included gas and electricity which, at an import value of US $ 1 460 million, accounted for 8.8% of total imports. Other important goods or groups of goods were iron and steel (1988: 6.2% of import value), power-generating and electrical equipment (3.5%) and tractors and agricultural machinery (3.2%).

Imports of agricultural produce traditionally served to increase the range available on the domestic market and chiefly comprised tropical and subtropical fruit, coffee, cotton, certain meat products and small quantities of feed grain. Since the mid-1980s imports of grain for both animal feed and human consumption have considerably increased, with the average annual quantity rising from 0.69 million tonnes in 1981-85 to 1.2 million tonnes in 1986-88. Grain imports were particularly high in the years following poor harvests.

9.3 MAIN IMPORTS OR IMPORT CATEGORIES
(US $ 1 000 000)

Goods or categories of goods	1983	1984	1985	1986	1987	1988
Timber, cellulose and paper products	235.2	234.0	235.5	246.2	272.9	270.8
Textile fibres and semi-finished textile products	184.8	170.7	196.2	192.2	211.2	297.9
Solid fuels	496.0	490.9	537.7	519.9	513.5	449.2
Gas and electricity	1 007.0	1 140.1	1 271.9	1 281.0	1 344.5	1 460.8
Chemicals	266.1	309.2	290.5	316.5	405.2	479.1
Medical and pharmaceutical products	134.1	140.0	155.8	193.6	236.4	258.4
Fertilizers and pesticides	164.5	175.4	166.0	134.8	142.2	134.6
Iron and steel	963.1	936.9	893.8	968.1	1 032.6	1 025.5
Tractors and agricultural machinery	295.7	284.8	297.9	355.7	436.0	529.6
Metalworking machinery	246.8	217.9	216.6	310.3	383.2	281.7
Mining, foundry and oil-drilling equipment	227.4	251.4	246.5	334.2	503.0	349.6
Equipment for food processing and light industry	159.7	156.4	191.0	252.0	275.4	362.2
Power-generating and electrical equipment	355.4	563.1	613.1	732.0	624.6	574.0

In 1988, 10.6% of Bulgaria's export value consisted of equipment for the chemical, timber and cellulose and construction industries. Other important export goods or groups of goods were mechanical handling equipment (10.0% of export value), tobacco products (4.7%) and power-generating and electrical equipment (4.4%).

Exports of agricultural produce in the form of raw materials and finished goods still accounted for a relatively high but declining proportion of currency receipts in the 1980s. The proportion of total exports accounted for by the main products of agricultural origin -tobacco products, fruit and vegetables, alcoholic beverages, meat preparations, dairy produce, eggs and animal fats- lay between 15.8% in 1983 and 11.4% in 1988. In the second half of 1989, however, a ban on food exports was enacted to improve supplies to the population, and this ban was confirmed in September 1990. Meat and dairy exports were thus prohibited until March 1991. Exports of feed grain, cereals, soya, potatoes, onions and vegetable oils were suspended at least until after the next harvest.

9.4 MAIN EXPORTS OR EXPORT CATEGORIES
(US $ 1 000 000)

Goods or categories of goods	1983	1984	1985	1986	1987	1988
Meat preparations, dairy products, eggs and animal fat	251.6	269.3	237.7	264.7	264.5	301.3
Fruit and vegetables	509.1	495.7	455.4	513.3	492.1	500.8
Alcoholic beverages	464.0	454.5	441.8	325.6	340.8	362.0
Tobacco products	697.4	672.4	671.4	713.1	776.2	806.8
Chemicals	329.7	383.3	335.1	296.3	286.7	409.9
Medical and pharmaceutical products	326.9	357.1	328.6	499.6	499.0	572.6
Iron and steel	380.1	417.6	388.1	375.9	424.0	556.4
Tractors and agricultural machinery	266.3	245.0	260.8	290.2	310.8	293.4
Mechanical handling equipment	1 151.8	1 239.4	1 331.2	1 447.1	1 670.7	1 723.7
Metalworking machinery	168.4	201.5	209.5	259.6	372.0	435.9
Equipment for the chemical, timber and cellulose processing and construction industries	1 914.8	2 518.7	1 038.0	1 220.9	1 447.0	1 828.0
Power-generating and electrical equipment	419.6	388.4	547.7	659.3	760.4	752.9
Garments and house-hold linen	284.9	301.1	296.1	333.0	350.7	373.3

For decades the Bulgarian economy was closely integrated into the CMEA system as far as foreign trade was concerned. Despite all efforts to increase exchanges with Western industrialized countries, in 1988 only 7.2% of Bulgaria's foreign trade volume consisted of trade with Member States of the European Community, compared with 58.4% of total foreign trade turnover accounted for by trade with the Soviet Union alone.

Imports from the Soviet Union in 1988 accounted for 53.9% of the total import value of US $ 16 600 million; imports from the Community accounted for 9.8%. Within the Community, the Federal Republic of Germany was the main selling country with 51% of the Community share. Other important selling countries for Bulgarian imports were the German Democratic Republic and East Berlin with 5.9% of the total import value, Czechoslovakia (5.4%) and Poland (5.0%).

9.5 IMPORTS FROM MAIN SELLING COUNTRIES
(US $ 1 000 000)

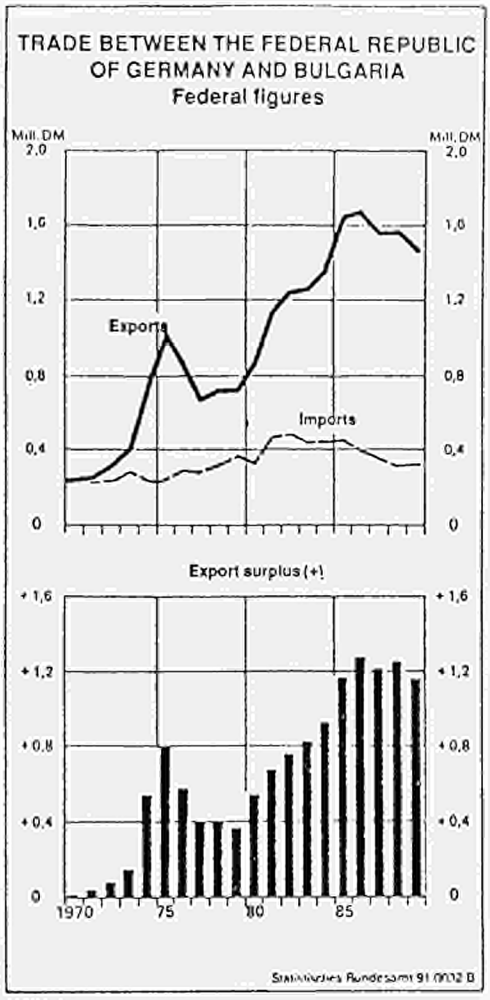
Selling country	1983	1984	1985	1986	1987	1988
European Community	1 012.9	1 035.2	1 289.2	1 487.9	1 600.7	1 617.9
Federal Republic of Germany	477.9	467.7	531.9	743.2	801.4	825.0
United Kingdom	108.4	105.8	173.8	185.8	186.2	161.7
Belgium	66.8	65.5	63.6	55.9	121.4	121.1
Soviet Union	7 135.3	7 504.5	7 667.7	8 603.2	9 284.0	8 943.4
German Democratic Republic and East Berlin	699.0	706.4	691.2	792.7	926.8	981.5
Czechoslovakia	504.8	500.7	566.5	693.5	803.4	901.9
Poland	504.8	500.7	566.5	693.5	803.4	901.9
Romania	531.3	537.1	621.5	630.7	772.0	829.8
Hungary	251.5	221.4	253.5	290.6	353.2	346.3
Cuba	282.8	247.7	255.1	292.7	328.8	318.3
Austria	193.9	228.7	227.9	206.3	290.8	206.8
Switzerland	202.7	180.6	199.8	225.8	251.7	263.4
Japan	182.6	260.8	184.0	214.1	222.1	230.7
Italy	109.6	73.5	84.1	111.2	167.2	188.0
Yugoslavia	109.7	123.9	158.2	170.0	189.7	187.5
United States	125.7	135.4	160.8	134.9	121.0	163.9
Brazil	65.2	60.8	148.0	139.1	105.8	148.5
	43.5	130.7	39.0	23.5	140.0	120.5

By far the largest purchaser of Bulgarian products was the Soviet Union, which took 62% of Bulgaria's entire export value in 1988. Other main purchasing countries were the German Democratic Republic and East Berlin with 5.2% and Czechoslovakia and Poland with 4.6% and 4.1%, respectively. Total purchases by the European Community amounted to only 4.6% of the export value.The main purchasing countries within the Community were the Federal Republic of Germany and Greece with 21.5% and 20.4% of the Community share, respectively.

East European countries are currently also the main importers of agricultural products in the form of raw materials and finished goods. Once again the main trading partner was the USSR, followed by the GDR, the CSSR and Poland. After decades of one-sided agricultural trade with East European countries with low quality requirements, Bulgarian agricultural produce now has little chance on the market. When Bulgaria attempted to export agricultural produce for convertible currencies, its lack of competitiveness became only too apparent.

9.6 EXPORTS TO MAIN PURCHASING COUNTRIES
(US $ 1 000 000)

Purchasing country	1983	1984	1985	1986	1987	1988
European Community	845.3	803.5	850.0	696.4	786.6	799.6
Federal Republic of Germany	204.9	225.9	195.3	158.3	187.8	172.1
Greece	221.8	128.7	196.4	136.0	161.7	163.5
Italy	101.3	66.1	66.3	116.7	95.1	124.2
Soviet Union	6 792.8	7 153.9	7 554.6	8 668.4	9 722.8	10 806.7
German Democratic Republic and East Berlin	662.6	669.6	680.9	788.8	872.2	899.2
Czechoslovakia	483.0	520.3	608.7	648.2	776.0	798.6
Poland	388.0	455.5	462.7	574.9	689.2	711.5
Hungary	278.0	246.8	257.1	280.2	292.7	354.2
Romania	261.8	240.9	284.4	338.5	331.3	353.7
Cuba	222.9	215.9	225.4	250.0	229.4	310.2
Iraq	310.0	353.6	409.3	323.1	455.0	475.4
Libya	486.2	595.2	577.9	400.0	540.6	393.7
Yugoslavia	85.7	107.6	114.7	120.3	105.4	144.6
Switzerland	256.9	192.7	137.3	139.6	151.9	136.3
Syria	23.9	83.4	116.7	113.1	94.5	121.5



The Federal Republic of Germany's turnover on trade with Bulgaria rose by 16% between 1984 and 1986 from DM 1790 million to DM 2070 million. The subsequent years then showed a steady decline: the 1989 trade volume of DM 1800 million was only 0.7% higher than in 1984. In the same period, 1984-1989, the Federal Republic recorded substantial export surpluses varying between DM 916 million (1984) and DM 1 270 million (1986).

As in previous years, the Federal Republic was Bulgaria's main trading partner in the European Community in 1988; 51% of Bulgarian imports from the Community originated in Germany, while 22% of Bulgarian exports to the Community were delivered to the Federal Republic.

According to German foreign trade statistics, Bulgaria was 51st on the list of Germany's partners in 1989 in terms of total turnover; it was 68th in terms of imports and 42nd in terms of exports.

9.7 TRENDS IN TRADE BETWEEN GERMANY AND BULGARIA

Imports/exports	1984	1985	1986	1987	1988	1989
			US $ 1 000 000			
Imports (Bulgaria as country of origin)	151	162	185	198	183	175
Exports (Bulgaria as country of destination)	470	568	778	876	891	784
Export surplus	320	405	593	678	709	609
			DM 1 000 000			
Imports (Bulgaria as country of origin)	435	464	399	353	322	327
Exports (Bulgaria as country of destination)	1 351	1 641	1 669	1 563	1 565	1 471
Export surplus	916	1 177	1 270	1 210	1 243	1 144

In 1989, garments and clothing accessories formed the main import category in trade between Germany and Bulgaria, accounting for 19.0% of total imports. Iron and steel accounted for 9.9% and fruit and vegetables for 6.5%. Textile yarn, fabrics and other made-up articles (4.5%) and milk and dairy products (3.5%) were other major import groups.

9.8 MAIN GOODS OR GROUPS OF GOODS IMPORTED FROM BULGARIA ACCORDING TO SITC HEADINGS

	1987		1988		1989	
Imports goods/ categories	1 000 US $	1 000 DM	1 000 US $	1 000 DM	1 000 US $	1 000 DM
Dairy products, birds' eggs	7 891	14 105	6 813	11 998	6 062	11 395
Vegetables and fruit	10 265	18 495	10 196	18 035	11 364	21 326
Tobacco and tobacco manufactures	8 688	15 641	3 800	6 682	5 625	10 580
Metalliferous ores and metal scrap	5 684	10 022	8 751	15 270	5 653	10 344
Crude animal and vegetable materials, n.e.s. [1]	5 002	8 801	4 810	8 451	5 828	10 839
Textile yarn, fabrics, made-up articles n.e.s and related products	5 847	10 449	7 259	12 906	7 795	14 571
Iron and steel	17 006	30 232	14 683	25 229	17 383	32 439
Articles of apparel and clothing accessories	40 241	72 305	31 782	55 800	33 088	62 108

[1] n.e.s. : not elsewhere specified.

As shown by the table below, various types of machinery, apparatus, producer goods for manufacturing plants, etc. are the main goods exported to Bulgaria from Germany. In 1989, specialized for particular industries and general industrial machinery and equipment alone accounted, respectively, for 13.3% and 9.9% of export value. Iron and steel and road vehicles were other important categories, with 6.6% and 4.1%, respectively, of export volume.

9.9 MAIN GOODS OR GROUPS OF GOODS EXPORTED TO BULGARIA ACCORDING TO SITC HEADINGS

Exports goods/ categories	1987		1988		1989	
	1 000 US $	1 000 DM	1 000 US $	1 000 DM	1 000 US $	1 000 DM
Organic chemicals	27 090	47 982	24 235	42 203	21 350	39 984
Dyeing, tanning and colouring materials	27 812	49 441	22 807	39 810	18 287	34 368
Plastics in primary forms [1]	.	.	40 850	71 305	27 150	50 915
Chemical materials and products, n.e.s. [2]	27 856	49 784	33 955	59 369	24 696	46 223
Textile yarn, fabrics, made-up articles n.e.s and related articles	33 021	58 787	31 668	55 512	31 148	58 361
Non-metallic mineral manufactures	19 203	34 457	14 684	25 813	14 567	27 386
Iron and steel	55 955	99 513	60 009	104 947	52 274	97 803
Non-ferrous metals	25 982	46 014	25 599	44 202	17 246	32 382
Manufactures of metals n.e.s.	18 883	33 802	19 306	34 077	22 373	41 834
Goods for complete manufacturing plants, Divisions 84, 85, 87	16 415	29 817	19 240	33 179	28 485	53 419
Machinery specialized for particular industries	99 761	179 838	97 255	171 310	104 654	195 140
Metalworking machinery	95 139	168 370	72 098	126 670	46 986	87 939
General industrial machinery and equipment n.e.s.	100 903	180 288	90 556	160 468	77 547	145 831
Electrical machines, apparatus and appliances n.e.s.	45 535	81 279	45 967	81 229	43 439	81 418
Road vehicles (including air-cushion vehicles)	24 040	43 031	50 393	88 296	31 616	59 750
Professional, scientific and controlling instruments and apparatus n.e.s.	33 933	60 192	30 530	53 971	30 413	57 218

1) Classification changed in 1988; 1987 figures not applicable.
2) n.e.s. : not elsewhere specified.

10 TRANSPORT AND COMMUNICATIONS

Most of Bulgaria's railway network dates from before the Second World War. Total track length in 1939 was 4 426 km; by 1989 it had been extended to 6 597 km. International trains using the network include the Polonia Express, the Pannonia Express, the Istanbul Express, the Direct Orient Express and the Tauern Orient Express. Newer international trains also provide connections with Belgrade, Prague, Budapest, Warsaw and Moscow.

94% of track is standard gauge (1 435 mm) and the rest narrow gauge (760 mm). In 1970 only 21% of standard-gauge track was electrified; after this date electrification progressed steadily. Following the electrification of Bulgaria's largest railway circuit, which links Sofia with Gorna Oryahovica, Varna, Burgas and Plovdiv, the proportion had risen to 56% by the mid-1980s and to 64% in 1989.

A series of serious accidents in 1988 drew public attention to major infrastructure problems in the transport sector. The causes include inadequate investment and outmoded and overworked equipment. Since public transport had operated for more than a decade with unchanged fares, constant State subsidies were needed to cover running costs, so that insufficient funds were available for modernizing the infrastructure.

Bulgaria's problems with railway structure are illustrated by the fact that in 1988 the country had the second lowest network density in Europe but the daily mileage of rolling stock was 50% higher than in the Federal Republic of Germany and the volume of goods transported per network kilometre was the third highest in Europe.

Bulgarian State Railways are planning to extend and electrify major sections of the transit railway network in the 1990s. As a first step, the Sofia-Nis route is to be improved in collaboration with Yugoslavia to allow speeds of at least 160 km/h, for which a second track will be needed in addition to electrification. The route modernization plan also includes connections between Sofia and the Greek and Turkish borders.

10.1 RAILWAY ROUTE AND TRACK LENGTH *)
(km)

Item	1970	1975	1980	1985	1988	1989
Track length	6 040	6 255	6 419	6 468	6 507	6 597
Route length	4 196	4 290	4 267	4 297	4 300	4 300
Standard gauge	3 951	4 045	4 022	4 052	4 055	4 055
Electrified	811	1 133	1581	2 270	2 588	2 610

*) Bulgarian State Railways (BDZ)

Trends in railway traffic differed between 1984 and 1989 according to the category. While the number of passenger kilometres remained fairly constant in the medium term, the number of tonne kilometres declined by 6%.

10.2 RAILWAY TRAFFIC *)

Traffic	Unit	1984	1985	1987	1988	1989	1990 1)
Passengers 2)	Mio.	102.3	105.4	109.7	107.8	99.9	.
Freight	mill. t	83.4	82.9	82.5	79.3	77.3	33.8
Passenger kilometres 2)	1 000 Mio.	7.5	7.8	8.1	8.1	7.6	.
Tonne-kilometres	1 000 Mio.	18.1	18.2	17.8	17.6	17.0	7.6

*) Bulgarian State Railways (BDZ)

1) January to June.

2) Excluding free travel.

Bulgaria's road transport sector was amalgamated into State transport enterprises and cooperatives. Individuals with motor vehicles were organized into the Social Motor Transport Association. The number of manual and non-manual workers in this sector has risen sharply since 1970, indicating a rapid expansion of road transport capacities.

Increased roadbuilding began in about 1947, when the entire country had only some 1 000 km of made-up roads. Many regions such as the Rhodope mountains and the Dobrudzha, formerly barely accessible by any mode of transport, now have relatively good connections. The total length of paved roads steadily increased: of the 37 000 km or so in 1988, 8% were first-class roads roughly comparable to the Bundesstrassen (trunk roads) in the Federal Republic of Germany ; 258 km consisted of motorway. Because of the country's geography, priority is being given to improving east-west connections.

Work on the 1 000 km Bulgarian orbital motorway began in 1972 and is to be completed by the year 2000, connecting Sofia with Varna and Burgas. Some stretches of this motorway, part of which six-lane, are already in use in the Sofia area (e.g. the Sofia-Plovdiv section). A motorway is also to be built between Pernik and Sofia. The long-term roadbuilding programme gives priority to improved connections between border regions and conurbations.

10.3 ROADS BY TYPE *)
(km)

Type of road	1970	1975	1980	1985	1987	1988
Total	36 143	36 060	36 447	36 459	36 908	36 897
paved roads	30 336	31 434	32 417	33 383	33 535	33 686
Motorways	.	.	108	221	242	258
1st-class roads	2 384	2 389	2 352	2 915	2 938	2 934
2nd-class roads	4 297	4 294	4 360	3 778	3 812	3 799
3rd-class roads	5 934	6 068	6 319	6 129	6 277	6 284
4th-class roads	23 528	23 309	23 308	23 416	23 639	23 622

*) Figures as at end of year.

Numbers of private cars increased considerably during the 1980s with rising new vehicle registrations, and by the end of 1988 there were 51% more cars than in 1980. The average number of cars per 1 000 inhabitants thus rose from 88 to 129.

10.4 NUMBERS OF MOTOR VEHICLES AND CAR OWNERSHIP *)

Type of vehicle/ car ownership	Unit	1980	1983	1985	1986	1987	1988
Private cars	1 000	781.8	937.6	1 030.1	1 083.1	1 138.4	1 184.2
cars per 1 000 inhabitants	number	88.1	104.8	115.1	120.8	126.9	128.7
Buses and coaches	1 000	24.5	27.5	.	.	25.6	25.6
Motorcycles and mopeds	1 000	427.6	422.8	469.0	406.0	478.2	490.2

*) Figures as at end of year.

10.5 NEW VEHICLE REGISTRATIONS

Type of vehicle	1980	1982	1983	1985	1987	1988
Private cars	18 820	15 444	9 991	48 031	61 711	57 206
Buses and coaches	335	1 008	517	.	.	.
Motorcycles and mopeds	819	1 113	1 662	16 013	17 477	8 611

According to 1988 data on both numbers of persons transported and passenger kilometres, passenger transport is predominantly by road. Railway transport comes second, with air, sea and inland waterway transport a long way behind.

Particularly in the 1970s there was a boom in public passenger transport by bus. Inter-urban transport in particular more than doubled between 1970 and 1981. A 17.5% increase in total passenger-kilometres was recorded between 1983 and 1988: +15.2% in urban and +18.5% in inter-urban services.

10.6 PUBLIC BUS TRANSPORT

Item	Unit	1983	1984	1985	1986	1987	1988
Passengers	1 000 Mio.	2 102.4	2 126.5	2 174.7	2 214.2	2 384.3	2 342.1
Passenger kilometres	1 000 Mio.	23.4	24.1	24.7	25.5	27.6	27.5
Urban services							
Passengers	1 000 Mio.	1 298.2	1 273.9	1 289.0	1 296.8	1 444.5	1 405.5
Passenger-kilometres	1 000 Mio.	6.6	6.2	6.2	6.3	7.7	7.6
Inter-urban services							
Passengers	1 000 Mio.	804.2	852.6	885.7	917.4	939.8	936.7
Passenger-kilometres	1 000 Mio.	16.8	17.9	18.5	19.2	19.9	19.9

Goods transport is also predominantly by road. As a proportion of total goods transport by road, public transport accounted in 1988 for 35% of freight volume and 60% of tonne kilometres.

10.7 GOODS TRANSPORT BY ROAD

Item	Unit	1983	1984	1985	1986	1987	1988
Goods carried	1 000 Mio.	907,2	914,0	911,5	924,8	917,5	919,9
Public transport	1 000 Mio.	329,6	329,7	323,7	331,3	322,6	326,0
Tonne kilometres	1 000 Mio.	16,9	17,1	16,7	16,5	16,7	17,4
Public transport	1 000 Mio.	10,6	10,6	10,3	9,9	10,1	10,4

With the increase in traffic density, the number of road accidents has also risen considerably. The following table shows the numbers of accidents involving personal injury between 1983 and 1989, when accidents increased by 34%, casualties by 42% and deaths by 14%.

10.8 ROAD ACCIDENTS

Item	1983	1984	1985	1987	1988	1989
Accidents involving personal injury	4 715	5 251	5 082	5 845	5 973	6 313
Casualties	4 784	5 432	5 255	6 259	6 292	6 779
Deaths	1 123	1 119	1 113	1 153	1 153	1 280

Bulgaria possesses two major waterways: for inland transport the Danube, which links the country with Central Europe, and for maritime transport the Black Sea, providing an ocean connection via the Bosphorus, the Dardanelles and the Mediterranean. Two railway ferries provide a connection with the Soviet Union.

Inland waterway transport is restricted almost entirely to the Danube; the main ports are Lom and Ruse. Goods transport declined considerably during the 1980s, with only 3.4 million tonnes carried in 1989 - 30% less than in 1983.

10.9 INLAND WATERWAY TRANSPORT

Item	Unit	1983	1984	1985	1987	1988	1989
Passengers	1 000	325	260	285	299	95	102
Freight	1 000 t	4 782	4 896	3 969	4 076	3 672	3 350
Passenger kilometres	1 000 Mio.	16	17	18	17	12	12
Tonne kilometres	1 000 Mio.	2.3	2.6	2.0	2.0	2.2	1.9
Cargo handled at river ports	1 000 t	9 177	9 960	8 489	8 128	8 068	.

In 1988, Bulgaria's merchant fleet comprised over 201 ships of 100 GRT , with a total tonnage of 1.4 million GRT. This included 19 tankers with a total of approximately 0.3 million GRT.

10.10 MERCHANT FLEET *)

Item	Unit	1970	1975	1980	1985	1988
Ships	Number	139	179	192	203	201
Tankers	Number	15	20	22	18	19
Tonnage	1 000 GRT	686	937	1 233	1 322	1392
Tankers	1 000 GRT	163	300	352	312	292

*) Ships of 100 GRT and over; figures as on 1 July.

The table below shows a marked decline in passenger transport by sea between 1983 and 1989. Passenger numbers fell by 37% over the period and passenger kilometres by 36%. The quantity of freight carried also fell by 7%, while output measured in tonne-kilometres increased by 21%.

10.11 SEA TRAFFIC

Item	Unit	1983	1984	1985	1987	1988	1989
Passengers	1 000	627	668	587	460	464	392
Freight	1 000 Mio.	27.4	26.5	22.8	25.9	24.0	25.5
Passenger kilometres	1 000 Mio.	33	32	30	27	25	21
Tonne kilometres	1 000 Mio.	61.2	60.5	56.6	67.5	64.8	74.1

The volume of freight carried in international traffic by sea rose by 11% to 34.2 million tonnes between 1983 and 1985 and then fell by 16% to 28.6 million tonnes in 1988. Of total goods carried in 1988, 77% were imports and 19% exports, the rest consisting of coastal shipping and transit traffic.

10.12 INTERNATIONAL SEA FREIGHT TRAFFIC *)

Item	Unit	1983	1984	1985	1986	1987	1988
Total	1 000 t	30 736	29 673	34 197	32 447	30 973	28 606
including:							
Exports	1 000 t	5 550	3 748	5 454	5 509	5 673	5 494
Imports	1 000 t	24 672	25 258	27 462	25 737	25 300	21 978

*) Including coastal shipping and transit.

Bulgarian post-war civil aviation began to develop in 1947 with the foundation of a Bulgarian-Soviet airline (TABSO); the Soviet Union also supplied the aircraft (particularly TU-134, IL-18, AN-24 and, since 1972, TU-154). Bulgaria now has a dense domestic flight network. All air transport is in the hands of the three companies Balkan (successor to TABSO), Buler and Agricultural Aviation. Balkan is the regular Bulgarian airline and Buler purely a charter company; Agricultural Aviation was set up for agricultural applications. The aerial spraying service also operates abroad. A few aircraft are available for medical and ambulance purposes.

Four of Bulgaria's eleven airports (Sofia, Plovdiv, Varna and Burgas) are used by international airlines, including Lufthansa since 1970. The remainder (Vidin, Ruse, Stara Zagora, Silistra, Târgovishte, Haskovo, Gorna Oryahovica) are purely domestic airports.

A new airport is to be built in Sofia in the early 1990s, incorporating much of the infrastructure of the existing airport. New facilities are to include a control tower, a freight terminal, a free trade zone, warehouses, catering facilities and a maintenance hangar for IL 96-300 aircraft. An additional runway is to be built at right-angles to the existing one, and a third is planned for the future. The new airport is intended to cater for five million passengers and 100 000 tonnes freight per year by 2010. Aircraft such as Boeing 757s and 767s, Airbus A 300 and Ilyushin IL 96-300 will then be able to fly to Sofia.

The number of passengers carried by Balkan Bulgarian Airlines rose by around 21% between 1983 and 1988. The number of passenger kilometres flown rose even more steeply, by 39%. Of some 2.9 million passengers in 1988, approximately 1.7 million or 60% were on international flights. The rise in passenger transport was offset by a considerable decline in the carriage of goods: 12% in freight terms and 13% in tonne kilometres. Almost 95% of traffic, measured in tonne-kilometres, was international in 1988.

10.13 SERVICES OF THE NATIONAL AIRLINE *)

Item	Unit	1983	1984	1985	1986	1987	1988
Passengers	1 000	2 384	2 517	2 606	2 445	2 813	2 874
International flights	1 000	1 334	1 419	1 494	1 339	1 592	1 701
Passenger-kilometres	1 000 Mio.	2 807.5	3 056.6	3 231.2	2 960.7	3 577.6	3 896.8
International flights	1 000 Mio	2 404.5	2 624.7	2 796.4	2 525.1	3 090.5	3 430.9
Freight	1 000 t	29.2	29.0	26.4	25.0	24.2	25.6
Tonne-kilometres	1 000 Mio.	51.8	52.6	43.9	43.1	41.7	44.8
International flights	1 000 Mio.	49.4	50.2	51.5	40.8	39.4	42.3

*) Regular flights of Balkan Bulgarian Airlines.

Use of long-distance pipelines in Bulgaria rose sharply in the late 1970s and early 1980s. The quantities of petroleum and petroleum products carried showed a fivefold increase to 16 million tonnes between 1979 and 1983. In 1984 and 1985 there was a further overall increase of 39% to 22 million tonnes. The quantity of petroleum (including petroleum products) transported subsequently fell by 11% to 19 million tonnes in 1989.

10.14 TRANSPORT IN LONG-DISTANCE PIPELINES

Item	Unit	1983	1984	1985	1987	1988	1989
Petroleum and petroleum products	1 000 t	15 555	20 058	21 560	21 045	21 930	19 100
Tonne kilometres	1 000 Mio.	1 095	943	1 014	998	1 037	910

The growing volume of news and information after the Second World War called for rapid development of the telecommunications system. The 1 000-odd post offices throughout Bulgaria in 1944 had multiplied to approximately 4 000 by 1984, linking virtually all localities to the postal, telex and telephone services. Between 1970 and 1989 the number of telephone connections rose from 470 000 to approximately 2.5 million.

Development of a country-wide data network is, however, still in its infancy. By September 1988 tests of the planned Bulpak network had been completed in four cities (including Plovdiv and Stara Zagora). A total of 60 subscribers in industry and public administration had by then been connected since the autumn of 1987. The network was further extended and efforts were made to connect with international data networks. Work was also done to improve other communications systems, enabling existing telephone or television networks to be used for data transmission. Digitization of the telephone network is a further priority in telecommunications investment.

The number of radio transmitters increased from three in 1939 to 70 in 1984, with a capacity of 5 800 kW. Since 1970 the number of radio licences issued has declined constantly; the two million or so in 1988 were 15% fewer than in 1983. At the same time there was a rapid increase in the number of television licences - a rise of 62% to some 1.7 million. By February 1989 the first 450 households in Sofia had received cable connections as part of a cable television pilot project in collaboration with a Soviet firm. The electronic components used are said to be exclusively of Soviet and Bulgarian origin. The Bulgarian organization involved is the Central Institute for Materials and Electronic Components, and the glass-fibre cables laid came from the Svetlina works in Sliven. A Soviet TV channel can now be received by cable in addition to the Bulgarian programmes. A Bulgarian-Soviet joint venture for producing cable television systems is planned.

10.15 COMMUNICATIONS DATA *)
(x 1 000)

Item	1970	1975	1980	1985	1988	1989
Telephone connections	473	777	1 256	1 946	2 386	2 515
Private telephones	170	314	647	1 164	1 515	1 618
Radio licences	2 291	2 271	2 149	2 017	1 965	1 941
Television licences	1 028	1 508	1 652	1 696	1 680	1 663

*) Figures as at end of year.

11 TOURISM

In the last few decades tourism has become a significant economic factor and currency-earner in Bulgaria. Systematic state promotion and a planned regional infrastructure have given the holiday areas so far developed an international reputation. The best-known and best-developed of these are the seaside resorts. The Bulgarian Black Sea coast is famous for its favourable climate. Its beaches are on average 40 m wide and 2 600 hours of sunshine can be expected annually. The regional organization plan for the 378 km-long coastal strip shows that more than 7 million m^2 of beaches can be used for tourism. The beaches on the Bulgarian coast can accommodate some half a million visitors daily. The best-known resorts on the Black Sea coast are Sunny Beach near Nesebâr (north of Burgas) and Golden Sands to the north of Varna. Other well-known holiday destinations are Druzhba, Rusalka and Albena. New tourist centres are being created to the south of Varna and Burgas.

Bulgaria's mountain ranges, which cover more than half of its total area, are a second international tourist attraction. So far only three main regions have been opened up for tourism: Pamporovo in the Rhodope, Borovec and Malyovica in the Rila mountains and Aleko in the Vitosha mountains. There are mountain spas and ski resorts in Sofia's immediate vicinity, and this area has further development potential. Mineral springs and spas are still under-exploited: apart from a few better-known spas such as Kyustendil or Hisarja, already visited regularly by foreign tourists, the sector has much untapped potential but will require substantial development, since the attraction of such resorts is heavily dependent on accommodation of international standard.

In the first half of 1990 Bulgaria took steps to give effective backing to the new status of tourism as a priority branch of the economy, including the foundation of a Ministry of Tourism. Perhaps the most effective measure, however, was the devaluation of the national currency, the lev, against the DM. The revision affected only the tourist exchange rate (since 1 April 1990 1 DM = Lv 5.58), with other rates remaining virtually unchanged. For the time being, however, tourist organizations were permitted to keep only 20% of their currency receipts. The rest had to be sold on the currency market at market rates. The percentage permitted to be retained was to be raised to 50% for 1991.

The number of foreign visitors rose considerably during the 1980s to 8.2 million in 1989, 50% more than in 1980. Of these 47% were transit passengers, 34% tourists and 8% business travellers; 8% were visiting relatives.

The constant increase in tourist numbers was interrupted in 1986, when West European tourists in particular cancelled their bookings following the Chernobyl reactor disaster. Rising tourist figures were again recorded in the next two years, however, with a record 8.3 million tourists in 1988. This was not quite repeated in 1989 (8.2 million tourists).

Initial estimates predicted a sharp decline in tourism for 1990, since the season began with relatively few bookings from the West and cancellations of up to 70% of bookings from Czechoslovakia and the GDR.

11.1 FOREIGN VISITORS BY PURPOSE OF JOURNEY
(x 1 000)

Purpose of journey	1980	1984	1985	1986	1988	1989
Total	5 485.8	6 138.3	7 295.2	7 567.1	8 295.0	8 220.9
Tourism	2 125.1	2 077.0	2 496.6	2 106.8	2 619.3	2 776.1
Business travel	336.0	363.1	427.9	458.2	536.1	632.3
Visits to relatives	338.5	358.0	554.4	687.1	623.4	662.8
Transit	2 619.4	3 234.8	3 688.4	4 060.8	4 327.6	3 904.8
Other purposes	66.8	105.5	127.9	254.2	188.6	244.8

11.2 FOREIGN VISITORS BY MEANS OF TRANSPORT
(x 1 000)

Means of transport	1980	1984	1985	1986	1988
Total	5 485.8	6 138.3	7 295.2	7 567.1	8 295.0
Land	4 656.5	5 343.5	6 317.3	6 819.0	7 206.7
Rail	649.1	555.9	594.5	582.6	648.9
Road	4 007.4	4 787.6	5 722.8	6 236.4	6 557.8
Sea	30.1	24.6	28.7	36.5	77.6
Air	799.2	770.3	949.2	711.6	1 010.7

Over 35% of foreign arrivals in 1989 were Turkish, though most of these were transit passengers rather than visitors. The next largest contingents of foreign visitors were from Yugoslavia, Poland, Hungary, the Soviet Union and Czechoslovakia.

11.3 FOREIGN ARRIVALS BY SELECTED COUNTRY OF ORIGIN

Country of origin	Unit	1980	1984	1985	1986	1988	1989
Total	1000	5 485.8	6 138.3	7 295.2	7 567.1	8 295.0	8 220.9
Turkey	%	39.7	44.7	36.7	38.3	38.9	36.1
Yugoslavia	%	14.1	13.8	19.7	25.3	17.5	14.9
Poland	%	6.8	6.3	6.7	7.0	11.1	10.8
Czechoslovakia	%	6.4	6.7	6.1	5.1	5.1	4.7
Soviet Union	%	6.0	5.5	5.0	4.0	5.7	6.7
German Democratic Republic	%	3.5	4.1	3.7	3.4	3.7	3.7
Federal Republic of Germany	%	3.0	2.1	2.6	3.0	3.3	2.9
Hungary	%	3.0	4.2	3.5	2.8	3.0	7.6
Romania	%	4.6	4.0	2.6	2.4	2.7	3.2
Greece	%	3.8	1.7	1.4	1.0	1.9	2.5
United Kingdom	%	0.8	0.9	1.0	0.6	1.1	1.2
Austria	%	0.5	0.6	0.6	0.6	0.7	0.7
Japan	%	0.8	0.4	0.5	0.5	0.5	0.5

The number of hotels declined somewhat between 1980 and 1988, but the number of hotel beds rose by 9% to over 110 000 in the same period. There was a similar trend in camping facilities, though on a considerably smaller scale.

Since 1988, Bulgarian citizens have been allowed to run family guest houses, including the provision of meals. Loans of approximately Lv 10 000 were granted towards the necessary alterations to houses and flats.

11.4 ESTABLISHMENTS OFFERING ACCOMMODATION

Item	1980	1985	1986	1987	1988
Hotels	658	646	648	644	635
Balkantourist Corporation	372	382	368	391	394
Campsites	111	105	106	107	100
Balkantourist Corporation	63	52	52	52	55
Mountain cabins	414	444	448	471	472

11.5 BEDS IN ESTABLISHMENTS OFFERING ACCOMMODATION
(x 1 000)

Item	1980	1985	1986	1987	1988
Hotels	102.0	107.2	109.9	113.5	111.3
Balkantourist Corporation	80.7	84.9	87.4	88.1	89.7
Campsites	12.7	15.2	14.7	15.6	17.5
Balkantourist Corporation	9.6	11.2	10.9	11.6	13.6
Mountain cabins	26.2	27.7	27.5	27.6	27.6

Between 1980 and 1985, currency receipts from tourism increased by 31% to US$ 340 million. In view of the drop in tourist numbers, in the next two years currency receipts showed only a small increase or stagnated.

11.6 OVERNIGHT STAYS AND FOREIGN CURRENCY RECEIPTS

Item	Unit	1980	1986	1985	1987	1988
Hotels	1 000 000	18.2	20.0	20.0	21.3	21.9
Balkantourist Corporation	1 000 000	13.9	15.6	15.2	16.9	17.6
Campsites	1 000 000	3.8	4.7	4.6	4.9	4.9
Balkantourist Corporation	1 000 000	3.4	4.1	3.8	4.3	4.3
Mountain cabins	1 000 000	2.9	3.2	3.3	3.3	3.2
Foreign currency receipts	US $ 1000 000	260	340	3354	354	.

12 MONEY AND CREDIT

Banking in Bulgaria was State-controlled until the 1980s. The note-issuing bank and core of the credit and payment system was the Bulgarian National Bank. The State Savings Bank was responsible for taking private savings deposits and granting loans to individuals. All commercial and non-commercial payment transactions with foreign countries and the funding of Bulgarian international trading companies were handled by the Foreign Trade Bank or, in certain cases, the Mineral Bank (re-named the Economic Projects Bank in the early 1980s).

The bank reform embarked on in 1987 led to the founding of commercial banks and hence to the abolition of the National Bank's monopoly, so stimulating competition between banks. A two-tier banking system thus arose in which the National Bank, formerly both the central bank and the commercial bank for State enterprises, was restricted to the role of bankers' bank. A decision by the Council of Ministers in April 1987 named eight banks to be newly established or reorganized: the Electrical Engineering Bank, the Biochim Bank (for biotechnology and the chemicals industry), the Avtotekhnika Bank (transport, agricultural technology and mechanical engineering), the Agricultural and Cooperative Bank in Plovdiv, the Economic Projects Bank, the Construction Industry Bank, the Transport Bank in Varna and the Business Bank. The sectors covered by the nine banks largely match those of the new-style business associations set up as part of the reforms of the Bulgarian economy. The legal and ownership status of the commercial banks was defined along the lines of a limited company.

Since the 1987 reform had only a limited effect, however, it was supplemented in May 1989 by a decree of the Council of Ministers under which former departments of the Bulgarian National Bank were to be expanded to form new commercial banks with the status of limited companies. Each bank was granted the right to establish its own network of branches in Bulgaria.

The functions of individual banks changed considerably. The Bulgarian National Bank was designated the State bank and thus largely assumed the functions of similar institutions in countries with highly-developed banking systems. Its duties as defined in the decree were to take part in the planning and implementation of national economic policy and the definition of standardized banking procedures, and to regulate the money supply and the activity of the other banks. It retains its functions connected with direct services to organizations outside the manufacturing sphere and payment transactions concerning the national budget.

At the same time the existing special commercial banks were given scope to assist not only the capital expenditure but also the day-to-day manufacturing activities of firms, allowing them to be intimately involved in the solution of financial problems. The commercial banks created from the former departments of the Bulgarian National Bank were granted the same rights.

The rights of the commercial banks to handle foreign exchange were also substantially extended: they are authorized to take foreign-currency deposits from Bulgarian and foreign legal and natural persons and to grant loans in foreign currencies. They may also deal on the international currency markets, using the foreign currency temporarily available to them, or form companies to carry out joint activities, including joint banks, with foreign legal and natural persons.

Draft legislation on the Bulgarian National Bank was drawn up in mid-1990, making it, as the country's central bank, responsible for monetary and credit policy, for controlling the activity of all other banks and for guaranteeing a stable currency. In performing these functions the National Bank is independent of the government.

Bulgaria's first private bank was registered in the second half of 1990 with an initial capital of Lv 10 million. Shares with a face value of Lv 1 000 are on public sale and may be acquired by legal and natural persons in Bulgaria or abroad. The first branches are to be opened in Plovdiv, Gabrovo and Tolbuhin, prior to the establishment of a country-wide network of branches. Private goods manufacturers will have priority in the granting of loans, and assistance will be given to agricultural and tourism projects. The bank's headquarters are in Sofia.

Bulgaria's currency unit is the lev (Lv) of 100 stotinki (st). Its relationships with convertible currencies are laid down in a system of split exchange rates which has been restructured several times. The official rate applies for domestic planning and reporting purposes. The rate applied to commercial and non-commercial payments between Bulgarian and foreign legal persons and for diplomatic and other missions in Bulgaria is the premium rate. This has been applied since 1990 to all currency transactions, including purchases of convertible currencies from Bulgarian and foreign private persons, which had still been conducted at the cash rate in the two previous years. While the official exchange rate between the DM and the lev scarcely changed between the end of 1986 and March 1990, at the premium rate the DM increased in value against the lev by 146% in the same period. Further substantial devaluations of the lev were subsequently necessary.

A special tourist rate was introduced to meet the needs of the tourist industry. In April 1990 this was revised to DM 1 = Lv 5.58, equivalent to a 75% devaluation of the lev, which gave a parity largely in line with the black market rate, according to Western experts. In 1990 there were also an official rate for CMEA trade and a new basic rate introduced at the beginning of May (DM 1 = Lv 1.76), which is used only for imports of specific goods which are scarce in Bulgaria.

Firms have for several years been able to sell their surplus currency at currency auctions, with prices adjusted according to supply and demand. At an auction in May 1990, Lv 5.50-25.40 were offered for one US dollar.

12.1 OFFICIAL EXCHANGE RATES *)

Type of rate	Unit	1985	1986	1987	1988	1989	1990 1)
Official rate 2)							
Buying and selling	Lv for DM 100	37.45	44.50	50.90	46.85	47.03	47.42
	Lv for US $ 100	100.00	90.18	82.45	82.15	80.90	80.10
Premium rate 3)							
Buying and selling	Lv for DM 100	.	57.85	76.35	93.70	117.58	142.26
	Lv for US $ 100	.	117.23	123.68	164.30	202.25	240.30
Cash rate 4)							
Buying and selling	Lv for DM 100	.	.	.	140.55	141.09	.
	Lv for US$ 100	.	.	.	246.45	242.70	.

*) Figures as at end of year.
1) March figures.
2) For domestic planning and reporting purposes.
3) For commercial and non-commercial payments between Bulgarian and foreign legal persons and for diplomatic and other missions in Bulgaria. From 1990, for all currency transactions.
4) For purchases of convertible currencies from Bulgarian and foreign private individuals (e.g. receipts from tourism, pension and maintenance payments).

Savings deposits showed a continuous upward trend between 1970 and 1983, reaching a total of Lv 10 800 million in 1983 - 243% more than in 1970; 34% of the total in 1983 consisted of deposits of Lv 4 000 or more and only 2% of deposits of under Lv 50. The following six years, up to 1989, showed a further growth of 51% in the total volume of savings deposits, to Lv 16 200 million.

12.2 SAVINGS DEPOSITS *)
(Lv 1000 000)

From Lv to less than Lv	1970	1975	1980	1981	1982	1983
Total	3 138.7	5 950.4	8 405.5	9 024.7	9 822.5	10 759.3[a]
less than 50	76.2	72.4	176.8	176.5	188.3	186.3
50 - 100	131.9	128.8				
100 - 500	579.5	682.0	723.4	733.4	759.0	778.7
500 - 1 000	677.2	1 023.7	1 169.5	1 215.2	1 269.7	1 313.7
1 000 - 2 000	742.5	1 350.7	1 760.7	1 822.1	1 932.9	2 100.8
2 000 - 4 000	611.6	1 477.2	2 138.5	2 305.4	2 465.1	2 670.4
4 000 and over	319.8	1 215.6	2 436.6	2 772.1	3 207.5	3 709.4

*) Figures as at end of year.
a) 1989 = 16 222.7.

The volume of credit rose by 43% to Lv 44 700 million between 1983 and 1988; The 1988 total consisted half of long-term and half of short-term loans. 95% of short-term loans in 1988 were to State and cooperative enterprises (1983: 96%), which means that short-term loans to private individuals increased only from 4% to 5% in the same period. Private individuals account for a far larger proportion of long-term loans, rising from 12% to 15% from 1983 to 1988 while the percentage of loans to State enterprises fell from 88% to 85%.

12.3 LOANS GRANTED *)
(Lv 1 000 000)

Recipient of loan	1983	1984	1985	1986	1987	1988
Total	31 244.3	33 323.0	34 274.8	36 419.7	41 045.3	44 671.9
Long-term loans	14 922.0	15 807.4	16 586.8	17 214.3	19 948.9	22 600.5
State enterprises	13 063.2	13 662.8	14 142.1	14 501.3	16 924.4	19 279.7
Cooperative enterprises	32.2	31.9	14.6	23.5	41.0	40.2
Private individuals	1 826.6	2 112.7	2 430.1	2 689.5	2 983.5	3 280.6
Short-term	16 322.3	17 515.6	17 688.0	19 205.4	21 096.4	22 071.4
State and cooperative enterprises	15 674.8	16 763.3	16 823.4	18 279.4	20 052.5	20 882.0
Private individuals	647.5	752.3	864.6	926.0	1 043.9	1 189.4

*) Figures as at end of year.

13 PUBLIC FINANCE

Bulgaria's national budget is both an instrument for distributing and redistributing the national income and the country's supreme financial plan. The chief sources of revenue are profits tax, turnover tax and social security receipts. Turnover tax, unlike the levy on profits, is paid to the Treasury immediately after firms have realized their production and is thus a means of checking that production and sales plans have been fulfilled. After deduction of turnover tax from a firm's total receipts, the profit remains as the difference between receipts and production costs. Part of this profit remains with the firm for it to create its own financial reserve.

Most capital expenditure by State-controlled enterprises and a range of social and cultural institutions are financed from the national budget, which also covers national defence costs. A large slice of the budget (up to 40% or more) is spent on industry, chiefly heavy industry. Social security takes up a large and increasing proportion of total expenditure.

The volume of the national budget increased by some 30% to an estimated Lv 24 300 million between 1985 and 1989. For the first time in several years, the budget adopted for 1990 shows a substantial deficit of approximately Lv 1 000 million, with revenue at Lv 24 900 million and expenditure at Lv 25 900 million.

13.1 NATIONAL BUDGET *)
(Lv 1 000 000)

Item	1985	1986	1987 1)	1988 1)	1989 2)
Revenue	18 770.8	22 007.5	20 672.8	22 952.0	24 288.0
Expenditure	18 665.7	21 909.7	20 662.8	22 952.0	24 288.0
Surplus	105.1	97.8	10.0	.	.

*) Budget year: calendar year
1) Provisional data.
2) Estimate.

According to the estimated figures, tax of Lv 7 700 million on the profits of economic organizations was the chief source of the 1989 public revenue of Lv 24 300 million. Turnover tax accounted for Lv 5 000 million and social security receipts for Lv 4 400 million.

As mentioned above, total public revenue for 1990 was estimated at Lv 24 900 million. Since the 1990 budget estimates were based for the first time on the assumption of a decline in the national product and a simultaneous rise in public revenue, a further increase was expected in the public sector share.

13.2 PUBLIC REVENUE *)
(Lv 1 000 000)

Budget heading	1985	1986	1987 1)	1988 1)	1989 1)
Total	18 770.8	22 007.5	20 672.8	22 952.0	24 288.0
Revenue from the economy	17 237.2	20 384.8	19 011.8	21 109.0	.
including:					
profits of economic organizations	.	.	.	.	7 688.0
turnover tax	.	.	.	.	5 000.0
social security receipts	.	.	.	.	4 386.0
Other revenue	1 533.6	1 622.7	1 661.0	1 843.0	.

*) Budget year: calendar year.
1) Provisional data.
2) Forecast.

Following a 6% increase in public expenditure in 1989 to Lv 24 300 million, an expenditure total of Lv 25 900 million was adopted for 1990 - an increase of 7% over 1989. Social expenditure was budgeted to increase appreciably in 1990, with public expenditure on health rising by 35% to Lv 1 700 million. Social security expenditure was to increase by 8%. The main reductions were in capital expenditure and subsidies. An investigation of the economy's main loss-makers was to be carried out in April to see how far State subsidies could be cut.

13.3 PUBLIC EXPENDITURE
(Lv 1 000 000)

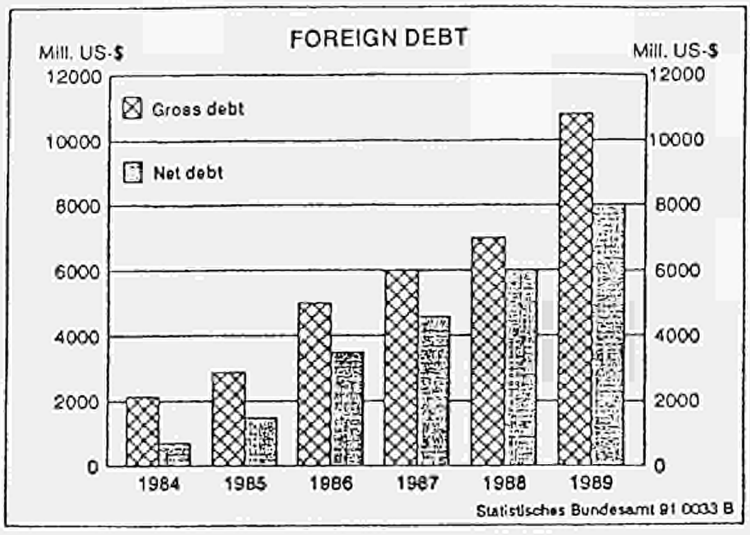
Budget heading	1985	1986	1987 1)	1988 1)	1989 2)
Total	18 665.7	21 909.7	20 662.8	22 952.0	24 288.0
Expenditure on the economy	9 406.3	11 377.6	9 590.1	10 842.0	.
Health, education, science and research, arts and culture	3 384.7	3 736.8	3 884.1	4 304.0	11 906.8 a)
Social security fund 3)	3 282.3	3 631.7	3 726.9	3 914.0	4 070.6
Administration	314.9	2 592.4	336.9	355.0	.
Other expenditure	2 277.5		3 124.8	3 537.0	.

*) Budget year: calendar year.
1) Provisional figures.
2) Estimate.
3) Including Agricultural Production Cooperatives Pension Fund.
a) Includes funding for the arts and sciences, the health service and social security.

Bulgaria's indebtedness grew rapidly during the 1980s. From 1984 to 1989 alone the gross debt increase fivefold to approximately US$ 11 000 million. With an average debt of some US$ 1 200 per inhabitant, Bulgaria comes second to Hungary as the RMEA country with the heaviest debt, although Bulgaria is thought to be even worse off because of its low level of exports to the West.

Further problems are caused by the structure of Bulgaria's foreign debt, which consists largely of short-term liabilities.

Under the increasing pressure of debt servicing, which swallowed over three-quarters of hard currency receipts in 1989, Bulgaria's International Trade Bank announced in March 1990 that the country's debt redemption payments were to be suspended. This did not at first affect interest payments, but in June it was announced that the International Trade Bank would also suspend interest payments on foreign liabilities in the third quarter of 1990.



13.4 FOREIGN DEBT *)
(US $ 1 000 000)

Type of debt	1984	1985	1986	1987	1988	1989
Gross debt	2 135	2 900	5 000	6 000	7 000	10 800
Net debt 1)	705	1 500	3 500	4 600	6 000	8 000

*) Figures as at end of year.
1) Gross debt less deposits with banks reporting to the Bank for International Settlements (BIS).

Bulgaria's capital expenditure represents total expenditure on extending, replacing and improving the productive and non-productive plant and equipment of the existing capital stock and on building up new capital stock. Total capital expenditure in 1989 amounted to Lv 9 500 million, 30% more than in 1984.

Most investment funds are allocated to State enterprises - approximately 95% in 1989, with 5% for private businesses and only 0.7% for cooperatives.

A breakdown by type of capital expenditure shows that, in 1989, some 42% of total funds were invested in assembly and construction work and 44% in plant and machinery.

Lv 7 400 million (over three-quarters of the total) were invested in material production in 1989, and 22% in various sectors of non-material production. The chief economic sector was industry with 49% of total capital expenditure, followed by housing and utilities including municipal services (13%), agriculture (10%), transport (6%) and construction (6%).

13.5 NATIONAL CAPITAL EXPENDITURE BY FORM OF OWNERSHIP AND TYPE
(Lv 1 000 000)

Form of ownership/ type	1984	1985	1986	1987	1988	1989
Total	7 993.2	8 681.4	9 361.3	10 042.7	10 288.1	9 500.0 a)
By form of ownership:						
State enterprises	7 263.9	7 995.3	8 545.2	9 345.5	9 597.8	8 992.0
Cooperatives	83.3	81.2	80.5	62.2	95.2	70.0
Private businesses	645.8	604.9	735.5	634.9	594.7	438.0
Other	0.2	0.0	0.1	0.1	0.4	0.0
By type:						
Assembly and construction work	4 204.0	4 345.8	4 525.5	4 563.3	4 679.0	3 962.3 b)
Design and planning	.	.	.	3 682.0	3 810.9	2 870.3
Assembly	.	.	.	881.3	868.1	1 092.0
Machinery, equipment and instrumentation	2 817.9	3 268.6	3 599.8	4 208.9	4 330.7	4 167.4
of which imports	1 001.7	1 225.5	1 467.2	1 487.2	1 539.2	.
Geological and hydrological prospecting	194.3	214.0	204.5	221.7	189.3	286.6
Research and development	249.2	241.1	262.1	295.3	354.6	372.1
Other	527.8	611.9	769.4	753.5	734.5	711.6

a) First half of 1990: Lv 3 379.2 million.
b) First half of 1990: Lv 1 484.1 million.

13.6 NATIONAL CAPITAL EXPENDITURE BY TYPE
(%)

Type	1984	1985	1986	1987	1988	1989
Assembly and construction work	52.6	50.0	48.3	45.4	45.5	41.7
Design and planning	.	.	.	36.6	37.0	30.2
Assembly	.	.	.	8.8	8.4	11.5
Machinery, equipment and instrumentation	35.3	37.7	38.5	41.9	42.1	43.9
of which imports	12.5	14.1	15.7	14.8	15.0	.
Geological and hydrological prospecting	2.4	2.5	2.2	2.2	1.8	3.0
Research and development	3.1	2.8	2.8	3.0	3.5	3.9
Others	6.6	7.0	8.2	7.5	7.1	7.5

13.7 NATIONAL CAPITAL EXPENDITURE BY ECONOMIC SECTOR
(Lv 1 000 000)

Economic sector	1980	1985	1986	1987	1988	1989
Total	7 195.6	8 681.4	9 361.3	10 042.7	10 430.0	9 500.0
Material production sectors	5 135.1	6 279.7	6 634.0	7 383.0	7 625.7	7 386.7
Industry	3 012.8	4 059.2	4 537.7	4 926.8	5 128.1	4 676.0
Construction	177.2	325.9	337.3	346.8	370.5	603.7
Agriculture	893.9	694.7	610.9	690.3	868.1	913.8
Forestry	1.5	13.5	8.7	9.0	6.7	12.8
Transport	698.9	737.8	654.6	1 009.4	763.4	605.4
Communications	99.8	110.6	124.8	120.0	136.3	160.4
Distributive trades, hotels and restaurants	218.5	283.6	308.0	230.8	282.0	384.2
Other material production sectors	32.5	54.4	52.0	49.9	70.6	30.4
Non-material production sectors	2 060.5	2 401.7	2 727.3	2 659.7	2 662.4	2 113.3
Housing, utilities and municipal services	1 455.2	1 690.8	1 855.1	1 860.2	1 883.5	1 240.4
Housing	954.7	1 108.4	1 220.0	1 195.8	1 205.2	647.3
Science and scientific services	63.0	95.7	100.3	100.3	118.3	49.3
Education	152.4	167.3	172.1	143.7	182.3	172.8
Culture and the arts	136.1	99.4	67.0	78.5	58.1	84.1
Health, social security, physical education, sport and tourism	88.0	175.8	217.3	213.4	175.4	167.8
Other non-material production sectors	165.8	172.7	315.5	263.6	244.8	398.9

Between 1980 and 1989, capital expenditure on the protection and rehabilitation of the environment increased by 90% to Lv 272 million, with the highest proportions spent on water pollution control (25%), soil protection (23%) and atmospheric pollution control (20%).

13.8 CAPITAL EXPENDITURE ON ENVIRONMENTAL PROTECTION AND REHABILITATION
(Lv 1 000 000)

Item	1980	1985	1988	1989
Total	142.9	148.6	175.5	271.6
including:				
water pollution control	76.4	61.7	62.8	68.1
soil protection	30.2	61.6	33.3	63.1
atmospheric pollution control	35.3	3.5	17.5	54.3
clean technologies and water recycling	1.0	14.9	31.0	40.0
noise control	.	6.8	30.9	46.1

14. WAGES AND SALARIES

In Bulgaria as elsewhere, incomes alone are not a comprehensive indicator of living standards. The benefits from the social consumption fund and changes in purchasing power also have to be taken into account. The total consumption fund is in two parts: that used to pay wages and salaries and the social consumption fund, used for education, health, social security, etc.

The wage freeze policy applied until about 1956, under which the purchasing power of the population was to be strengthened through price reductions, was replaced by a more flexible wage policy geared more to economic growth, the manpower shortage and material incentives. Attempts were made through a series of reforms to link earnings more closely to performance. Relatively constant prices (e.g. as a result of State price fixing for staple foods), coupled with repeated wage increases, led for a time to a rise in real incomes and purchasing power. However, since the assumption that prices remained stable, particularly in the 1980s, is only partly true (cf. Chapter 15), the trend in real earnings also requires reassessment.

The minimum wage has been raised several times in recent years, most recently on 1 July 1990 by some 18% to Lv 165 per month.

The following table gives an indication of trends in earnings for the four million or so manual and non-manual workers between 1984 and 1989 (cf. Table 6.3). The figures show that the average gross annual earnings of manual and non-manual workers rose by a total of 29% in this period, with a growth of 6% over the previous year in 1989 alone. Earnings were above average in manufacturing industry, transport, construction, science and public administration. According to the latest data from the Bulgarian Central Statistical Office, the wages bill of businesses expanded by 4.4% in the first four months of 1990 compared with the same period in the previous year - where there was a 6% drop in employment figures. Despite an increase of almost 11% in the level of earnings, real earnings are assumed to have fallen by some 2% over this period.

14.1 GROSS AVERAGE ANNUAL EARNINGS OF MANUAL AND NON-MANUAL WORKERS BY ECONOMIC SECTOR
(Lv)

Economic sector	1984	1985	1986	1987	1988	1989
Total	2 488	2 564	2 697	2 812	3 025	3 207
Material production						
Agriculture	2 321	2 286	2 444	2 513	2 815	3 008
Forestry	2 053	2 077	2 302	2 426	2 598	2 773
Manufacturing industry	2 605	2 724	2 879	3 031	3 256	3 422
Transport	2 822	2 871	3 011	3 083	3 261	3 529
Communications	2 313	2 369	2 442	2 588	2 739	2 992
Distributive trades, hotels and restaurants	2 135	2 188	2 278	2 360	2 572	2 698
Construction	2 846	2 927	3 053	3 172	3 352	3 591
Other branches of material production	2 583	2 659	2 827	2 964	3 258	3 403
Non-material production						
Health, social security, sport and tourism	2 240	2 387	2 446	2 519	2 595	2 682
Education	2 230	2 396	2 500	2 590	2 650	2 740
Science and scientific services	2 877	3 013	3 137	3 302	3 535	3 580
Culture and the arts	2 260	2 348	2 419	2 480	2 646	2 924
Housing and utilities	2 175	2 299	2 397	2 555	2 731	2 935
Finance, credit and insurance	2 381	2 513	2 592	2 720	2 949	3 082
Public administration	2 854	2 984	2 977	3 143	3 384	3 515
Other branches of non-material production	2 671	2 664	2 862	3 040	3 019	3 110

The gross average annual earnings of workers in material production in 1989 amounted to Lv 3 159 - 28% more than in 1984. Above-average wages were paid in the construction industry (16% above average), transport (12%) and manufacturing industry (7%).

14.2 GROSS AVERAGE ANNUAL EARNINGS OF MANUAL WORKERS IN MATERIAL PRODUCTION BY ECONOMIC SECTOR
(Lv)

Economic sector	1984	1985	1986	1987	1988	1989
Total	2 463	2 526	2 667	2 781	2 996	3 159
Agriculture	2 250	2 209	2 370	2 444	2 722	2 956
Forestry	1 986	2 018	2 276	2 394	2 584	2 777
Manufacturing industry	2 565	2 684	2 830	2 973	3 180	3 385
Transport	2 806	2 858	2 987	3 057	3 235	3 535
Communications	2 218	2 267	2 349	2 474	2 616	2 828
Distributive trades, hotels and restaurants	1 950	1 995	2 019	2 089	2 253	2 410
Construction	2 780	2 859	2 977	3 092	3 259	3 671
Other branches of non-material production	2 359	2 425	2 440	2 536	2 658	2 970

The following table shows that in 1988 the gross annual earnings of manual and non-manual workers in state-run manufacturing industry were 31% higher than in cooperative enterprises. The highest earnings were in coalmining and the iron and steel industry: 41% and 28%, respectively above the average wage in manufacturing industry.

14.3 GROSS AVERAGE ANNUAL EARNINGS OF MANUAL AND NON-MANUAL WORKERS IN MANUFACTURING INDUSTRY
(Lv)

Economic sector	1984	1985	1986	1987	1988
Total	2 598	2 717	2 881	3 030	3 254
State enterprises	2 638	2 759	2 927	3 082	3 308
Electricity and thermal energy production	2 989	3 135	3 561	3 695	3 924
Coalmining	3 634	3 888	4 295	4 416	4 578
Iron and steel industry [1]	3 303	3 435	3 618	4 104	4 158
Mechanical engineering, electrical and electronics industry	2 790	2 927	3 101	3 242	3 476
Mechanical engineering and metalworking	2 875	3 008	3 193	3 348	3 586
Electrical engineering	2 647	2 791	2 948	3 074	3 314
Chemicals and rubber industry	2 771	2 877	2 988	3 323	3 624
Building materials industry	2 762	2 841	3 047	3 127	3 268
Logging and wood processing industry	2 572	2 635	2 738	2 870	3 078
Cellulose and paper industry	2 470	2 585	2 678	2 813	3 024
Glass, porcelain and ceramics industry	2 541	2 750	2 861	2 956	3 216
Textile industry	2 242	2 456	2 537	2 649	2 914
Clothing industry	1 952	2 047	2 147	2 279	2 469
Leather, footwear and tobacco industry	2 194	2 305	2 397	2 500	2 801
Printing and duplicating industry	2 536	2 608	2 714	2 842	3 105
Food and beverages industry	2 341	2 382	2 500	2 594	2 852
Cooperative enterprises	2 048	2 125	2 214	2 259	2 517
Mechanical engineering and metalworking industry	2 719	2 809	2 920	3 035	3 312
Electrical engineering	1 657	1 703	1 700	1 793	2 039
Chemicals and rubber industry	2 798	2 930	3 037	3 055	3 396
Logging and wood processing industry	2 767	2 779	2 845	2 937	3 110
Cellulose and paper industry	1 751	1 757	1 882	1 903	1 995
Textile industry	2 019	1 950	2 016	2 058	2 236
Clothing industry	1 877	1 935	2 028	2 058	2 172
Leather, footwear and tobacco industry	2 128	2 208	2 261	2 354	2 478
Food and beverages industry	2 151	2 198	2 248	2 225	2 531

1) Including ore extraction.

15 PRICES

Until 1956, prices in Bulgaria were fixed more for political than for economic motives; the purchasing power of the population was boosted primarily by means of price reductions. The disproportionate growth in the supply of goods and purchasing power was to be corrected by increasing the prices of many agricultural products and the retail prices of various other goods.

Various attempts were made later to reform or derestrict the price system and bring prices into line with costs. In the first quarter of 1990 the Bulgarian Government decided to derestrict the prices of a series of goods and services, which would then be determined by supply and demand alone. At the same time the prices of staple foods were frozen so as to keep the social burden on the population within reasonable limits.

The State retail price index published by the Bulgarian Statistical Office shows an overall increase of approximately 7% from 1984 to 1988. An above-average increase of some 9% was recorded for food, beverages and tobacco and a 6% increase for industrial goods.

The official figure for the annual rate of inflation, which used to be no more than about 0.5%, is now considerably higher. The rise in prices over the last few years was accompanied by growing shortages. An analysis by the party newspaper Rabotnichesko Delo stated that approximately half of all foodstuffs and over 60% of other goods were unavailable on the market in mid-1989. Since then the position has deteriorated further. According to Western experts, staple foods are often not available in the shops even in exchange for ration coupons. The newspaper Duma (the successor to the former party publication Rabotnichesko Delo) found a price increase of 4% in June 1990 over the previous month, based only on those goods which were actually available.

The serious market deficit is one reason why it is difficult to calculate an index of living costs in Bulgaria. Moreover, hidden increases in prices are difficult to quantify, since they are implemented in three main ways: by changing the label, by maintaining the price of the item while reducing the quality and by forcing demand, so that the more expensive item is bought because the cheaper one is unavailable.

15.1 INDEX OF STATE RETAIL PRICES BY PRODUCT GROUP *)
(1980 = 100)

Product group	1984	1985	1986	1987	1988
Total	103	105	108	108	110
Food, beverages and tobacco	105	108	112	112	114
Industrial goods	101	102	105	105	107

*) Annual average.

The index of average retail prices, calculated on the basis of a basket of 166 product groups, shows a total price increase of 15% for the period 1985-1989, with a rise of 6% in the prices of food, beverages and tobacco.

15.2 INDEX OF AVERAGE RETAIL PRICES *)
(1980 = 100)

Total	1985	1986	1987	1988	1989
Total	115	118	121	124	132
Food, beverages and tobacco	112	113	115	117	119
Industrial goods	118	122	127	130	143

*) Calculated on the basis of a basket of 166 groups of goods (68 of which are food, beverages or tobacco).

The State retail prices of the selected foodstuffs and beverages rose by an average of 14% between 1980 and 1988. The prices of a number of these goods, such as bread, rice, beans and eggs, remained unchanged for years, while meat, confectionery, oranges and coffee showed price increases well above average.

15.3 INDEX OF STATE RETAIL PRICES OF SELECTED FOODSTUFFS, ETC. *)
(1980 = 100)

Product	1984	1985	1986	1987	1988
Total	105	108	112	112	114
Bread, biscuits and cakes	100	100	100	100	100
Rice	100	100	100	100	100
Beans (dried)	100	100	100	100	100
Meat	115	120	127	127	127
Fish	106	106	106	106	106
Vegetable oil	100	100	100	100	100
Sugar	100	100	100	100	118
Confectionery	100	106	120	120	125
Milk	100	100	100	100	100
Brine cheese	100	100	101	101	101
Kashkaval cheese	100	100	100	100	100
Eggs	100	100	100	100	100
Oranges	139	139	143	143	143
Spirits	105	105	105	105	105
Non-alcoholic drinks	100	100	100	100	100
Coffee	100	116	159	159	181

*) Annual average.

The State retail prices for the selected fruit and vegetable varieties have changed relatively little over the past few years. The largest increases from 1985 to 1989 were for potatoes (15%), cucumbers (9%) and cabbage (8%). The price of grapes fell by 4% and onion and pear prices by 3%.

15.4 AVERAGE STATE RETAIL PRICES FOR SELECTED VEGETABLE AND FRUIT VARIETIES
(Lv/kg)

Product	1985	1986	1987	1988	1989
Potatoes	0.26	0.26	0.25	0.25	0.30
Tomatoes	0.55	0.56	0.57	0.57	0.57
Peppers, green	0.51	0.52	0.47	0.49	0.54
Onions	0.37	0.37	0.37	0.36	0.36
Cabbage	0.24	0.25	0.24	0.26	0.26
Cucumbers	0.87	0.91	0.79	0.88	0.95
Beans, green	0.41	0.41	0.41	0.41	0.43
Grapes	0.50	0.50	0.51	0.50	0.48
Apples	0.55	0.55	0.58	0.57	0.56
Pears	0.40	0.41	0.42	0.42	0.39

The State retail prices for selected industrial goods rose by an average of 7% from 1980 to 1988. The following table shows the price trends of certain main product groups.

15.5 INDEX OF STATE RETAIL PRICES FOR SELECTED INDUSTRIAL GOODS *)
(1980 = 100)

Product	1984	1985	1986	1987	1988
Total	101	102	105	105	107
Cotton fabrics	100	100	100	100	100
Shoes	105	106	106	107	110
Electric cookers	100	100	100	100	100
Electric heaters	100	103	111	111	111
Motor cars	100	103	109	109	109
Cement	100	100	100	100	100
Bricks	100	111	139	139	139

*) Annual average.

The cooperative retail prices of selected agricultural products rose by an average of 23% between 1980 and 1989, with particularly steep increases for poultry, honey, fresh vegetables and wool, for example. The prices of eggs and pulses fell over the period.

Agricultural producer prices rose more quickly than retail prices for food of domestic origin. The index of agricultural producer prices as a whole was 119 in 1987 with 1980 as the base year, with the prices of vegetable and animal products showing similar trends on average (118.9 and 119.0). Some products showed above-average rises: for example, the producer prices of unwashed wool and vegetables rose by a factor of over 1.5, of potatoes, melons and watermelons by roughly the same amount, of bee products and fibre plants by 30% and of industrial crops and poultry by 20%.

15.6 INDEX OF COOPERATIVE RETAIL PRICES FOR SELECTED AGRICULTURAL PRODUCTS *)
(1980 = 100)

Product	1984	1985	1986	1987	1988	1989
Total	107	109	111	108	114	123
Cereals	94	98	100	99	96	100
Flour	106	106	103	108	107	107
Pulses	96	87	87	89	90	98
Potatoes	110	100	104	107	103	109
Fruit, fresh	109	106	107	108	112	121
Nuts	101	103	105	108	109	107
Melons and water melons	105	116	112	106	110	123
Dried fruit	128	124	126	123	116	115
Vegetables, fresh	108	111	116	111	121	134
Dairy products	103	106	106	108	108	109
Eggs	98	99	83	82	78	83
Honey	114	114	122	131	134	133
Wool	121	120	116	114	117	120
Cattle	107	108	113	117	119	128
Poultry	114	114	125	127	129	132

*) Annual average.

15.7 AVERAGE COOPERATIVE RETAIL PRICES OF SELECTED FRESH VEGETABLE AND FRUIT VARIETIES *)
(Lv/kg)

Product	1985	1986	1987	1988	1989
Potatoes	0.55	0.58	0.60	0.59	0.68
Tomatoes	0.81	0.86	0.79	0.81	0.94
Peppers, green	0.79	0.82	0.78	0.83	0.89
Onions	0.50	0.50	0.47	0.48	0.47
Cabbage	0.37	0.37	0.37	0.36	0.38
Cucumbers	0.85	0.93	0.90	0.97	1.10
Beans, green	0.61	0.61	0.60	0.60	0.62
Grapes	0.75	0.74	0.76	0.76	0.82
Apples	0.64	0.65	0.66	0.70	0.71
Pears	0.58	0.59	0.59	0.61	0.61

*) Annual average.

The following table shows that, according to official figures, electricity and water supply were the services which showed the sharpest price increases between 1980 and 19 89 - 51% and 56%, respectively. The prices of thermal energy, rents, fares for various means of transport and television and radio licences remained stable.

15.8 PRICE INDEX FOR SELECTED SERVICES *)
(1980 = 100)

Service	1984	1985	1986	1987	1988
Electrical energy	100	112	149	150	151
Thermal energy	100	100	100	100	100
Water	100	114	156	156	156
Rent	100	100	100	100	100
Hairdressing	113	113	113	114	114
Banking services	101	102	102	102	102
Refuse disposal	104	105	105	105	105
Hotel charges	114	124	129	147	154
Postal, telegraph and telephone services	101	108	131	131	131
Radio and television licences	100	100	100	100	100
Railway transport	100	100	100	100	100
Inter-regional road transport	100	100	100	100	100
Urban transport	116	116	116	116	116
Shipping	100	100	100	100	100
Air transport	100	100	100	100	100
Tailoring	101	101	101	101	101
Shoe repairs	100	100	100	100	100
Cultural events	104	106	107	114	119

*) Annual average.

16. NATIONAL ACCOUNTS

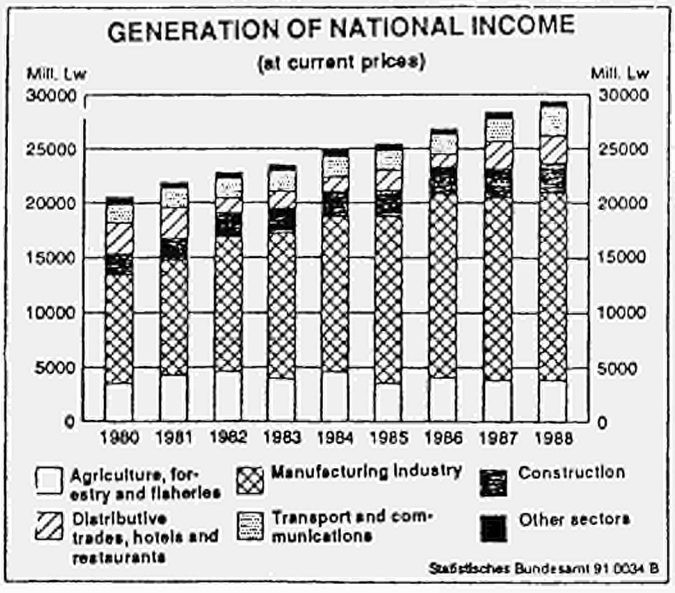
Bulgaria's national accounts are produced by the Central Statistical Office in Sofia and appear in both national and international publications. The following indications are based chiefly on United Nations publications.

Below is a summary of growth in produced national income at current and constant prices; the generation of national income is also examined.

Bulgaria prepares its national accounts along the lines of the System of Material Product Balances (MPS) also used by the other socialist/communist countries. The concepts, definitions and classifications used in this system differ widely from those in the United Nations System of National Accounts (SNA) used by most non-socialist countries as a model for their national accounts.

An important difference between the MPS and the SNA is the scope of the production sectors covered. The MPS does not cover production by the State, private non-profit institutions, services to households, accommodation agencies, credit institutions, the insurance sector or various other service sectors. This means that only material production sectors are included under production in the generation-of-income account: agriculture, forestry, manufacturing industry, construction, the distributive trades, transport and communications, restaurants and hotels and other material production services. To maintain consistency and unity of content between the generation-of-income and use-of-income accounts, however, with this concept goods produced in the material production sector must then also be shown in the use-of-income account even if the end users do not belong to the material production sector. A methodological study [1] published by the United Nations and produced by the Member States of the Council for Mutual Economic Assistance (CMEA) summarizes the concepts and methods used in the MPS. A further document [2] describes the differences in concepts between the MPS and the SNA. Various official and unofficial publications also explain important national accounts parameters and, to a certain extent, the calculation method (Statistisches Jahrbuch 1990 für die Bundesrepublik Deutschland, p. 668 ff.: note on the national accounts of the German Democratic Republic).

1) United Nations (ed.), Basic Principles of the System of Balances of the National Economy, Studies in Methods, Series F No. 17, New York 1971.
2) United Nations (ed.), Comparisons of the System of National Accounts and the System of Balances of the National Economy, Part One, Conceptual, Relationships, Studies in Methods, Series F No. 20, New York 1977.



16.1 GROWTH OF PRODUCED NATIONAL INCOME

Year	Produced national income		
	at current prices	at constant prices	
	Total		Per inhabitant
	Lv 1 000 000	(1980 = 100)	
1975	14 289	74.2	75.5
1980	20 509	100.0	100.0
1981	21 933	105.0	104.6
1982	22 850	109.4	108.7
1983	23 479	112.7	111.6
1984	24 907	117.9	116.4
1985	25 451	120.0	118.5
1986	26 851	126.4	124.9
1987	28 338	132.8	131.0
1988	29 423	136.0	133.9
1989	30 006	135.5	133.2
Change compared with previous year and average annual growth rate in %			
1983	+ 2.8	+ 3.0	+ 2.7
1984	+ 6.1	+ 4.6	+ 4.3
1985	+ 2.2	+ 1.8	+ 1.8
1986	+ 5.5	+ 5.3	+ 5.4
1987	+ 5.5	+ 5.1	+ 4.9
1988	+ 3.8	+ 2.4	+ 2.2
1989	+ 2.0	- 0.4	- 0.5
1975/1980 average	7.5	+ 6.1	+ 5.8
1980/1985 avrage	4.4	+ 3.7	+ 3.5
1985/1989 average	4.2	+ 3.1	+ 3.0

16.2 GENERATION OF NATIONAL INCOME

Year	Produced national income	Agriculture and forestry	Industry	Construction	Distributive trades and hotels/restaurants [1]	Transport and communications	Other sectors of material production
			At current prices (Lv 1 000 000)				
1980	20 509	3 463	9 939	1 905	2 821	1 659	722
1981	21 933	4 267	10 441	2 063	2 767	1 809	587
1982	22 850	4 601	12 238	2 208	1 384	1 796	624
1983	23 479	3 945	13 265	2 270	1 529	1 845	624
1984	24 907	4 599	14 091	2 367	1 328	1 912	611
1985	25 451	3 512	15 170	2 490	1 801	1 807	670
1986	26 851	4 062	16 677	2 564	1 227	1 752	569
1987	28 338	3 820	16 650	2 675	2 500	2 058	636
1988	29 423	3 820	17 088	2 780	2 471	2 596	666
1989	30 006	3 785[a]	17 541	2 793	.	.	.
			Change compared with the previous year/average annual growth rate in %				
1983	+ 2.8	- 14.3	+ 8.4	+ 2.8	+ 10.5	+ 2.7	± 0
1984	+ 6.1	+ 16.6	+ 6.2	+ 4.3	- 13.1	+ 3.6	- 2.1
1985	+ 2.2	- 23.6	+ 7.7	+ 5.2	+ 35.6	- 5.5	+ 9.7
1986	+ 5.5	+ 15.7	+ 9.9	+ 3.0	- 31.9	- 3.0	- 15.1
1987	+ 5.5	- 6.0	- 0.2	+ 4.3	+ 103.7	+ 17.5	+ 11.8
1988	+ 3.8	± 0	+ 2.6	+ 3.0	- 1.2	+ 26.1	+ 4.7
1980/1984 average	+ 5.0	+ 7.4	+ 9.1	+ 5.6	- 17.2	+ 3.6	- 4.1
1984/1988 average	+ 4.3	- 4.5	+ 4.9	+ 4.1	+ 17.8	+ 7.9	+ 2.2
			At 1982 prices (% of produced national income)				
1980	100	19.3	51.3	9.1	9.8	7.5	3.0
1981	100	19.2	51.3	9.4	9.4	7.9	2.8
1982	100	19.4	54.1	9.7	6.1	7.9	2.8
1983	100	15.9	57.0	9.7	7.0	7.8	2.6
1984	100	16.8	58.0	9.7	5.3	7.8	2.4
1985	100	13.3	59.9	9.9	6.9	7.6	2.4
1986	100	15.3	60.1	9.6	5.4	7.6	2.0
1987	100	12.6	60.6	9.6	7.5	7.6	2.1
1988	100	12.1	60.4	9.8	7.3	8.3	2.1
1989	100	11.6[a]	61.1	10.0	.	.	.

1) Including material and equipment supplies and primary purchasing.
a) Excluding forestry.

17. ENVIRONMENT

As explained above in Chapter 7 (Agriculture), Bulgaria was already setting up environmental protection bodies in the early 1970s. Many provisions for protecting the environment were adopted, some as early as the 1960s. Nevertheless, conditions are regarded in many respects as unsatisfactory. Even official reports State that, at the end of the 1990s (sic), 60% of sewage in Bulgaria could not be treated and 44% of the atmosphere was polluted at levels above the permitted limits. Although lip service has long been paid to giving environmental protection high priority in Bulgaria, the politicians responsible complain that there is no effective machinery for implementing it, one reason being the lack of strict penalties for pollution. As a new ingredient of a long-term environmental protection programme, stricter inspections and sanctions against sources of pollution were introduced in 1989. An environmental monitoring system was planned long ago but has never progressed beyond its initial stage, as was acknowledged even by officials of the Bulgarian Environmental Protection Committee. The help of Western partners is being sought for the establishment of a country-wide system for measuring and controlling emissions.

The Programme for Environmental Protection and Rehabilitation up to the year 2000 was put forward in the second half of 1989, providing for capital expenditure of some Lv 13 000 million. According to the provisional programme, 50% of all waste should be recyclable by 1995; the target for the year 2000 is 70%. Similar targets were set in previous years, but were mostly not met because of lack of resources.

A total of 14 sewage treatment plants are to be built by 1995, plus five sewage disposal installations in urbanized areas along the Bulgarian Black Sea coast. Tourism, an important source of foreign currency, is now seriously threatened by environmental pollution; the bathing beaches near Varna are classed as heavily polluted, with unfiltered sewage trapped and suspended in the relatively still water.

Particularly in the Sofia conurbation, road traffic is one of the chief sources of pollution. Planned remedies include an extended trolleybus system, a new underground railway in Sofia, traffic reduction measures in cities and more stringent exhaust controls.

17.1 ENVIRONMENTAL DATA

Item	Unit	1981	1985	1988	1989
Domestic refuse collected	1 000 t	5 581	6 773	7 746	9 825
per inhabitant	kg	628	756	862	1 093
Cleaning up coastal waters					
Solid waste removed from harbours	tonnes	91	134	73	121
Oil spills recorded	number	15	14	22	15
Oil removed	1 000 t	83.6	3.5	44.0	32.1
Soil recultivation measures					
Areas protected against erosion	1 000 ha	39.6	58.5	196.9	230.4
Recultivated agricultural land	1 000 ha	1.0	0.8	0.9	1.8
Chemically improved areas (spreading of lime and gypsum)	1 000 ha	15.4	11.2	30.4	29.6
Use of biological and integrated plant protection methods	1 000 ha	395.2	510.5	1 337.7	1 019.8
Urban greenery					
Public parks	number	.	26 314	27 390	28 034
Green space	1 000 ha	.	88.5	128.6	130.0
Planted roadside areas	1 000 ha	.	1.5	1.7	1.8
Green space per inhabitant	m^2	.	100	145	146

18 ECONOMIC PLANNING

Since the Second World War, multi-annual economic plans have become the essential instruments of economic and social development. Following the Two-Year Plan of 1947-48, a series of five-year plans were implemented. At the end of 1965, as part of the economic reform process, the principles of the New System for controlling and planning the national economy were announced, according to which central planning was to be more flexible and to incorporate economic controls to make it more effective. According to the New System, introduced in all business concerns by 1969, only capital expenditure on the establishment of new branches of industry and the expansion of the basic materials industry and infrastructure would be planned centrally. The keynotes of the system were the application of the profit concept as the guiding principle of economic planning, adjusting earnings to productivity and the use of economic levers such as profit, prices, credit, interest rates and taxes. Indices for production volume, capital expenditure, basic materials and supplies and foreign exchange were to be laid down centrally. Central price controls were to continue.

The Fifth Five-Year Plan, completed in 1970, achieved or even surpassed its goals, with a national income in 1970 52% higher than in 1965 (the target having been 50%).

A key element in the Sixth Five-Year Plan (1971-75) was continued industrialization, with mechanical and chemical engineering receiving special attention. Production in these branches was intended to double during the five-year period. It was also planned to set up further agro-industrial complexes in order to boost industrial-scale processing in agriculture. The energy supply was to be improved by building conventional and nuclear power-stations and by obtaining more energy from the Soviet Union and the other CMEA countries.

The focus of the Seventh Five-Year Plan, agreed with the other CMEA Member States with regard to the CMEA Comprehensive Programme, was the modernization and expansion of existing plants. Special priority was to be given to developing the branches marked for CMEA-wide specialization.

In agriculture, specialization and concentration on agro-industrial complexes continued to have priority. In the early 1980s, increasing emphasis was also laid on efforts to develop economic and technical cooperation between Bulgarian and Western firms.

The prime targets of the Eighth Five-Year Plan (1981-1985) were to raise the national income by 25-30% and to boost productivity by 30-35%. Industrial production was to increase by 30-35%, with particular emphasis on heavy engineering. In the energy sector, further oil and gas fields and brown coal deposits were to be opened up. Nuclear power plants were to supply some 26% of energy requirements by 1985. Agriculture (+20 to 22%) was to boost its productivity by introducing new technologies. Measures were planned to improve the supply of fertilizers to agriculture and to open up a further 85 000 ha to irrigation. Private agricultural production by domestic farms was to be boosted in order to improve the supply of meat, fruit and vegetables to the urban population. The real income of the population was to be increased by 16-18% over the five-year period and the average annual wage from Lv 2 185 to Lv 2 500. Only a few of the targets of this plan were achieved, although growth rates indicated that Bulgaria had made progress in catching up with its CMEA partners. Part of the reason for the failure to meet certain targets lay in the bottlenecks in the energy and water industries. In addition to the cutbacks in crude oil supplies from the Soviet Union and power-station breakdowns resulting from poor maintenance, the water shortage caused by drought was a major reason for the unreliable electricity supply. Increased investment in the energy sector was planned. After years of discussion of possible economic reforms, the first practical steps were taken in the early 1980s.

The New Economic Mechanism (NEM) introduced in 1981 underwent repeated modifications showing tendencies towards both decentralization and recentralization. The following are some of the main hallmarks of the Bulgarian NEM: the central planning directives continued to be addressed to the economic units - the fulfilment of the central plan continued to be the basic measure of the success of economic activity and, coupled with rewards or sanctions, the essential factor in decision-making. The economic organizations, a term applied to concentrated structural units such as business associations, industrial combines, agro-industrial complexes, etc., were in particular to be upgraded. The Party continued to exercise strict control, since the managing directors of the business organizations were often also members of the Central Committee.

In practice, the reforms did not bite as had been hoped. Some of the main reasons for this lay in intrinsic contradictions within the NEM, a lack of stability in certain regulations and normative provisions, undermining by administrative practices and resistance to the reforms in the Party and State bureaucracies, among management and at grass roots.

Attempts at reforms outside the NEM in the strict sense were made in the first half of the 1980s in three areas: the founding of State-owned small and medium-sized industrial firms, the promotion of personal businesses, particularly in agriculture, and new opportunities for supplementary work, i.e. work for employees in the socialist sector outside regular working hours or part-time work for persons not previously economically active.

In view of the economic difficulties which had been particularly evident in the closing phase of the previous planning period, the targets of the 1986-90 Five-Year Plan appeared very ambitious. The idea was to give a substantial boost to the economy and achieve a further rise in living standards through a scientific and technological revolution. The desired qualitatively new growth involved the (familiar) goals of a comprehensive rise in the efficiency of the national economy, with the emphasis on new technology, retooling and economic restructuring. Automation, computerization, resource-saving and science-intensive technologies, the development and use of new materials, bio-technologies, laser technology and precision engineering were to play key roles in the technological revolution. Growth in produced national income was intended to accelerate to 5.4% per annum. An average annual increase of 5% was planned for industrial production and approximately 6% for agricultural production.

Since the reforms of the first half of the 1980s had proved largely ineffective, new reforms were launched in 1986, the economy having run into further difficulties in the previous year. Another crucial factor was the challenge posed by the new Soviet reforms. For the time being, however, the steps towards reform were largely restricted to organizational restructuring. A significant turning point, however, was the decree issued in January 1989 which gave equal rights to different forms of ownership. This affected :

(i) State property, which was to continue to play a dominant role in key sectors of the economy;

(ii) a variety of forms of collective ownership were also to be allowed;

(iii) cooperatives were to be extended and freed from administrative restrictions;

(iv) public limited companies were to be set up as a new form of collective property;

(v) the opportunity to lease means of production and use it for work on one's own account further diversified the property structure;

(vi) private economic activity was allowed to a hitherto unheard-of extent. Private individuals were granted the right to set up firms and employ up to ten persons on a regular basis.

According to the government, the abolition of the State ownership monopoly opened the way for the first time to socialist economic competition. A transition from the former planning based on indicators to indirect control of the economy based on global targets and economic regulators such as credit, interest rates and taxes was announced at the same time. Doubts were, however, soon expressed in various quarters about the feasibility of this indirect planning.

For agriculture, the changes in the economic mechanism meant the abolition of compulsory plans. One-year and five-year business plans are now formulated independently by agricultural enterprises, unsing information on State planning and fixed economic regulators. In the process farms can conduct an ongoing dialogue with the supervisory authorities and to a large extent reconcile their own interests with those of society.

State contracts are to be awarded on an entirely voluntary basis, with the stimulus of guaranteed supplies of materials and equipment. Restricting them to two-thirds of the production potential of all economic units in the agricultural sector, as laid down in the decree by the National Council, can be regarded as an interim measure. The proportion is to be reduced to a minimum when conditions allow this.

Despite the reforms, Western experts assessed Bulgaria's economic position at the end of the 1980s as follows:

(i) gross foreign debt which had risen to US$ 10 000 million;

(ii) a deterioration in the international trade structure, particularly in foreign currency receipts from exports, with an increased need for foreign currency for debt servicing, inter alia;

(iii) for the first time, negative nominal growth of 0.4% in the economy as a whole in 1989 - which meant a real shrinkage of 8-12%, depending on the inflation estimate;

(iv) a decline in industrial production in 1989 to nominal growth of only 1.1%, signifying real shrinkage in most branches;

(v) a further decline in agricultural production in 1989, despite extremely low figures in the previous year and good weather conditions;

(vi) low profitability of firms in large sectors of the Bulgarian economy.

19. SOURCES *)

Publisher	Title
Centralno Statisticesko Upravlenie, Sofija	Statisticeski godisnik na Narodna Republika Bulgarija 1988
	Statisticeski spravocnik 1989
	Statisticeski izvestija
	Turizm 1988

*) National sources only; readers are referred to international statistical source material (see list in the annex to Vierteljahreshefte zur Auslandsstatistik) and to other publications by the Statistisches Bundesamt on the statistics of foreign countries.

Further publications on Bulgaria
by the Federal German departments

Bundesstelle für Außenhandelsinformation (BfAI)
Agrippastraße 87-93, D-W-5000 Köln 1, Tel. n° (0221) 2057-316

Wirtschaftsstruktur und -entwicklung
81.104.89.125 Bulgarien zur Jahresmitte 1989
27.018.90.125 Wirtschaftsentwicklung 1989

Geschäftspraxis
80.002.89.125 Kurzmerkblatt Bulgarien

Also: Wirtschaftsdaten Aktuell, Wirtschafts- und Steuerrecht (on request).

A charge is made for supplying these publications.

Bundesverwaltungsamt
Postfach 68 01 69, D-W-5000 Köln 60, Tel. n° (0221) 7780-2740

Informationsschriften für Auslandtätige und Auswanderer
Merkblatt Nr. 18 - Bulgarien - Situation December 1987

Sources used by IALA:
Gesetz zum Schutz und der Reproduktion der natürlichen Umwelt. - In: Rabotnicesko delo Sofia (1989-10-05).

Naidenow, N.: Ökologisch-ökonomische Anforderungen an die Intensivierung der landwirtschaftlichen Produktion. - In: Internationale Zeitschrift für Landwirtschaft/IZL. - Moskau/Berlin (1988) 3.

Tanow, A.; Zonewa, M.; Trynkow, I.: Ökonomische Bewertung agrotechnischer Maßnahmen zur Verhütung der Nitratbelastung des Grundwassers. - In: IZL. - Moskau/Berlin (1988) 3.

Baikow, B.: Ökotechnik in der industriemäßigen Tierproduktion. - In: IZL. - Moskau/Berlin (1988) 3.

Petrowa, D.: Bodenschützende und ökonomische Effektivität des erosionsverhütenden Ackerbaus. - In: Ekonomika i upravlenie na selskoto stopanstvo. - Sofia (1989) 6/7.

Naidenow, N.; Wojtschewa, M.: Ökonomische Probleme der Ökologisierung der industrie-mäßigen Tierproduktion. - In: Internationale Agrar-Industrie Zeitschrift/IAIZ - Moskau/Berlin (1990) 2.

Simowa, A.: Die Agrarpolitik der entwickelten kapitalistischen Länder und die Ausweitung des Agrarexports der VR Bulgarien in diese Länder. - In: Ekonomika upravlenie na selskoto stopanstvo. - Sofia (1989) 2.

Internal CMEA statistics:
Schaterow; M.: Soziale Probleme des bulgarischen Dorfes. - In: IZL. - Moskau/Berlin (1984) 6.

Narodnoe chozjajstvo stran-clenov SEV v 1988 godu. - Moskva 1989.

Dekow, D. W.: Die Weiterbildung der Hochschulkader aus der Landwirtschaft und Lebensmittelindustrie Bulgariens. - In: IZL. - Moskau/Berlin (1988) 6.

Grosew, I.: Zur Vervollkommnung des Wirtschaftsmechanismus in der agrarindustriellen Sphäre Bulgariens. - In: IAIZ - Moskau/Berlin (1989) 4.

Mischew, W.: Sozialistische Konkurrenz unter den Bedingungen der Selbstverwaltung in den Landwirtschaftsbetrieben. - In: IAIZ (1989) 3.
Mischew, W.: Probleme der Vervollkommnung der Agrarpreise in Bulgarien. - In: IAIZ - Moskau/Berlin (1989) 4.

Mischew, W.: Vervollkommnung der Wirtschaftsführung und der Leitung in der Landwirtschaft Bulgariens. - In: IZL. - Moskau/Berlin (1988) 5.

Über die Umgestaltung der Landwirtschaft Bulgariens. - In: Bjulleten' innostrannoj kommerceskoj informazii (1988) 128.

Bericht über die Nationalversammlung der VRB zu Problemen der Umgestaltung der Landwirtschaft. - In: Bjulleten' innostrannoj kommerceskoj informazii (1988) 97.

Shiwkow, T.: Referat auf dem Plenum des ZK der BKP. Über die Agrarpolitik unter den Bedingungen der Umgestaltung. - In: Selskaja Shizn. - Moskva (1989-05-05).

Luzow, I.: Die Umgestaltung und das Genossenschaftswesen in Bulgarien. - In: IAIZ - Moskau/Berlin (1990) 1.

Uljukaev, A.: Vektor der Veränderungen. Über die ökonomische Reform in der VRB. - In: Kommunist (1989) 100.

Gesetz über landwirtschaftlich genutzte Bodenflächen. - In: Kooperativna selo. - Sofia (1990) 100.

Statisticeskij ezegodnik stran-clenov SEV v 1988 godu. - Moskva 1989.

Rabotnicesko delo (1990-01-30).

Erlaß Nr. 922 des Ministerrates der VRB über die Bodennutzung und die Ausführung landwirtschaftlicher Tätigkeit. - In: Kooperativno selo (1989-05-23).

Zur individuellen Kleinproduktion in Bulgarien. - In: IAIZ - Moskau/Berlin (1990) 2.

Pejtschew, M.; Stalew, I.: Probleme und Perspektiven der Entwicklung und Anwendung von Automatisierungsmitteln in der Lebensmittelindustrie Bulgariens. - In: IZL - Moskau/Berlin (1989) 6.

Petrow, S.: Die Kühlwirtschaft als Reserve für die Verringerung der Verluste an landwirtschaftlichen Erzeugnissen. - In: Ikonomika i upravlenie na selskoto stopanstvo. - Sofia (1989) 6/7.

European Communities — Commission

Country profile — Bulgaria 1991

Luxembourg: Office for Official Publications of the European Communities

1991 — 115 pp. — 17 x 24 cm

ISBN 92-826-3124-9

Catalogue number: CA-71-91-348-EN-C

Price (excluding VAT) in Luxembourg: ECU 11

Bulgaria is the most heavily urbanized country in south-eastern Europe.

In the early 1970s, almost half of Bulgaria's population still lived in the countryside; by 1990, 70% were living in urban areas. This trend went hand in hand with a radical change in the structure of economic activity. Agricultural workers declined from over 35% of the workforce in 1970 to less than 20% in 1988, while numbers of employees in both manufacturing industry and the services grew proportionately.

Industrialization brought with it increasing environmental pollution. Although environmental protection agencies had been set up by the early 1970s, pollution levels are alarming. Tourism, an important source of foreign currency, is already under serious threat from polluted bathing waters.

These developments and other topics such as Bulgaria's foreign trade, money and credit, public finance, wages and salaries, prices and national accounts are discussed in this country report and illustrated by the most recent statistics.

Venta y suscripciones • Salg og abonnement • Verkauf und Abonnement • Πωλήσεις και συνδρομές
Sales and subscriptions • Vente et abonnements • Vendita e abbonamenti
Verkoop en abonnementen • Venda e assinaturas

BELGIQUE / BELGIË

Moniteur belge / Belgisch Staatsblad
Rue de Louvain 42 / Leuvenseweg 42
1000 Bruxelles / 1000 Brussel
Tél. (02) 512 00 26
Fax 511 01 84
CCP / Postrekening 000-2005502-27

Autres distributeurs / Overige verkooppunten

Librairie européenne/ Europese Boekhandel
Avenue Albert Jonnart 50 / Albert Jonnartlaan 50
1200 Bruxelles / 1200 Brussel
Tél. (02) 734 02 81
Fax 735 08 60

Jean De Lannoy
Avenue du Roi 202 /Koningslaan 202
1060 Bruxelles / 1060 Brussel
Tél. (02) 538 51 69
Télex 63220 UNBOOK B
Fax (02) 538 08 41

CREDOC
Rue de la Montagne 34 / Bergstraat 34
Bte 11 / Bus 11
1000 Bruxelles / 1000 Brussel

DANMARK

J. H. Schultz Information A/S
EF-Publikationer
Ottiliavej 18
2500 Valby
Tlf. 36 44 22 66
Fax 36 44 01 41
Girokonto 6 00 08 86

BR DEUTSCHLAND

Bundesanzeiger Verlag
Breite Straße
Postfach 10 80 06
5000 Köln 1
Tel. (02 21) 20 29-0
Telex ANZEIGER BONN 8 882 595
Fax 20 29 278

GREECE

G.C. Eleftheroudakis SA
International Bookstore
Nikis Street 4
10563 Athens
Tel. (01) 322 63 23
Telex 219410 ELEF
Fax 323 98 21

ESPAÑA

Boletín Oficial del Estado
Trafalgar, 27
28010 Madrid
Tel. (91) 44 82 135

Mundi-Prensa Libros, S.A.
Castelló, 37
28001 Madrid
Tel. (91) 431 33 99 (Libros)
431 32 22 (Suscripciones)
435 36 37 (Dirección)
Télex 49370-MPLI-E
Fax (91) 575 39 98

Sucursal:
Librería Internacional AEDOS
Consejo de Ciento, 391
08009 Barcelona
Tel. (93) 301 86 15
Fax (93) 317 01 41

Llibreria de la Generalitat de Catalunya
Rambla dels Estudis, 118 (Palau Moja)
08002 Barcelona
Tel. (93) 302 68 35
302 64 62
Fax (93) 302 12 99

FRANCE

Journal officiel
Service des publications des Communautés européennes
26, rue Desaix
75727 Paris Cedex 15
Tél. (1) 40 58 75 00
Fax (1) 40 58 75 74

IRELAND

Government Publications Sales Office
Sun Alliance House
Molesworth Street
Dublin 2
Tel. (1) 71 03 09

or by post

Government Stationery Office
EEC Section
6th floor
Bishop Street
Dublin 8
Tel. (1) 78 16 66
Fax (1) 78 06 45

ITALIA

Licosa Spa
Via Benedetto Fortini, 120/10
Casella postale 552
50125 Firenze
Tel. (055) 64 54 15
Fax 64 12 57
Telex 570466 LICOSA I
CCP 343 509

Subagenti:

Libreria scientifica Lucio de Biasio - AEIOU
Via Meravigli, 16
20123 Milano
Tel. (02) 80 76 79

Herder Editrice e Libreria
Piazza Montecitorio, 117-120
00186 Roma
Tel. (06) 679 46 28/679 53 04

Libreria giuridica
Via XII Ottobre, 172/R
16121 Genova
Tel. (010) 59 56 93

GRAND-DUCHÉ DE LUXEMBOURG

Messageries Paul Kraus
11, rue Christophe Plantin
2339 Luxembourg
Tél. 499 88 88
Télex 2515
Fax 499 88 84 44
CCP 49242-63

NEDERLAND

SDU Overheidsinformatie
Externe Fondsen
Postbus 20014
2500 EA 's-Gravenhage
Tel. (070) 37 89 911
Fax (070) 34 75 778

PORTUGAL

Imprensa Nacional
Casa da Moeda, EP
Rua D. Francisco Manuel de Melo, 5
1092 Lisboa Codex
Tel. (01) 69 34 14

Distribuidora de Livros Bertrand, Ld.ª
Grupo Bertrand, SA
Rua das Terras dos Vales, 4-A
Apartado 37
2700 Amadora Codex
Tel. (01) 49 59 050
Telex 15798 BERDIS
Fax 49 60 255

UNITED KINGDOM

HMSO Books (PC 16)
HMSO Publications Centre
51 Nine Elms Lane
London SW8 5DR
Tel. (071) 873 2000
Fax GP3 873 8463
Telex 29 71 138

ÖSTERREICH

Manz'sche Verlags- und Universitätsbuchhandlung
Kohlmarkt 16
1014 Wien
Tel. (0222) 531 61-0
Telex 11 25 00 BOX A
Fax (0222) 531 61-81

SUOMI

Akateeminen Kirjakauppa
Keskuskatu 1
PO Box 128
00101 Helsinki
Tel. (0) 121 41
Fax (0) 121 44 41

NORGE

Narvesen Information center
Bertrand Narvesens vei 2
PO Box 6125 Etterstad
0602 Oslo 6
Tel. (2) 57 33 00
Telex 79668 NIC N
Fax (2) 68 19 01

SVERIGE

BTJ
Box 200
22100 Lund
Tel. (046) 18 00 00
Fax (046) 18 01 25

SCHWEIZ / SUISSE / SVIZZERA

OSEC
Stampfenbachstraße 85
8035 Zürich
Tel. (01) 365 54 49
Fax (01) 365 54 11

ČESKOSLOVENSKO

NIS
Havelkova 22
13000 Praha 3
Tel. (02) 235 84 46
Fax 42-2-264775

MAGYARORSZÁG

Agroinform
Budapest I. Kir.
Attila út 93
1012 Budapest
Tel. (1) 56 82 11
Telex (22) 4717 AGINF H-61

POLAND

Business Foundation
ul. Krucza 38/42
00-512 Warszawa
Tel. (22) 21 99 93, 628-28-82
International Fax&Phone
(0-39) 12-00-77

YUGOSLAVIA

Privredni Vjesnik
Bulevar Lenjina 171/XIV
11070 Beograd
Tel. (11) 123 23 40

CYPRUS

Cyprus Chamber of Commerce and Industry
Chamber Building
38 Grivas Dhigenis Ave
3 Deligiorgis Street
PO Box 1455
Nicosia
Tel. (2) 449500/462312
Fax (2) 458630

TÜRKIYE

Pres Gazete Kitap Dergi Pazarlama Dağitim Ticaret ve sanayi AŞ
Narlibahçe Sokak N. 15
Istanbul-Cağaloğlu
Tel. (1) 520 92 96 - 528 55 66
Fax 520 64 57
Telex 23822 DSVO-TR

AUTRES PAYS
OTHER COUNTRIES
ANDERE LÄNDER

Office des publications officielles des Communautés européennes
2, rue Mercier
2985 Luxembourg
Tél. 49 92 81
Télex PUBOF LU 1324 b
Fax 48 85 73
CC bancaire BIL 8-109/6003/700

CANADA

Renouf Publishing Co. Ltd
Mail orders — Head Office:
1294 Algoma Road
Ottawa, Ontario K1B 3W8
Tel. (613) 741 43 33
Fax (613) 741 54 39
Telex 0534783

Ottawa Store:
61 Sparks Street
Tel. (613) 238 89 85

Toronto Store:
211 Yonge Street
Tel. (416) 363 31 71

UNITED STATES OF AMERICA

UNIPUB
4611-F Assembly Drive
Lanham, MD 20706-4391
Tel. Toll Free (800) 274 4888
Fax (301) 459 0056

AUSTRALIA

Hunter Publications
58A Gipps Street
Collingwood
Victoria 3066

JAPAN

Kinokuniya Company Ltd
17-7 Shinjuku 3-Chome
Shinjuku-ku
Tokyo 160-91
Tel. (03) 3439-0121

Journal Department
PO Box 55 Chitose
Tokyo 156
Tel. (03) 3439-0124

17 11 10

CA-71-91-348-EN-C

Bulgaria is the most heavily urbanized country in south-eastern Europe.

In the early 1970s, almost half of Bulgaria's population still lived in the countryside; by 1990, 70% were living in urban areas. This trend went hand in hand with a radical change in the structure of economic activity. Agricultural workers declined from over 35% of the workforce in 1970 to less than 20% in 1988, while numbers of employees in both manufacturing industry and the services grew proportionately.

Industrialization brought with it increasing environmental pollution. Although environmental protection agencies had been set up by the early 1970s, pollution levels are alarming. Tourism, an important source of foreign currency, is already under serious threat from polluted bathing waters.

These developments and other topics such as Bulgaria's foreign trade, money and credit, public finance, wages and salaries, prices and national accounts are discussed in this country report and illustrated by the most recent statistics.

Price (excluding VAT) in Luxembourg: ECU 11

ISBN 92-826-3124-9

OFFICE FOR OFFICIAL PUBLICATIONS
OF THE EUROPEAN COMMUNITIES
L-2985 Luxembourg