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Report No. 1601-RO

Romania The Industrialization of an Agrarian Economy Under Socialist Planning

(In Four Volumes)

Volume I

March 31, 1978

Country Programs Department | Europe, Middle East and North Africa Region

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CURRENCY EQUIVALENTS

1. Official Rate

Lei 4.47 = US\$1.00 1/

Leu 1.00 = US\$0.22

2. Tourist Rate

Lei 12.00 = US\$1.00

Leu 1.00 = US\$0.08

3. Conversion Rate for Traded Goods

Lei 18.00 = US\$1.00 1/

Leu 1.00 = US\$0.06

FISCAL YEAR

January 1 - December 31

1/ Conversions from lei and lei valuta into dollars in the report are made using the exchange rates in force at the time. Exchange rates and the periods in which they were in force are given in the footnotes to pages 37 of the Report.

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ROMANIA REP. OF - SOCIAL INDICATORS DATA SHEET

LAND AREA (THOU KM2)	ROMANIA REP. OF - SOCIAL INDICATORS DATA SHEET						
	ROMANIA REP. OF			REFERENCE COUNTRIES (1970)			
TOTAL	237.5	MOST RECENT ESTIMATE			YUGOSLAVIA	ITALY	GERMANY FED. REP. OF***
AGRIC.	149.0	1960	1970	ESTIMATE			
GNP PER CAPITA (US\$)		..	550.0**	1450.0**	830.0*	1910.0*	4420.0*
POPULATION AND VITAL STATISTICS							
POPULATION (MID-YR, MILLION)		18.4	20.3	21.4/a	20.4	53.7	61.6
POPULATION DENSITY PER SQUARE KM.		77.0	85.0	90.0/a	80.0	178.0	240.0
PER SQ. KM. AGRICULTURAL LAND		126.0	136.0	144.0/a	139.0	266.0	439.0
VITAL STATISTICS							
CRUDE BIRTH RATE (/THOU, AV)		23.9	19.0	19.7	21.0	18.6	17.3
CRUDE DEATH RATE (/THOU, AV)		10.9	8.9	9.3	9.1	9.7	11.6
INFANT MORTALITY RATE (/THOU)		75.7	49.4	34.7	55.5	29.6	23.6
LIFE EXPECTANCY AT BIRTH (YRS)		65.9	67.7	69.1	67.7	71.9	70.3
GROSS REPRODUCTION RATE		1.2	1.3	1.3	1.3	1.3	1.2
POPULATION GROWTH RATE (%)							
TOTAL		1.2	1.0	1.0	1.0	0.8	1.0
URBAN		3.8	3.4	2.1	4.6	0.8	4.1
URBAN POPULATION (% OF TOTAL)		32.0	40.8	43.0	38.7	51.5	62.4
AGE STRUCTURE (PERCENT)							
0 TO 14 YEARS		27.9/a	25.9	25.4/a	28.3	24.4	23.2
15 TO 64 YEARS		64.9/a	65.5	64.8/a	64.3	65.2	63.6
65 YEARS AND OVER		7.2/a	8.6	9.8/a	7.4	10.4	13.2
AGE DEPENDENCY RATIO							
ECONOMIC DEPENDENCY RATIO		0.5	0.5	0.5	0.6	0.5	0.6
		0.7/b	0.7/a	0.7/a,b	..	0.9/a	0.9
FAMILY PLANNING							
ACCEPTORS (CUMULATIVE, THOU)	
USERS (% OF MARRIED WOMEN)	
EMPLOYMENT							
TOTAL LABOR FORCE (THOUSAND)		9600.0	9900.0	10200.0/a	..	19600.0	26500.0
LABOR FORCE IN AGRICULTURE (%)		66.0	49.0	36.0/a	..	19.0	8.9
UNEMPLOYED (% OF LABOR FORCE)		3.1	0.7
INCOME DISTRIBUTION							
% OF PRIVATE INCOME REC'D BY-							
HIGHEST 5% OF HOUSEHOLDS		15.1	..	..
HIGHEST 20% OF HOUSEHOLDS		41.4	..	..
LOWEST 20% OF HOUSEHOLDS		6.6	..	..
LOWEST 40% OF HOUSEHOLDS		18.4	..	..
DISTRIBUTION OF LAND OWNERSHIP							
% OWNED BY TOP 10% OF OWNERS		15.1/a	..	..
% OWNED BY SMALLEST 10% OWNERS		84.9/b	..	..
HEALTH AND NUTRITION							
POPULATION PER PHYSICIAN		740.0	680.0	620.0	1010.0	550.0	580.0
POPULATION PER NURSING PERSON		300.0	200.0	180.0	410.0	470.0/b	350.0
POPULATION PER HOSPITAL BED		180.0/c	140.0/b	120.0/c	170.0	90.0	90.0
PER CAPITA SUPPLY OF -							
CALORIES (% OF REQUIREMENTS)		105.0	118.0	118.0/d	124.0	126.0	121.0
PROTEIN (GRAMS PER DAY)		81.0	92.0	90.0/d	92.0	100.0	88.0
-OF WHICH ANIMAL AND PULSE		24.0	28.0	..	29.0	42.0	56.0
DEATH RATE (/THOU) AGES 1-4		4.9/a	2.4	2.1	2.6	1.0	0.9
EDUCATION							
ADJUSTED ENROLLMENT RATIO		98.0	113.0	108.0	94.0	110.0	129.0
PRIMARY SCHOOL		24.0	44.0	49.0	45.0	60.0	66.0
SECONDARY SCHOOL	
YEARS OF SCHOOLING PROVIDED (FIRST AND SECOND LEVEL)		12.0	14.0	14.0	12.0	13.0	15.0
VOCATIONAL ENROLLMENT (% OF SECONDARY)		54.0	58.0	67.0	72.0	26.0	48.0
ADULT LITERACY RATE (%)		98.0/e	85.0	97.0	99.0
HOUSING							
PERSONS PER ROOM (URBAN)		..	1.3/c	..	..	..	0.7/a
OCCUPIED DWELLINGS WITHOUT PIPED WATER (%)		..	88.0/c,d	..	..	..	0.3/b
ACCESS TO ELECTRICITY (% OF ALL DWELLINGS)		..	49.0/c	..	..	..	100.0
RURAL DWELLINGS CONNECTED TO ELECTRICITY (%)		..	27.0/c	..	..	..	..
CONSUMPTION							
RADIO RECEIVERS (PER THOU POP)		109.0	152.0	146.0	165.0	218.0	318.0
PASSENGER CARS (PER THOU POP)		35.0	190.0	220.0
ELECTRICITY (KWH/YR PER CAP)		414.0	1615.0	2411.0	1288.0	2262.0	4128.0
NEWSPRINT (KG/YR PER CAP)		2.1	2.6	2.1	4.3	5.3	17.7

SEE NOTES AND DEFINITIONS ON REVERSE

NOTES

Unless otherwise noted, data for 1960 refer to any year between 1959 and 1961, for 1970 between 1968 and 1970 and for Most Recent Estimate between 1973 and 1975.

* GNP per capita data are based on the World Bank Atlas methodology (1974-76 basis).

** Not comparable to those for other Centrally Planned Economies. Derived by using the Bank Atlas methodology, by adjusting official Romanian National Accounts data and converting them into US dollars at the effective exchange rate for foreign trade transactions which approximates Lei 20 per US dollar.

*** The Federal Republic of Germany has been selected as an objective country because it is an industrialized European country with major trade ties with Romania.

<u>ROMANIA</u>	<u>1960</u>	<u>/a</u> 1962; <u>/b</u> Ratio of population under 15 and 65 and over to total labor force; <u>/c</u> Hospitals only, excludes sanitaris and maternity homes.
	<u>1970</u>	<u>/a</u> Ratio of population under 15 and 65 and over to total labor force; <u>/b</u> Hospitals only, excludes sanitaris and maternity homes; <u>/c</u> 1966; <u>/d</u> Inside only.
	<u>MOST RECENT ESTIMATE:</u>	<u>/a</u> 1976; <u>/b</u> Ratio of population under 15 and 65 and over to total labor force; <u>/c</u> Hospitals only, excludes sanitaris and maternity homes; <u>/d</u> 1969-71 average; <u>/e</u> 1974, official estimate is 100 percent.
<u>YUGOSLAVIA</u>	<u>1970</u>	<u>/a</u> Agriculture land held by social sector "Kombinate"; <u>/b</u> Agriculture land held by private small-holders "10 hectares maximum"; <u>/c</u> Including midwives, assistant midwives, assistant nurses and nursing auxiliaries.
<u>ITALY</u>	<u>1970</u>	<u>/a</u> Ratio of population under 15 and 65 and over to total labor force; <u>/b</u> Hospital personnel.
<u>GERMANY FED. REP. OF</u>	<u>1970</u>	<u>/a</u> Total, urban and rural; <u>/b</u> Inside only.

R18, February 21, 1978

DEFINITIONS OF SOCIAL INDICATORS

Land Area (thou km²)

Total - Total surface area comprising land area and inland waters.

Agric. - Most recent estimate of agricultural area used temporarily or permanently for crops, pastures, market & kitchen gardens or to lie fallow.

GNP per capita (US\$) - GNP per capita estimates at current market prices, calculated by same conversion method as World Bank Atlas (1973-75 basis); 1960; 1970 and 1975 data.

Population and vital statistics:

Population (mid-year million) - As of July first; if not available, average of two end-year estimates; 1960, 1970 and 1975 data.

Population density - per square km - Mid-year population per square kilometer (100 hectares) of total area.

Population density - per square km of agric. land - Computed as above for agricultural land only.

Vital statistics

Crude birth rate per thousand, average - Annual live births per thousand of mid-year population; ten-year arithmetic averages ending in 1960 and 1970, and five-year average ending in 1975 for most recent estimate.

Crude death rate per thousand, average - Annual deaths per thousand of mid-year population; ten-year arithmetic averages ending in 1960 and 1970 and five-year average ending in 1975 for most recent estimate.

Infant mortality rate (/thou) - Annual deaths of infants under one year of age per thousand live births.

Life expectancy at birth (yrs) - Average number of years of life remaining at birth; usually five-year averages ending in 1960, 1970 and 1975 for developing countries.

Gross reproduction rate - Average number of live daughters a woman will bear in her normal reproductive period if she experiences present age-specific fertility rates; usually five-year averages ending in 1960, 1970 and 1975 for developing countries.

Population growth rate (%) - total - Compound annual growth rates of mid-year population for 1950-60, 1960-70 and 1970-75.

Population growth rate (%) - urban - Computed like growth rate of total population; different definitions of urban areas may affect comparability of data among countries.

Urban population (% of total) - Ratio of urban to total population; different definitions of urban areas may affect comparability of data among countries.

Age structure (percent) - Children (0-14 years), working-age (15-64 years), and retired (65 years and over) as percentages of mid-year population.

Age dependency ratio - Ratio of population under 15 and 65 and over to those of ages 15 through 64.

Economic dependency ratio - Ratio of population under 15 and 65 and over to the labor force in age group of 15-64 years.

Family planning - acceptors (cumulative, thou) - Cumulative number of acceptors of birth-control devices under auspices of national family planning program since inception.

Family planning - users (% of married women) - Percentages of married women of child-bearing age (15-44 years) who use birth-control devices to all married women in same age group.

Employment

Total labor force (thousand) - Economically active persons, including armed forces and unemployed but excluding housewives, students, etc.; definitions in various countries are not comparable.

Labor force in agriculture (%) - Agricultural labor force (in farming, forestry, hunting and fishing) as percentage of total labor force.

Unemployed (% of labor force) - Unemployed are usually defined as persons who are able and willing to take a job, out of a job on a given day, remained out of a job, and seeking work for a specified minimum period not exceeding one week; may not be comparable between countries due to different definitions of unemployed and source of data, e.g., employment office statistics, sample surveys, compulsory unemployment insurance.

Income distribution - Percentage of private income (both in cash and kind) received by richest 5%, richest 20%, poorest 20%, and poorest 40% of households.

Distribution of land ownership - Percentages of land owned by wealthiest 10% and poorest 10% of land owners.

Health and Nutrition

Population per physician - Population divided by number of practicing physicians qualified from a medical school at university level.

Population per nursing person - Population divided by number of practicing male and female graduate nurses, "trained" or "certified" nurses, and auxiliary personnel with training or experience.

Population per hospital bed - Population divided by number of hospital beds available in public and private general and specialized hospital and rehabilitation centers; includes nursing homes and establishments for custodial and preventive care.

Per capita supply of calories (% of requirements) - Computed from energy equivalent of net food supplies available in country per capita per day; available supplies comprise domestic production, imports less exports, and changes in stock; net supplies exclude animal feed, seeds, quantities used in food processing and losses in distribution; requirements were estimated by FAO based on physiological needs for normal activity and health considering environmental temperature, body weights, age and sex distributions of population, and allowing 10% for waste at household level.

Per capita supply of protein (gram per day) - Protein content of per capita net supply of food per day; net supply of food is defined as above; requirements for all countries established by USDA Economic Research Services provide for a minimum allowance of 60 grams of total protein per day, and 20 grams of animal and pulse protein, of which 10 grams should be animal protein; these standards are lower than those of 75 grams of total protein and 23 grams of animal protein as an average for the world, proposed by FAO in the Third World Food Survey.

Per capita protein supply from animal and pulse - Protein supply of food derived from animals and pulses in grams per day.

Death rate (/thou) ages 1-4 - Annual deaths per thousand in age group 1-4 years, to children in this age group; suggested as an indicator of malnutrition.

Education

Adjusted enrollment ratio - primary school - Enrollment of all ages as percentage of primary school-age population; includes children aged 6-11 years but adjusted for different lengths of primary education; for countries with universal education, enrollment may exceed 100% since some pupils are below or above the official school age.

Adjusted enrollment ratio - secondary school - Computed as above; secondary education requires at least four years of approved primary instruction; provides general, vocational or teacher training instructions for pupils of 12 to 17 years of age; correspondence courses are generally excluded.

Years of schooling provided (first and second levels) - Total years of schooling; at secondary level, vocational instruction may be partially or completely excluded.

Vocational enrollment (% of secondary) - Vocational institutions include technical, industrial or other programs which operate independently or as departments of secondary institutions.

Adult literacy rate (%) - Literate adults (able to read and write) as percentage of total adult population aged 15 years and over.

Housing

Persons per room (urban) - Average number of persons per room in occupied conventional dwellings in urban areas; dwellings exclude non-permanent structures and unoccupied parts.

Occupied dwellings without piped water (%) - Occupied conventional dwellings in urban and rural areas without inside or outside piped water facilities as percentage of all occupied dwellings.

Access to electricity (% of all dwellings) - Conventional dwellings with electricity in living quarters as percent of total dwellings in urban and rural areas.

Rural dwellings connected to electricity (%) - Computed as above for rural dwellings only.

Consumption

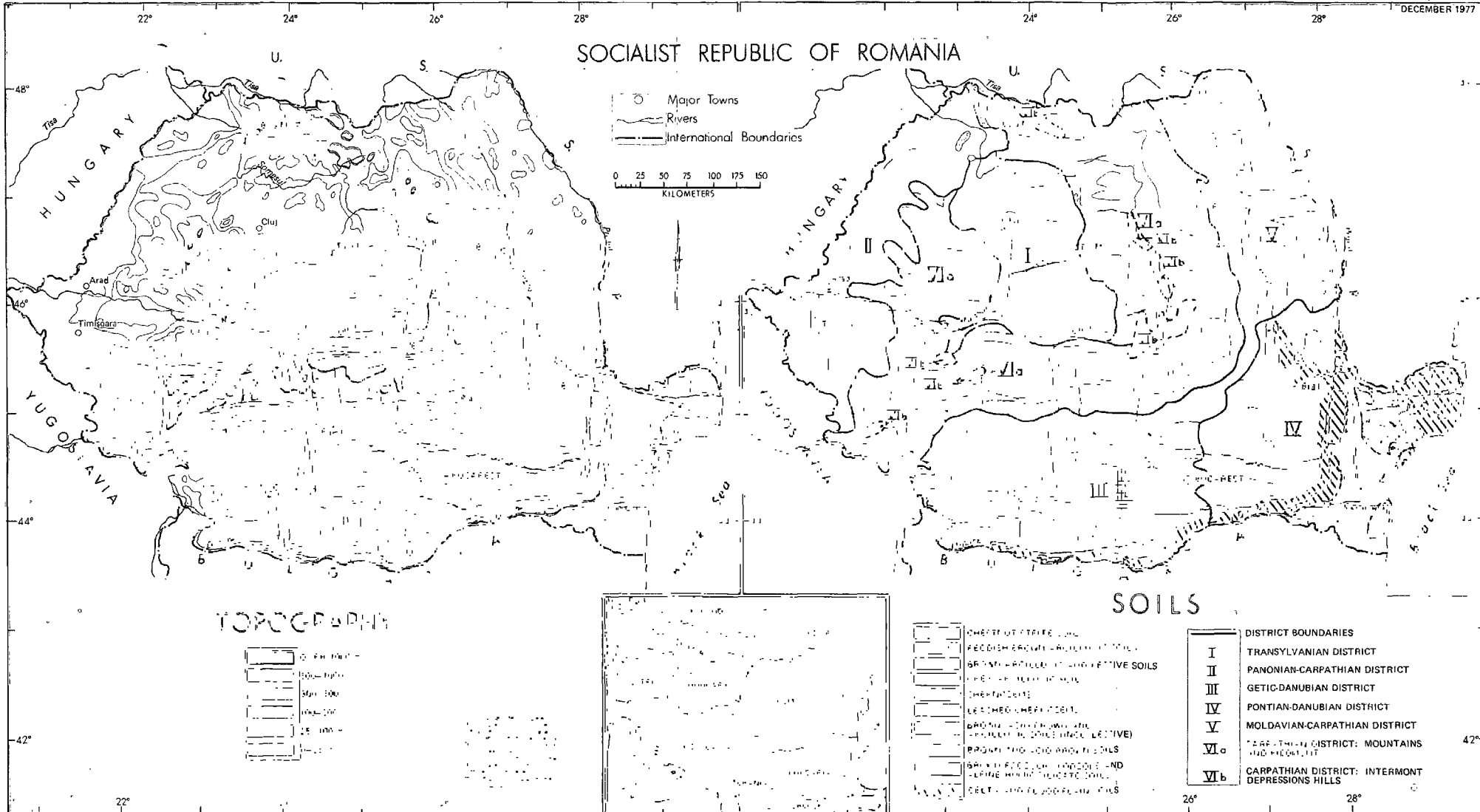
Radio receivers (per thou pop) - All types of receivers for radio broadcasts to general public per thousand of population; excludes unlicensed receivers in countries and in years when registration of radio sets was in effect; data for recent years may not be comparable since most countries abolished licensing.

Passenger cars (per thou pop) - Passenger cars comprise motor cars seating less than eight persons; excludes ambulances, hearses and military vehicles.

Electricity (kwh/yr per cap) - Annual consumption of industrial, commercial, public and private electricity in kilowatt hours per capita, generally based on production data, without allowance for losses in grids but allowing for imports and exports of electricity.

Newspaper (kg/yr per cap) - Per capita annual consumption in kilograms estimated from domestic production plus net imports of newsprint.

SOCIALIST REPUBLIC OF ROMANIA



Major Towns
 Rivers
 International Boundaries

0 25 50 75 100 125 150
KILOMETERS

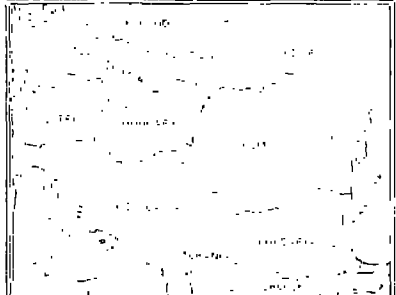
TOPOGRAPHY

0 - 200	200 - 500	500 - 1000	1000 - 2000	2000 - 3000	3000 - 4000	4000 - 5000
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SOILS

I	CHERTY CHERNOZEM
II	REDISH BROWN AND RED SOILS
III	BROWN AND BROWNISH RED SOILS
IV	LEACHED CHERNOZEM
V	BROWN AND BROWNISH RED SOILS (MOUNTAIN SOILS)
VI _a	BROWN AND BROWNISH RED SOILS (MOUNTAIN SOILS)
VI _b	LEACHED CHERNOZEM

I	TRANSYLVANIAN DISTRICT
II	PANONIAN-CARPATHIAN DISTRICT
III	GETIC-DANUBIAN DISTRICT
IV	PONTIAN-DANUBIAN DISTRICT
V	MOLDAVIAN-CARPATHIAN DISTRICT
VI _a	CARPATHIAN DISTRICT: MOUNTAINS AND HIGHLANDS
VI _b	CARPATHIAN DISTRICT: INTERMOUNTAIN DEPRESSIONS HILLS

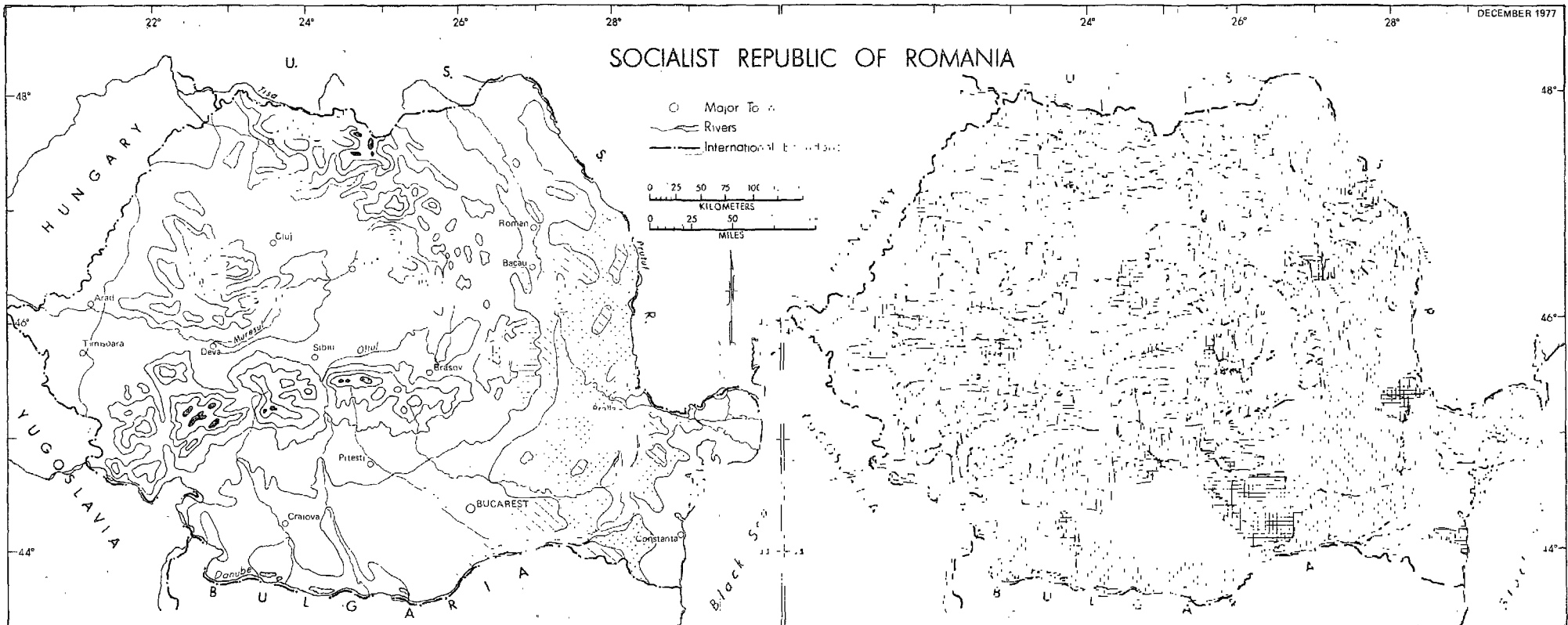


SOCIALIST REPUBLIC OF ROMANIA

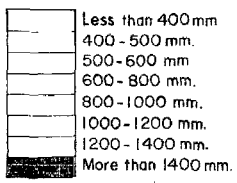
○ Major Towns
 ~ Rivers
 - - - International Boundaries

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 KILOMETERS

0 25 50
 MILES



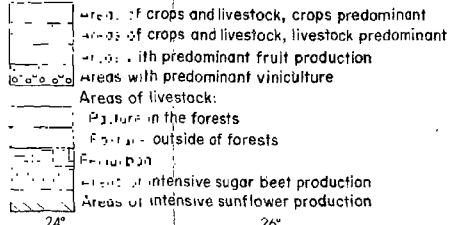
AVERAGE ANNUAL RAINFALL



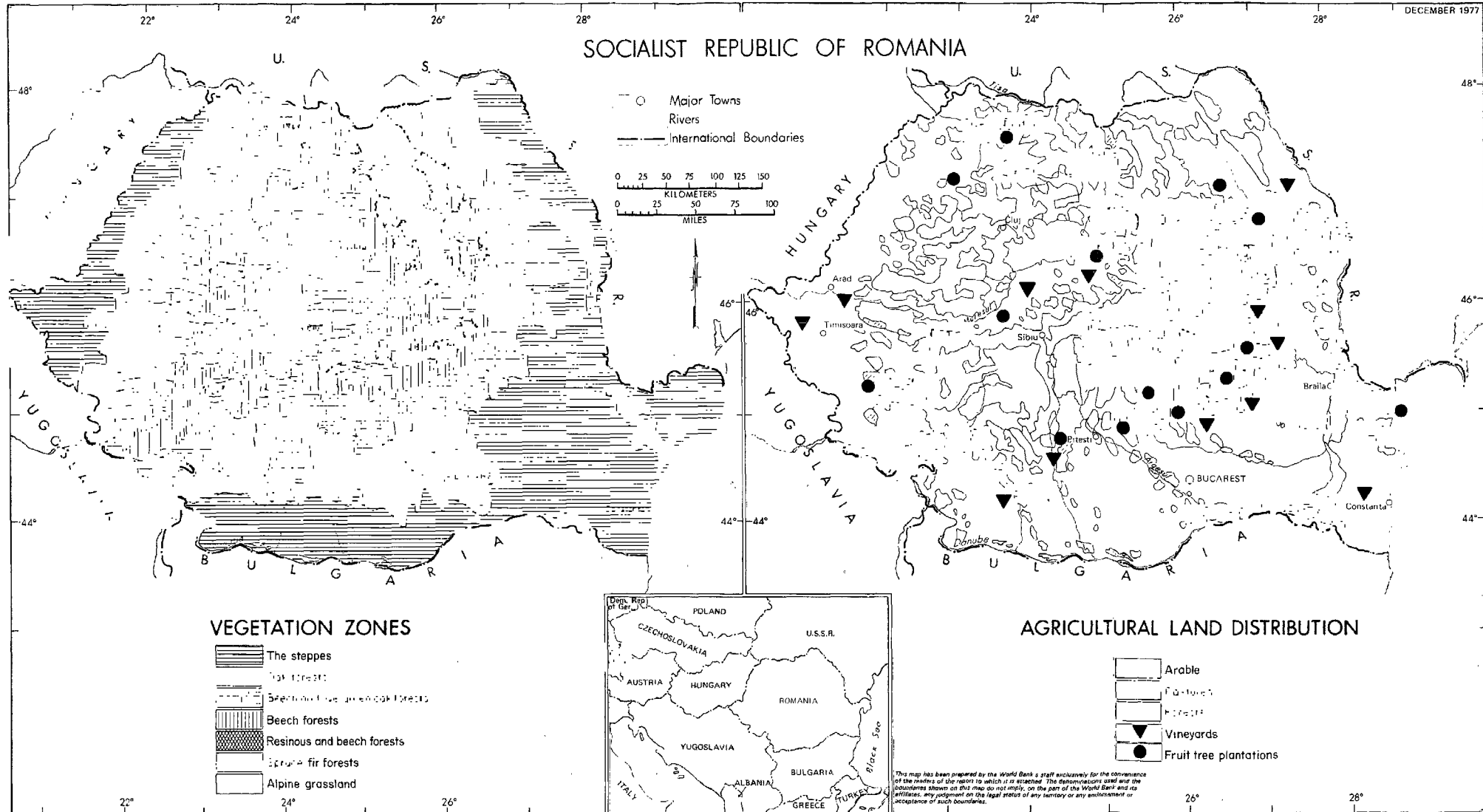
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AGRICULTURAL PRODUCTION AREAS



SOCIALIST REPUBLIC OF ROMANIA

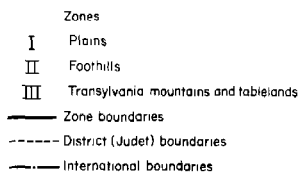
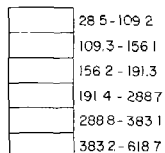


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SOCIALIST REPUBLIC OF ROMANIA LAND AREA AND USE BY DISTRICTS, 1973

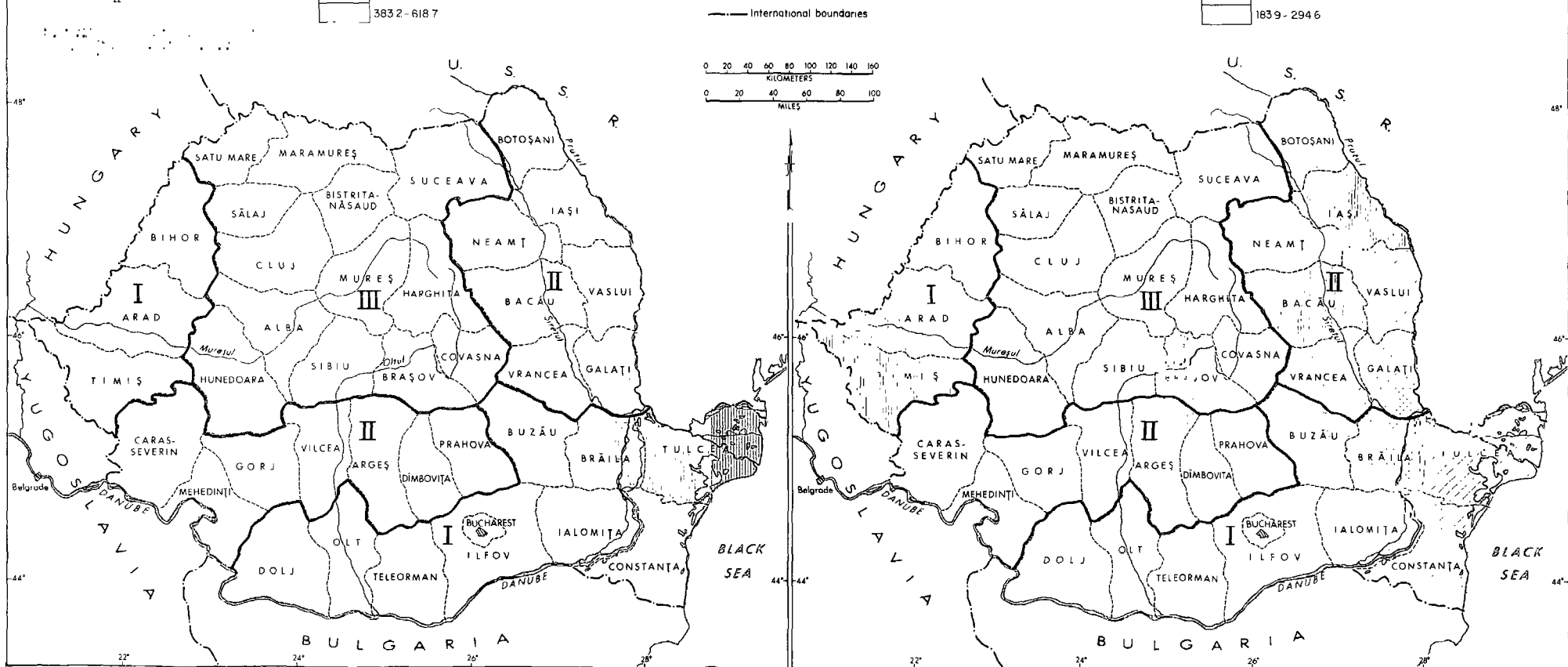
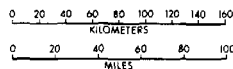
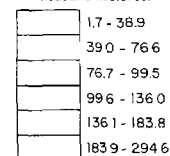
ARABLE LAND

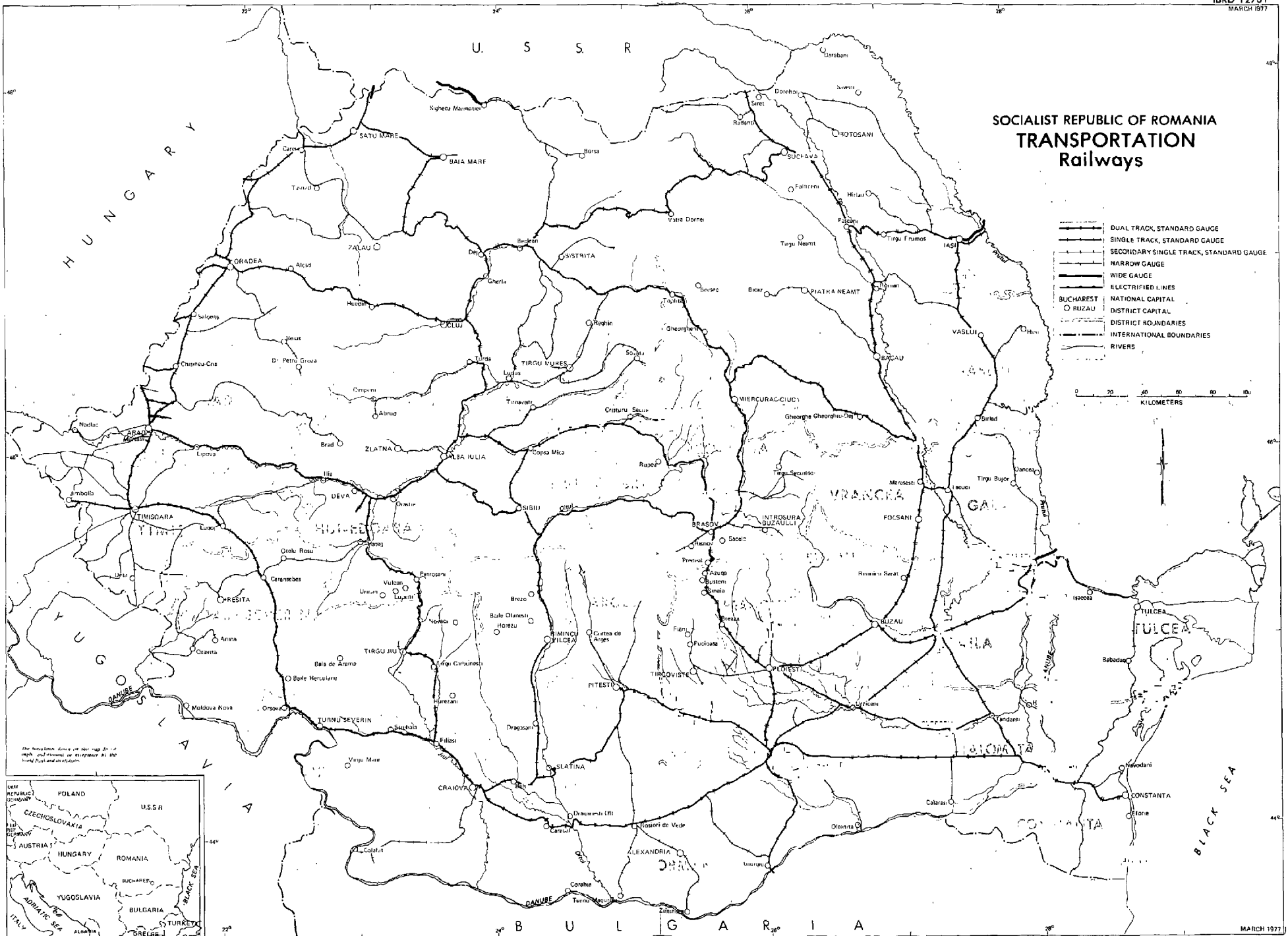
Thousand hectares



TOTAL PASTURE AND MEADOW

Thousand hectares:



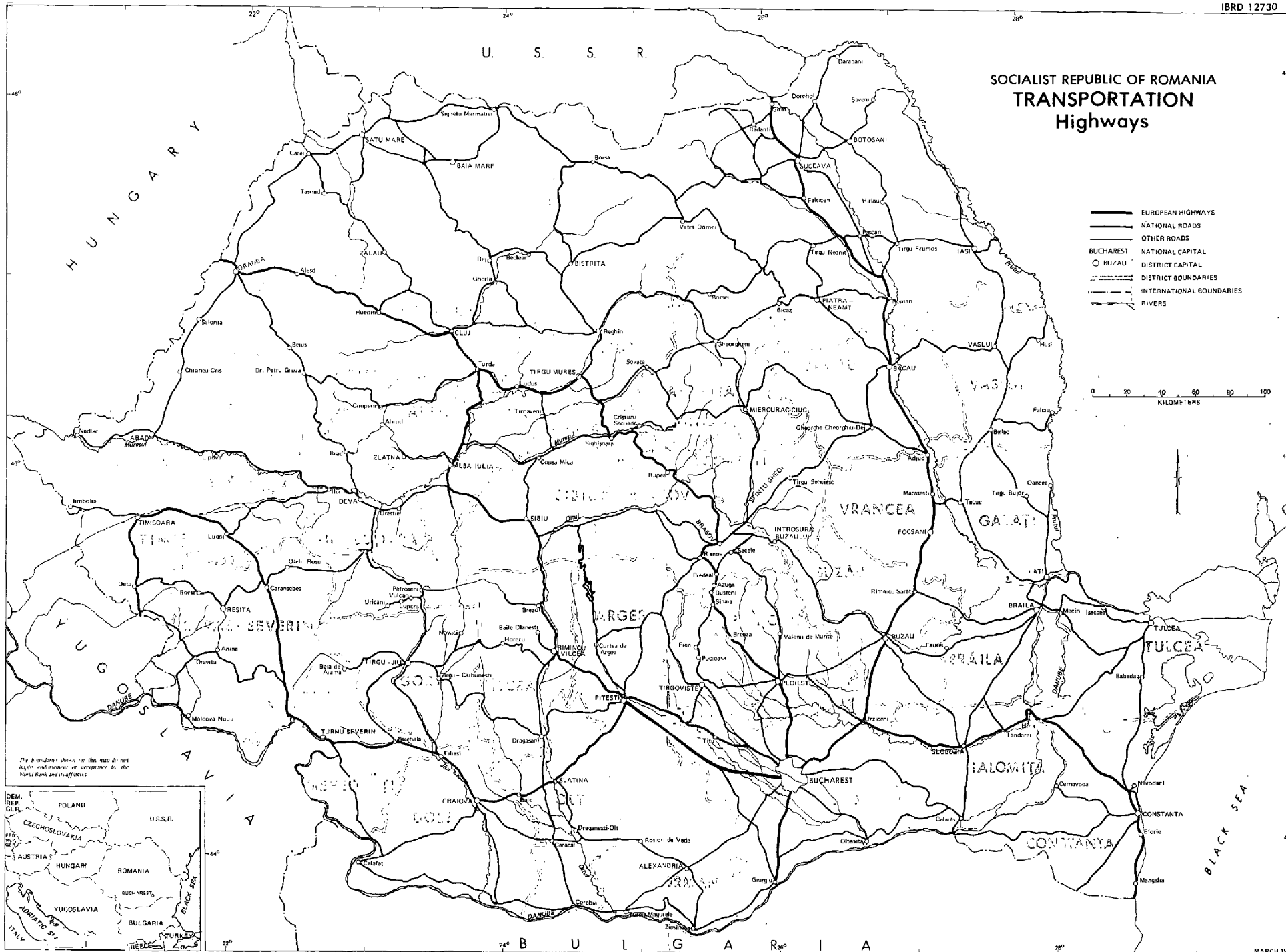
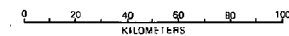


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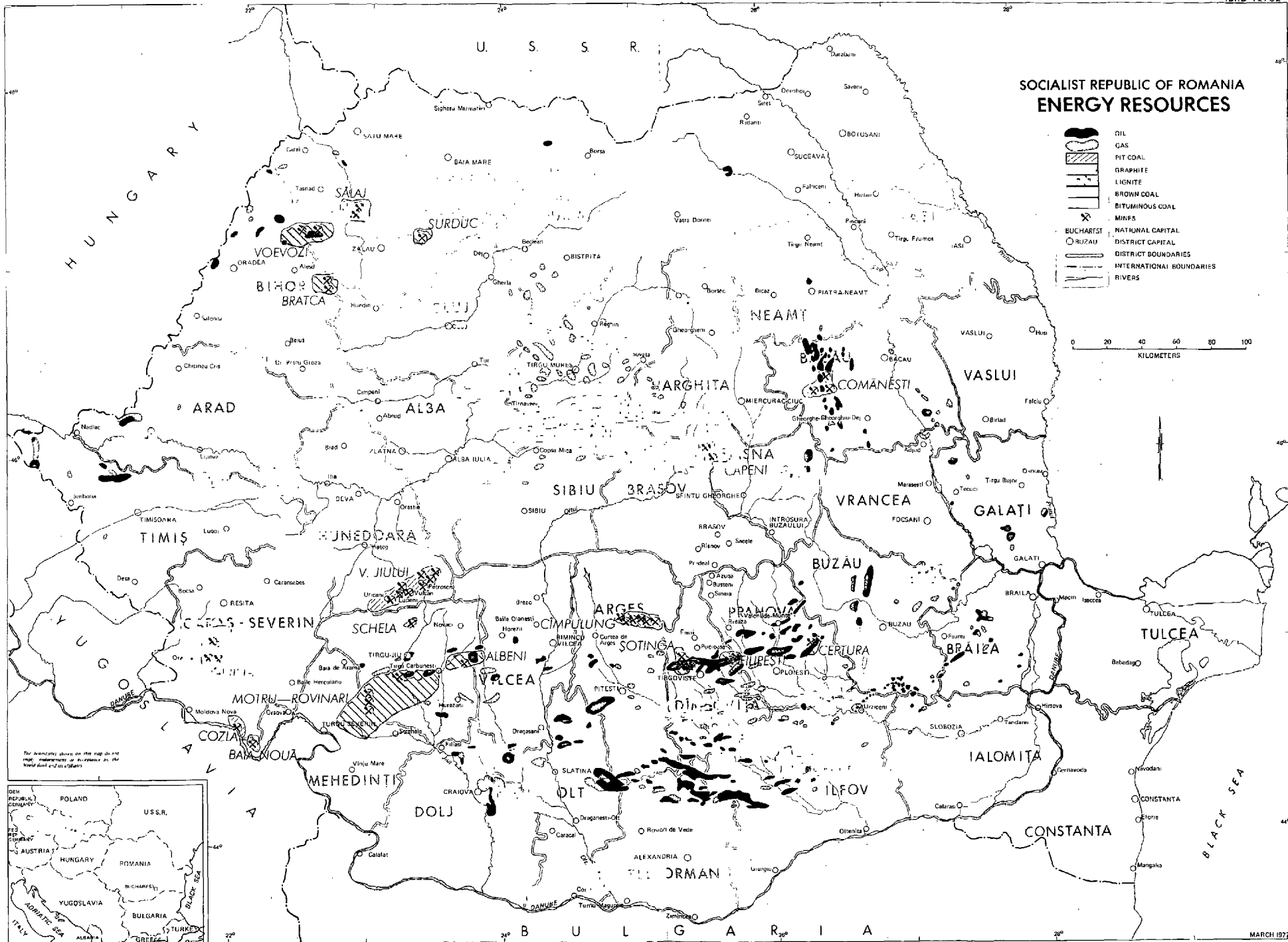
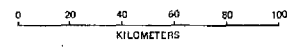
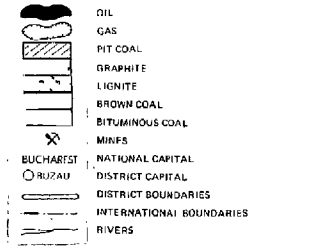
SOCIALIST REPUBLIC OF ROMANIA TRANSPORTATION Highways

- EUROPEAN HIGHWAYS
- NATIONAL ROADS
- OTHER ROADS
- BUCHAREST NATIONAL CAPITAL
- DISTRICT CAPITAL
- DISTRICT BOUNDARIES
- INTERNATIONAL BOUNDARIES
- RIVERS



The boundaries shown on this map do not imply endorsement or acceptance by the World Bank and its affiliates.

SOCIALIST REPUBLIC OF ROMANIA ENERGY RESOURCES



The boundaries shown on this map do not represent any international agreement or arrangement in the World Bank or I.B.R.D. files.



G L O S S A R Y

- Accumulation Fund:** The part of national income used in the form of investment and change in stocks in both the productive and non-productive sectors.
- Benefit:** The difference between the value of output measured in delivery prices and total costs of production plus turnover tax; the equivalent of gross profits.
- Central:** An economic unit subordinate to but separate from a ministry, with responsibilities for planning, supervising and coordinating the operations of enterprises under its jurisdiction. It is also responsible, through subordinate enterprises, for research, design and foreign trade.
- Combinat:** A large, usually vertically or horizontally-integrated enterprise.
- Comparable Prices:** A form of constant prices used to value many statistical series, particularly social product, national income and aggregated production data. Romanian statistics covering the period 1950-76 and expressed in comparable prices present data in 1963 prices. However, such series are not equivalent to a pure constant price measure, since the aggregations are made in terms of different price weights; for 1950-59, the aggregations are made on the basis of weights derived from 1950 prices, for 1959-65, on the basis of 1955 prices and for 1965-76, on the basis of 1963 prices.
- Consumption Fund:** The part of national income allocated for the consumption of material products and services. Consumption of non-productive services is included only insofar as they constitute part of material expenditures.
- Cooperative:** A form of economic organization in both productive and non-productive sectors in which assets are collectively owned by its members. There are four types of cooperatives: agricultural, craft, consumer and credit. Their activities cover arable agriculture and livestock, small-scale industry, non-productive services, credit and retail sales in rural areas.

Delivery Price:	Producer price plus turnover tax, that is, a wholesale price at which goods are delivered to retail outlets.
Employed Population:	The total number of wage earners in the socialist sector; it includes workers, technical and economic personnel, engineers, managers and administrators.
Enterprise:	The basic unit of economic and social activity. Published statistics include only those enterprises with legal status (see Chapter Ten, Table 10.5). For details of industrial enterprises, see Appendix 3, and of agricultural enterprises, Chapter Eleven.
Global or Gross Product:	A gross output concept, measured in delivery prices, which measures and aggregates the production of enterprises; it includes (and thus double-counts) the value of intermediate goods used as inputs except those produced in the same enterprise. The sum of global products of all productive sectors equals social product (see gross production and social product).
Gross Production:	A gross output concept, valued in producer prices, which measures and aggregates the production of enterprises; it includes the value of intermediate goods used as inputs whether produced in the same enterprise or purchased from other enterprises. (See global product and social product).
Group A Industry:	Producer goods industry.
Group B Industry:	Consumer goods industry.
Judet:	Territorial and administrative unit. For details, see Appendix 2.
Labor Productivity:	Measured as social product per employee, it is a gross output concept of the value of production per employed person in the socialist sector.
Leu Valuta:	The 'foreign exchange leu', a unit of currency expressing the formal gold price of the leu which is termed the official rate. At present, the official rate stands at 4.47 lei valuta: US\$1. The leu valuta is used only for expressing the value of foreign trade in government statistics.
Local Budget:	The budget of judets, under the management of the People's Councils.

- Local Sector:** State enterprises and institutions which are responsible to the People's Councils.
- Material Balance:** A physical measure, used in the planning process, of the sources and uses of a product or resource. (See Chapter Three.)
- Material Expenditures:** The cost of all material inputs (including depreciation) used in production.
- National Income:** A value-added concept measured in delivery prices and the sum of net products in the productive sector, where net product equals global product less material expenditures. It does not include the net products of the non-productive sector, or depreciation expenditures; these items constitute the main difference between national income in the Romanian definition (System of Material Production) and the UN definition (System of National Accounts). (See Appendix 4).
- Non-Productive Sector:** Includes those activities not directly related to production: municipal services (not including distribution of water, gas, electricity and urban transportation), housing, education, health services, scientific services (not including scientific research related to production), finance, administration, and political and social organizations. (See Appendix 4).
- Norm:** Quantitative expression of existing rules and standards e.g. time per operation, material expenditures per unit of output.
- Occupied Population:** The total number of persons working in all sectors of the economy.
- People's Council:** Local body of state power in judets, towns or villages with responsibilities for planning and management of economic and social activities under its jurisdiction.
- Producer Prices:** The ex-factory price, defined as the branch-average cost of production (including a profit margin), and the price at which state enterprises conduct transactions for inputs and outputs in the process of production. (See Chapter Four).

Productive Sector:	Includes industry, agriculture, forestry, construction, transport, trade, telecommunications and other productive branches. Since 1970 it has specifically included services rendered to agriculture by agricultural mechanization stations, veterinary dispensaries, passenger transport, telecommunications servicing the population and administrative and socio-cultural units, services rendered by hotels, catering units in hospitals and health resorts, scientific research for the purpose of production, laundries, cleaning, dyeing and photographic shops. (See Appendix 4).
Real Incomes:	Personal incomes of the population in money and kind (goods and services) coming from labor and social funds.
Real Remuneration:	Real wages, that is, money wages deflated by the retail price index.
Regularization Tax:	A tax on excess profits, established in 1970 and abolished in 1977. (See Appendix 7).
Republican Sector:	All state enterprises of national importance responsible to ministries and other central state bodies.
Socialist Retail Trade:	Distribution and sale of goods through socialist sector outlets.
Socialist Sector:	The state sector plus cooperative sector.
Social Product:	The sum of global products of the productive sector.
Socio-Cultural Expenditures:	The costs of education, health, arts and culture, physical education and sport, social assistance, etc.
State Budget:	The state financial plan including centralized incomes of the state and their distribution.
Synthetic Indicator:	A measure that summarizes and aggregates values of other variables e.g. national income.
Titular:	An administrative body responsible for implementing specific tasks of the plan.
Turnover Tax:	A tax levied on a good between production and wholesale (see producer and delivery prices, and Chapter Four).
Wage Fund:	The total value of wage payments to employees.

ABBREVIATIONS

ARCOM:	The foreign trade enterprise in the Ministry of Industrial Construction
BAFI:	Bank for Agriculture and Food Industries
CAP:	Agricultural Producer Cooperatives
CFR:	Romanian Railways
CMEA:	Council for Mutual Economic Assistance - also referred to as COMECON
CNST:	National Council for Science and Technology
CPPC:	Committee for the Problems of the People's Councils
GIGCDC:	General Inspectorate for Guidelines, Control and Directions in Construction
FAS:	State Agricultural Units
ICA:	Inter Cooperative Association
ICOR:	Incremental Capital Output Ratio
IOVR:	Military Pension Scheme
ITA:	State Warehousing and Distribution Company
ORDGC:	Organization for Research Design and Guidelines in Construction
RCP:	Romanian Communist Party
SAM:	Stations for Agricultural Mechanization
SCESD:	Supreme Council of Economic and Social Development
SGIIC:	State General Inspectorate for Investments and Construction
SMP:	System of Material Product (national accounts methodology)
SNA:	System of National Accounts (U.N)
SPC:	State Planning Committee
t.o.e.:	tonnes of oil equivalent

PREFACE

1. This is the Bank's first basic economic report on the Romanian economy. Romania joined the Bank in December 1972 and since that time the Bank's economic work has been oriented towards obtaining a gradual 1/ understanding of the economy chiefly in support of its lending operations. Sector work in this country has been undertaken in connection with the Bank's lending operations, and the only sector report published to date has been on agriculture. 2/ It is against this background that the present report has been prepared. Its intent is to provide for the first time a comprehensive review of the development of the Romanian economy and its prospects, and also to establish a data base for future economic and sector work. The report is intended to be both descriptive and analytical, but makes no attempt to be exhaustive. Only the most important economic sectors are examined; and in a number of areas it is not overly analytical since the data available although sufficient for a general economic review, was not sufficient for an in-depth analysis of certain important sectors.

2. In addition, the report contains a chronological limit: it examines the economy to the end of July 1977. Since that date, the Government has announced a number of important changes in plans and policies. In December 1977, the National Conference of the RCP adopted a supplementary program containing higher targets for the 1976-80 Plan period (including the increases in targets for living standards and pensions originally announced in July). In March 1978, the Plenum of the Central Committee of the RCP announced measures to enable workers to participate in the profits of enterprises and to improve the functioning of the economic system through greater use of self-management techniques and financial instruments. As a result, it is planned that workers' bonuses will be based in part upon profits and foreign exchange earnings, that wages will be linked to net production instead of global output and that enterprises will be able to retain part of profits for the construction of workers' houses and other socio-cultural activities. In the sphere of planning and implementation of enterprises' activity, the measures announced will also increase the role of profit. The major indicator against which performance is to be measured will be net rather than gross production and each economic unit will be given greater responsibility for carrying out its economic and financial plan within both the domestic and export markets. As a concomitant of these self-management measures, it is intended that financial institutions will have a strengthened role. These measures, which are now being debated in detail within the country, are not discussed in the report since they have not yet been analyzed by the Bank and discussed with the

1/ Two economic reports have been issued: The Economy of Romania (Report No. 181b-RO) in November 1973, and Current Economic Position and Prospects of Romania (Report No. 492a-RO) in October 1974. An Economic Memorandum (Report No. 818a-RO) was also issued in December 1975.

2/ Agricultural Sector Survey (Report No. 953a-RO), October 1976.

Romanian authorities. They will be reviewed during the Bank's forthcoming economic work on Romania.

3. The report is divided into three parts. Volumes one and two describe the organization and operation of this centrally planned economy and its major sectors, reviews and assesses the economic achievements of the last twenty-five years (1950-75), both at the macro level and in selected sectors, and discusses the prospects for development during the next decade. Particular attention is given to the management tools, especially the plans used in planning and administering the economy; the 1971-75 plan and the prospects for the 1976-80 plan are treated in detail. Volume three provides additional information on issues and subsectors not discussed in the main report, but are of importance in conveying a comprehensive view of the economy. Volume four, along with the text tables in Volumes one and two, provide a detailed data base, making use chiefly of published information but containing some previously unpublished data and discussing data interpretation.

4. The findings of two missions have been particularly important for the completion of this report. A basic economic mission visited Romania in October/November 1976. It consisted of Messrs. A. Tsantis (mission leader), R. Pepper (general economist), P. Davies (general economist) D. Fallen-Bailey (energy sector specialist), W. Wipplinger (industrial economist) and H. Van Helden (consultant, transport sector specialist). The basic mission had been preceded by a preparatory special economic mission in March 1976 consisting of Messrs. O. Maiss (mission leader) A. Tsantis (general economist), R. Pepper (general economist), P. Biraben (general economist), T. Lejano (national accounts specialist), J. Roy (quantitative planner), R. Sabot (manpower economist), J. Theodores (education sector specialist), S. Yusuf (fiscal economist). The chapter on agriculture is based on the Bank's Agricultural Sector Report and that on Tourism on the findings of Mr. Snoy, who visited Romania in April/May 1975. The country economic team ultimately responsible for this report consisted of Messrs. A. Tsantis and R. Pepper, assisted by Mr. P. Davies in the earlier stages of the report.

5. A draft of this report was discussed with Romanian officials in October/November 1977 and in February 1978.

SUMMARY AND CONCLUSIONS

Introduction

1. The purpose of this report -- the Bank's first basic economic report on the Romanian economy -- is to provide a comprehensive review of the country's development and prospects, and to establish a data base for further economic and sector work. The report is intended to be both descriptive and analytical, but makes no attempt to be exhaustive. Only the most important sectors have been examined and in a number of areas the analysis and discussion of issues is somewhat curtailed because the data available, although sufficient for a general economic review, was not sufficient for an in-depth analysis of certain sectors. In addition, because this is the first basic report on Romania, the procedures and institutions involved in the planning and management of the economy are described in some detail.

2. In examining Romania's progress to date, the report concludes that, over the last twenty-five years, the economy has experienced a major transformation. Prior to World War II, Romania was one of the least developed countries of Eastern Europe. Its economic structure was predominantly agrarian, with approximately three-quarters of the population living in the rural areas and a similar proportion of the labor force working in agriculture. Organized mainly in large estates, despite spasmodic and limited attempts at land reform, agriculture was poorly developed, providing at a low level the subsistence requirements of the population and oriented towards the production of export crops for sale in Western Europe. For the majority of the population, economic and social conditions were poor. Standards of living, dependent largely upon low-productivity agriculture, were low and the limited access to education and medical services was illustrated by high rates of illiteracy and infant mortality and low life expectancy. Despite the efforts of successive governments to stimulate industrial development, industrial production and employment had grown only slowly, the latter constituting only 8 percent of the labor force in 1938. Such industrial development as occurred was limited sectorally and regionally and was mainly in consumer goods and associated with the production of raw materials for export; little heavy industry existed and the only large-scale modern industry was oil. Furthermore, industry and commerce were concentrated in a few urban areas, evidence of the limited progress made in transforming the economy from its backward state.

3. By 1975, the economy had made considerable progress towards the Romanian Communist Party's (RCP) long-term development goal of a highly industrialized economy providing a high standard of living for the population. The more important progress had been made in expanding the economy's productive base. The level of industrial production had increased rapidly and, with the creation of a broad industrial base, especially heavy industry, the composition of output had been diversified, thereby providing the means for the modernization of other economic sectors and a general increase in labor productivity and national income. Standards of living although they remained below levels in most other European countries, had improved substantially, not

only because of the growth of personal incomes resulting from both general wage increases and the transfer of labor from low-productivity agriculture to higher-productivity industry, but also because of the provision through the state budget of expanded medical services, housing and other social expenditures. Per capita gross national product in 1975 was approximately US\$1,170. ^{1/}

Development Strategy

4. The changes in the level and structure of economic activities between 1950 and 1975 represent the outcome of a development strategy, the aim of which has been to accelerate the growth rate and to catch up as soon as possible to the level and structure of economic activities in the presently-developed socialist and capitalist countries. The essential features of this strategy can be summarized as:

- (a) high and increasing rates of saving and investment. This has been a key element in the strategy. An acceleration in the economy's growth rate has required the diversion of a high proportion of incremental income to investment and its allocation so as to generate the maximum increase in production. This is seen as necessary for providing a steady and sustained growth of the population's living standards.
- (b) the creation of a broad industrial base able to provide both capital and consumer goods. Industry has been viewed as the key to economic progress, the provision of high living standards and economic and political independence. Industrialization policy has stressed the creation of the capital goods industry which can provide the means for modernizing and increasing the productive potential of other sectors. It also stressed the production within Romania of a wide range of industrial goods and the incorporation of scientific and technological gains through the use of the most modern techniques of production. Over the past decade, the industrialization strategy has shifted in emphasis from the creation of a wide base of basic industries towards the development of technologically advanced secondary industries, chief of which are in the engineering, metallurgical and chemical subsectors.
- (c) the development of local natural resources. The strategy has given importance to the exploitation of all local resources of fuels (oil, gas, coal and hydro-electric power), metals and minerals, so as to ensure to the largest possible extent self-sufficiency in these areas and to meet the needs of industry and its related sectors.

^{1/} Utilizing the UN methodology and calculated from official statistics on national income. Under the World Bank's Atlas methodology, per capita gross national product in 1975 is estimated at \$1,300.

- (d) the reorganization and modernization of agriculture. Agriculture plays an important role in Romania's development strategy because of its important role as a sector and employer of the population. Its role has been to supply food and inputs for industry and the newly-urbanized industrial work force, to provide a source of livelihood for a large percentage of the population and to produce a surplus over domestic requirements for export and thus permit the import of goods needed for industrial development. In view of the fragmented and underdeveloped nature of the sector, the RCP's strategy has had two major components - reorganization and the expansion of production. Reorganization into large-scale units, that is state farms and cooperatives, has been seen as necessary for planning effectively the growth of the sector and making use of modern techniques of management and mechanization. The policy for stimulating production has centered upon the development of arable production through irrigation, improved inputs and better management. The aim has been to increase the share of land used for industrial crops and the production of fodder for the livestock industry whose share in total agricultural production has increased substantially and is planned to increase further in the future.
- (e) the balanced regional distribution of production and incomes. Increasing attention has been paid during the last three plan periods to the distribution of investment and economic activities within Romania, with the purpose of reducing inequalities in levels and structures of production and incomes in each judet. In view of the unified national wage structure, the allocation of investment is seen as a means of improving the regional distribution of personal incomes.
- (f) the expansion of foreign trade and international economic relations. While the development strategy has emphasized self-sufficiency to the largest possible extent, Romania is too small and not endowed with enough natural resources to be totally self-sufficient. Certain raw materials must be imported because they are not available locally and others must be purchased from other countries because the growth of the economy has out-run domestic raw material resources. Furthermore, the industrialization strategy's change of emphasis over the past decade towards the development of sophisticated manufacturing embodying technology not yet available within Romania has generated the need for capital good imports. Thus it has been an important element of Romania's development strategy to develop foreign trade at a sufficiently rapid rate to ensure the economy is supplied with raw materials and capital goods. To this end, it has been government policy to expand exports to pay for imports. Important elements of the export promotion policy have been the expansion of trade with all countries, attempts to improve the efficiency of trading

activities by increasing the share in exports of highly-processed goods, particularly products of the engineering metallurgical and chemical industries, and, furthermore, the signing of cooperation agreements with trading partners to tie trade more closely to joint production, technological and scientific research and technical assistance. Over the last decade, the government's view of the role of foreign trade has been modified by Romania's success in industrializing. Whereas in the past participation in foreign trade was viewed largely as a means of securing resources not available domestically, a more positive role has been ascribed to exports now that Romania's economic structure produces a comparative advantage which it feels permits it to compete on a more equal basis with other developed countries. Exports are promoted as a means of improving enterprises' efficiency and quality of production, as well as obtaining faster growth and economies of scale not available through the domestic market.

- (g) the development of human resources; in order to meet the objective of improving the standards of living of the population in its role as beneficiary of the development process, the government has pursued policies to make better use of the population in its role as factor of production. The most important policies in this respect have been a commitment to full employment, the introduction of an education and training system geared closely to the needs of economic growth, the transfer of the labor force from rural areas and agriculture to urban areas and industry and the transformation of some rural towns into urban centers. It has been an essential feature of the overall manpower policy to raise participation rates and to stimulate an increase in birth rates.

5. The main instrument for carrying out this strategy has been the system of comprehensive central planning and management. Upon taking power in 1947, the RCP began steps to bring all activities under social control, in keeping with its belief that the transformation of the economy could not be achieved under a decentralized market system. Since then, the RCP has emphasized the need for the creation and continued improvement of the planning and management system and for the involvement of the population in the formulation and implementation of plans.

Economic Development 1950-75

6. Between 1950 and 1975 the economy grew rapidly within the framework of comprehensive economic planning which was made possible by the state's control of the major productive resources and its monopoly over foreign trade. Through this control, the state was able to mobilize the resources required for the economy's rapid growth rate and to finance the development programs laid out in the five-year plans. Development planning has been in a continuous state of evolution, changes being introduced periodically to deal with weaknesses in previous practices and to respond to changes in the level and

structure of activity. Until the middle 1960s, planning and implementation by central directive was reasonably effective in a simple economy, but it became necessary to adapt it to a more complex economy. As a result, new measures have been introduced in the past decade, with the purpose of improving the planning process and securing better results in plan implementation.

7. Between 1950 and 1975, according to official statistics, the Romanian economy sustained the highest growth rate in Eastern Europe and one of the highest in the world. Over the period, social product and national income grew at 9.8 percent and 9.7 percent per annum, respectively. ^{1/} Since population growth was of the order of only 1.1 percent per annum, per capita growth of social product and national income was also high by international standards, 8.7 percent and 8.6 percent per annum respectively. The driving force behind these growth rates was the high and increasing volume of investment. Between 1950 and 1975, investment grew at an annual average rate of 13.1 percent. As a result of this high marginal propensity to invest (approximately 0.4 throughout the period and approaching 0.5 in some years) which documents clearly the government's ability to mobilize resources for growth and to maintain the growth of consumption below that of national income, the economy raised the proportion of national income utilized as the accumulation fund from 17.6 percent between 1951-55 to 34.1 percent in 1971-75. ^{2/} The sectoral allocation of investment throughout the period reflected the priority given to industrialization; approximately 50 percent was allocated to industry and, of this, by far the largest part was directed to the producer goods sub-sector.

8. As a result, the leading sector in the economy was industry which experienced an average annual growth rate of 13 percent between 1950 and 1975; the output of producer goods increased at 14.5 percent per annum, faster than that of consumer goods (10.5 percent). During the first three plan periods, 1951-65, the difference between growth rates of producer and consumer goods widened, due to the strong emphasis given to engineering goods and basic chemicals industries. It was only during the last decade that this trend was reversed, as consumer good industries have been given more emphasis without, however, affecting the leading role of producer good industries. As a result, the share of producer goods in total industrial production rose from approximately 50 percent in 1950 to 72 percent in 1975. Throughout the period, the leading sectors of industry were chemicals and engineering goods and, propelled by high and increasing volumes of investment, their joint share of total industrial production rose from 16.4 percent in 1950 to 43.7 percent in 1975. Another important feature of structural change and growth within industry was the lagging growth of some branches which supply raw materials and of the consumer goods industry. With the output of domestic raw materials,

^{1/} The interpretation of these figures should be done with care, because of the statistical methodologies used to calculate them. See Chapter Five for details.

^{2/} Gross investment amounted to 36.6 percent of national income in 1971-75, which corresponded to approximately 29 percent of GNP.

particularly oil, gas, coal and iron ore growing less quickly than the user industries because of limited domestic reserves, there has been a substantial increase in import dependence.

9. While this report provides a largely statistical picture of the impressive rate of industrial growth, it is unable to provide a full assessment of the sector's past developments. It does, however, draw attention to a number of the sector's characteristics which reflect upon the efficiency of the industrialization process and industrial production. Industrialization has given rise to generally large-scale enterprises in many branches. Large size (by international standards Romania has a very high number of employees per enterprise) seems to have been seen as necessary for the application of advanced technology and for securing economies of scale. Between 1960 and 1975, average employment per enterprise doubled, reaching 1,554 persons in 1975, when 82 percent of gross industrial production and the industrial labor force was concentrated in enterprises employing more than 1,000 persons. The growth of average enterprise size reflected normal expansion of existing production lines, the addition in existing enterprises of new lines and administrative reorganization. Enterprises employing more than 2,000 persons have in recent years been the major generators of new employment. This may explain why as yet labor productivity increases in this group have been below average and why economies of scale have not been fully utilized. Some inefficiencies in the utilization of capital are also identified. In some branches, such as machine-building, wood processing and some light industry enterprises, as a result of investment decisions being determined by technological scale rather than the size of the market, capacities have exceeded domestic market requirements, thereby leading to under-utilization of capital stock or the production of surpluses for export of goods in which Romania has had no particular advantage. In addition, in the past, there has been a certain non-coordination between policies to modernize production and to reduce the wasteful use of capital which has led to obsolete machinery being retained or new equipment being used alongside older and less productive processes. Such difficulties have stood in the way of greater efficiency in the use of the capital stock.

10. One industrial sector (as categorized in the Romanian methodology) which receives especial attention in the report is energy. Rapid industrialization has brought about a large growth in energy consumption, at a rate of about 8.6 percent per annum, that eventually outpaced domestic production of energy. In 1950, Romania was a net exporter of energy, as a result of crude oil exports. Over the next two decades, despite large investments in oil, gas and coal which resulted in significant production increases, domestic consumption expanded more quickly. In 1972, according to Bank estimates, Romania became a net importer of energy, largely in the form of crude oil imports, which had begun in 1968. In anticipation of this as well as because of the increases in 1973 in the price of crude oil, plans were made to increase domestic supplies of coal and to economize on the consumption of all energy supplies.

11. The large volumes of investment directed towards new production facilities necessitated the rapid expansion of the construction sector. In 1975 construction was the third largest sector in the economy, providing 7.6 percent of national income and having grown at an annual average of 11.3 percent between 1950 and 1975. Construction's share in total investment, however, has been diminishing, particularly during the last decade. This appears to reflect two aspects of the sector; first, the diminishing share of construction in investment as there has been a gradual but continual shift in the allocation of investment from new facilities to the modernization and expansion of existing enterprises; and second, the reduction in the relative price of construction resulting from substantial improvements in its efficiency in the last decade.

12. In 1950, the sector was labor-intensive, unmechanized and unsophisticated; by 1975, construction was mechanized and efficiency conscious. For much of this period, growth of the sector was propelled by increases in labor and capital, but in the last plan period, difficulties in recruiting labor led to accelerated capitalization of the sector, at an increasing cost. The result of these efforts to prevent construction becoming a constraint was an attempt to increase efficiency by increasing the sector's mechanization, eliminating overdesign of construction work, economizing on materials, improving design work and improving training. Successful implementation of these measures has become more urgent following the 1977 earthquake. The reconstruction program imposes additional tasks, beyond those already set out in the 1976-80 plan, upon the construction sector, especially in the field of housing.

13. The other major sector which has grown rapidly in response to the demands of industry is transport. In 1950, Romania had a fairly well developed and evenly distributed rail system. Over the past two and a half decades, government policy has concentrated chiefly upon improving all transport and upon minimizing the costs of transporting goods. Between 1950 and 1975, the growth of goods transport grew at an annual average of 11.7 percent, somewhat faster than national income and social product, but the growth of passenger traffic was substantially smaller. As a result of government's policy to improve the existing system and to concentrate traffic on the railways the sector has exhibited rising capital productivity. However, there have been indications in recent years that the capacity of the rail system is being reached and that further increases in traffic will necessitate costly upgrading and construction programs. Road transport has expanded rapidly over the past decade, carrying as much tonnage in 1975 as rail, but much less in ton/km terms because of the limitations imposed on length of haul. The development of road transport has also been inhibited by the condition of the road system. An expanded use of road transport is becoming more urgent with the development of trading and tourist links with Western Europe where speed of transport and delivery service for goods are regarded as more important than in the Romanian context.

14. As a basic branch of the economy, agriculture has contributed to the economy's development over the past two and a half decades. Between 1950 and 1975, social product and national income in agriculture increased at average

annual rates of 5 percent and 3 percent respectively. This growth in production was secured even though the sector's manpower diminished and led to a tripling of labor productivity between 1955 and 1975. The growth of production was greater in livestock than crop production, 4.3 percent per annum compared with 2.1 percent between 1955 and 1975. As a result the share of livestock production, as a proportion of total agricultural production, increase from 35 percent in 1955 to 43 percent in 1975. The major features of agricultural development over the period were reorganization into state farms and cooperatives between 1949 and 1962, and irregular improvements in production. With regard to the latter, the major features were an increase in cereal production generated by large increases in yields - as a result of improved farming practices, improved inputs and irrigation. This permitted the acreage devoted to cereals to be reduced and on the land thus released, the cultivation of other food crops (such as potatoes, vegetables and fruit), fodder crops (green feed and silage in particular) and industrial crops (flour, sugar, beet, sunflower, tobacco, etc.) was expanded, to provide inputs for industry and feed for the livestock industry, the chief components of which are cattle, pork and poultry.

15. However, in spite of these improvements, agricultural performance throughout the period seldom approached the sector's potential. During the 1950s, the sector received relatively few investment funds despite its underdeveloped state and most of the gains from production in this period reflected recovery from the war, reorganization of land into larger units and price incentives given for private farmers. Since 1960, investments have increased more rapidly and the growth rate of gross agricultural production accelerated, as irrigation, improved inputs and mechanization were provided. In no period, however, have steady gains been made in production because of annual fluctuations in rainfall. In spite of such difficulties, the sector has played an important role in the economy. It has provided sufficient food for the population to increase nutritional standards and to supply a surplus for export; it has also supplied the non-agricultural sector with labor while maintaining and increasing production and in addition it has supplied inputs for industrial expansion.

16. As a result of the above sectoral developments, the structure of the economy underwent considerable change between 1950 and 1975, with industry assuming the mantle of the dominant sector. Between 1950 and 1975, the proportion of national income originating in industry rose from 44 percent to 56.2 percent in current prices, while agriculture declined from 27.8 percent to 16 percent. Because of the large relative price changes occurring over the period, the extent of the structural change is somewhat veiled. Expressed in constant prices, the decline in agriculture and increase in industry would be more prominent. The employment figures express the change more clearly. Whereas in 1950 74.1 percent of the labor force was employed in agriculture, the proportion was only 37.8 percent in 1975. This reallocation of employment involved an increase in urban population, although at a slower rate than the creation of non-agricultural jobs. This is an uncommon feature in developing countries but has been achieved in Romania by the coordinated control of employment and labor movement and by official policies to distribute new capacities evenly and to control urban growth. Between 1950 and

1975, the proportion of the population living in urban areas increased from 23 percent to 43 percent. In spite of these policies, the demand for housing has been such that 10-15 percent of all investment over the period has been allocated to housing, investment in which grew at some 12 percent per annum. The sectoral reallocation of employment also generated the need for education and training. Very comprehensive efforts have been made to provide for the proper training of all the population. One of the first programs introduced was literacy training and since 1948, when the basis for the present system was established, the education and training system has been developed, along with the manpower planning system, to meet the needs of the economy. The achievements of the system have been to improve the educational qualifications of the labor force and to adapt continually to the needs of the economy for trained manpower.

17. The pattern of development in Romania has had implications for the level and structure of foreign trade and for its economic cooperation with all trading partners. Between 1950 and 1975 the volume of foreign trade increased at an average annual rate of almost 13 percent. Throughout the period, foreign trade played an important role in the growth of the economy and also served as an index of the success of development policy. The total level of imports rose in response to the need for raw materials and capital goods. The policy of diversifying sources of supply of raw materials and the industrialization strategy stressing the development of technologically advanced industries led to a more rapid increase in trade with developing countries and developed market economies, particularly after 1965. The structure of exports in turn mirrored the transformation of the economy. Between 1950 and 1975, the structure of exports moved away from being predominantly raw materials towards industrial products. Whereas in 1950, 75 percent of all exports were raw materials, in 1975, industrial goods constituted 55 percent of all exports. The extent of Romania's industrialization have been shown, however, by the structure of trade with developed market economies, where, in contrast to its trade with developing and socialist countries, raw materials and relatively unsophisticated products continue to comprise a sizeable share of the exports although industrial exports are increasing at a rapid pace. In its trade with developed market economies, Romania has typically been in deficit and has financed imports by recourse to suppliers and financial credits. As a result, Romania has increased its external debt in the past decade, but it is clear from government actions that a conservative debt policy has been followed so that financing the debt imposes no undue burdens on the economy.

18. The changes in the level and structure of economic activity have been accompanied by changes in the population's standards of living, although in view of the increasing saving and investment rate they were less substantial than the increase in national income. In the early years of the period under review, the authorities took on the commitment of providing for all the population a basic needs package, partly through the provision of a job and a wage for all people of working age and partly through the provision of social consumption, such as education, health and housing. From this subsistence level, the government planned annual increases in living standards.

Between 1950 and 1975, real incomes of the population rose at an annual average of 6.2 percent, with the growth rate gradually increasing. The main component of real incomes, wages and salaries, increased at 4.8 percent per annum while socio-cultural expenditures, measured in current prices, increased annually at 11.6 percent.

19. The above paragraphs provide a brief summary of the major features of Romania's development since 1950. The main body of the report examines the period in more detail with the purpose of illustrating the processes and policies determining the growth of the economy and identifying the potential for future growth and possible constraints. The major conclusion to be derived from the review of the past is that Romania, although still remaining a developing country, has been successful to date in its development efforts and that such problems as are identified have not prevented targets being met, although they may have increased the costs of meeting them. It is, however, the recurring hypothesis of the report that the Romanian economy has reached an important phase in its development. Maintaining the high growth rates of the past decade might become increasingly difficult and require new measures to deal with some problems that in the past have not been serious constraints but which might become so at the new stage of Romania's development.

Future Plans and Prospects

20. The assessment of Romania's development prospects in the report is based upon the government's proposals for the next fifteen years laid out in the perspectives for 1976-90, and more specifically in the five-year plan for 1976-80. The perspectives provide in general terms an impression of where the economy will stand in 1990. In short, it will have caught up with the more developed socialist countries in terms of living standards and level and structure of production, having a national income of some \$3,000 per capita (Romanian methodology) in 1963 prices. National income will be, it is planned, 3.5-3.8 times the 1975 level; growth will continue to be fueled by increases in investment which in 1976-80 will be 1.8 times more than in 1971-75 and in 1981-90 two times larger than in 1971-80 and by increases in efficiency; the allocation of investment will continue to favor industry whose growth will lead to a gross industrial production in 1990 of 3.5-4.0 times the 1975 level. As a result, industry will produce about 70-75 percent of national income in 1990. Within industry, the major sectors, constituting 55-60 percent of industrial output by 1990, will remain chemicals and engineering. Complementary investments will be made in energy resources, and these will be coupled with a program to conserve energy which, it is planned, will contain the rate of growth of energy consumption to approximately two-thirds that of national income.

21. In agriculture, the emphasis will be placed upon livestock development which will amount to 50 percent of gross agricultural production in 1990; upon the irrigation of all irrigable land of about 5 million ha by 1990 (amounting to half of the arable land); and upon increased fertilizer use, reaching around 300 kg per ha by 1990. Furthermore, the perspectives envisage a reduction in the agricultural labor force to 12-15 percent of the

total and, thus, a corresponding increase in mechanization. In foreign trade, the perspectives anticipate more than a three-fold increase, in constant prices, thereby maintaining the relative importance of trade by 1990.

22. The perspectives also provide targets for consumption and living standards. They provide for almost a doubling in real wages (a 5.6 percent increase per annum), the increase in social consumption to the level where it accounts for 30-32 percent of total incomes, and the reduction of the working week to 40-42 hours by 1990.

23. A comparison of the 1976-80 five-year plan with the perspectives to 1990 indicates clearly that the fifteen year period breaks down into two distinct parts. Between 1976-80, the high growth rates of 1971-75 are to be continued, after which the momentum is expected to slacken. The high growth rates of 1976-80 support the contention that the 1970s have been viewed as a decisive period in the achievement of long-term development objectives, during when the economy is planned to burst through the constraints upon its transition from a developing country to an industrially-based and technologically advanced economy.

24. Between 1976 and 1980, national income is planned to grow at 10-11 percent per annum, only a little lower than that achieved between 1971 and 1975. Gross industrial production will increase at 10.2-11.2 percent per annum, a little lower than before, but gross agricultural production is expected to overcome its previous poor results by increasing at 5-7.6 percent. In addition, investment is due to increase considerably more quickly than before, at 12.7 percent per annum. The volume of foreign trade is planned to double in real terms, which is a much faster growth rate than in 1971-75 when trade merely doubled in current prices. Furthermore, the growth of exports is intended to exceed that of imports, to allow the liquidation of most external debt and the accumulation of international reserves. The targets for consumption growth are below those of production, but with a target of 6.2-7.0 percent growth in real incomes, the increase is similar to that attained in 1971-75. Real wages for all workers are due to grow at 5.4 percent per annum.

25. The picture for 1981-90 is considerably different. While the perspectives indicate a constant growth in standards of living, the production targets imply a relative deceleration in the growth rate. National income would grow at 8-8.4 percent per annum which remains high by international standards, and gross industrial production would increase at 8-8.9 percent. Investment growth would decelerate, and growth of foreign trade would also be slower.

26. Both the perspectives and the sixth five-year plan specify a number of additional objectives. These are improving regional distribution of production and incomes; encouraging internal scientific and technological development; reducing consumption of energy and raw materials; and improving efficiency of production and quality of goods. Improved regional development is to be achieved through distribution of industrial and agricultural investment. Scientific and technological development is to be secured through organizational improvements gearing scientific work more closely to industrial

needs and simply allocating more funds to it. Control of consumption of raw materials is to be achieved through planning and design and the institution of norms and indicators. And improvements in efficiency and marketability are sought from improvements in the use of capital and labor and more rigorous use of tools already in existence e.g. prices, product planning, export incentives, etc.

27. It is to these aspects of the Romanian plans that the report turns in attempting an assessment of the targets. The ambitious levels at which targets are set are not sufficient grounds for doubting that they can be achieved, for the government has succeeded in implementing ambitious plans before. In assessing Romania's plans, the report focusses upon two major issues. On the one hand, the gradual shift of emphasis from an extensive to an intensive development strategy with its implications for increased complexity and interdependence of the economy and its impact upon the planning system and efficiency of production. And, on the other hand, the deterioration in Romania's energy and raw material balance with its implications for foreign trade and the marketability of Romanian exports. The interconnection of these two issues in the foreign trade sector provides the basis for the report's conclusion that implementation of Romania's present five-year plan will be more difficult than in the past. This conclusion is drawn without taking into account the impact of the earthquake; it is, of course, clear that the damage caused by the earthquake will make implementation that much more difficult.

28. During the 1976-80 Plan period, the high target for foreign trade is generated by the projected increase in imports of raw materials and capital goods. In toto, imports will grow, it is planned, at more than 10 percent per annum. Having become a net energy importer in the early 1970s, Romania will be importing some US\$1.2 billion of crude oil in 1980 to meet forecasted demand and will also have increased imports of raw materials needed to keep industry running at full capacity. In addition, imports will increase because of the need for capital goods to develop advanced secondary industries in chemicals, engineering and metallurgy and thereby push these leading sectors toward the technological frontier. Thus not only the continued operation of the economy but also future investment will be more heavily dependent upon foreign trade and thus the ability of Romania to increase its exports. Exports are required to increase at 11.2 percent per annum in real terms.

29. The ability to fulfill this trade plan will be constrained in some degree by the condition of the world economy over which Romania has little control, but it will be affected also by internal developments. First, it will depend upon whether imports can be limited to the target levels which were drawn up on the basis of the norms laid down for the reduced consumption of raw materials. In view of previous performance, it would seem ambitious to try to trim material expenditures by 8.5-9.5 percent per 1,000 lei of marketable production. Second, holding imports to planned levels depends upon domestic sources of raw materials being developed on schedule. The 1976-80 Plan contains a very ambitious lignite mining program which is already behind schedule and threatens to increase crude oil and coal imports more than planned. Third, it depends upon the ability of the economy to generate

marketable exports, particularly in the sectors of chemicals, machinery and equipment and industrial consumer goods. It is planned that the majority of export growth should originate in these industrial sub-sectors, and achievement of total exports will require a substantially higher growth rate of exports from these sectors than has been achieved in the past. These are product areas requiring high quality, responsiveness to customer demand and, in addition, the intended destination of these products, the developed market economies, are highly competitive markets protected frequently by tariffs and quotas. Through vigorous negotiations bilaterally and multilaterally Romania is trying to break down such barriers to market entry, but merely gaining the opportunity to compete does not guarantee export sales in these areas.

30. The achievement of export targets will require improvements in the quality of products and responsiveness to customer demands, areas in which the economy appears to have lagged behind targets in past years. In spite of measures taken to improve performance e.g. by giving enterprises more direct contact with foreign customers, by repricing products to give a premium for quality and export suitability, progress has been limited in making the trade sector very responsive to world markets. This, again, requires further improvements in planning to incorporate into economic management more effective tools for meeting the diverse and multitudinous objectives of an increasingly sophisticated economy. The report focusses upon the existence of important problems concerning the stimulus for standardization, the emphasis on volumetric indices, the need for improvement of investment criteria to establish optimum resource allocation, etc.

31. The report also examines alternative possibilities should the foreign trade constraint operate (for external or internal reasons) and concludes that the most likely possibility would be to choose to expand external borrowing within prudent limits and beyond that to maintain tight control over imports.

32. In focussing upon the internal and external problems facing Romania in the future, the report does not attempt to belittle the achievements of the economy or to suggest that it faces insurmountable problems. While the report concludes that although the issues discussed above are not easily resolved, it remains probable that Romania will continue to enjoy one of the highest growth rates among developing countries over the next decade and that it will largely succeed in implementing its development targets. The report also concludes that, as a result of the comprehensive control of economic activities and the cautious policy of the Government towards the use of foreign borrowing, external constraints will not result in any reduction in the country's credit-worthiness.

PART I

DEVELOPMENT OBJECTIVES AND PLANNING

CHAPTER ONE

INTRODUCTION -- GEOGRAPHICAL AND HISTORICAL PERSPECTIVE

A. Introduction

1.01 The Socialist Republic of Romania, which covers an area of 237,500 square kilometers shares common borders with four countries: to the south Bulgaria, to the west Hungary and Yugoslavia and to the north and east the USSR. Romania is not a land-locked country, however; it has a 245 kilometer-long coast line on the Black Sea and along much of its southern border with Bulgaria flows the Danube, the largest navigable river in south-east Europe.

B. Topography

1.02 Romania has a varied topography with three principal relief zones of approximately equal size. In the middle of the country lie the Carpathian mountains, part of the Alpine chain, which rise to over 2500 meters. Around this mountain core there are hills and tablelands ranging in height from 200 to 500 meters, and finally there are the lowlands, the largest of which are the Tisa Plain (Cimpia Tisei) in the west and the Romanian Plain (Cimpia Romana) in the south. Reflecting the relief features drainage is basically radial, although in the north of the country it is largely westwards into the Tisa via the Muresul and the Somesul. Parts of the tablelands of the northwest, particularly where glacial soils are found, have poor drainage. In the south, the major rivers, the Oltul, Siretul and Argesul, flow towards the Danube. All these tributaries have large seasonal and annual variations in flow and in years of heavy rainfall flooding occurs. The last major flood was in 1975 when all the rivers overflowed, damaging crops and physical structures.

C. Climate

1.03 Romania's climate can be described generally as continental, but there is considerable local variation because of relief features and the influence at different times of the year of the Atlantic Ocean, the Mediterranean and the Eurasian land-mass. In the north and northeast Eurasian continental influences are strong, bringing heavy snowfalls and strong winds (the crivat) in winter. The Danubian plains are influenced in summer by tropical air masses that produce temperatures of up to 44°C. In general, rainfall declines from northwest to southeast, with annual precipitation of up to 1500 mm in the mountains and as little as 400 mm in the southeast where the substantial variation in rainfall has made agriculture an uncertain undertaking in non-irrigated areas. At the same time, the low rainfall on the Black Sea coast, coupled with mild winters and moderately hot summers, has encouraged tourism.

D. Natural Resources

1.04 Romania has a wide range of natural resources of varying size and quality. More than 60 percent of its area is suitable for agriculture,

with climatic and relief characteristics favoring both arable and pastoral farming. The plains consist largely of fertile soils that permit the cultivation of a wide range of cereals, foods and industrial crops. Arable agriculture, especially vineyards and orchards, can also be carried out in much of the upland areas while in the mountains pastoral farming is found wherever grazing is available. Twenty-seven percent of the country, chiefly upland and mountain areas, is forested; the lowlands have been largely deforested for farming. Forestry has been an important industry for many years with replanting and forest management programs renewing and conserving the lumber reserves. The delta, the rivers and the Black Sea also contain large fish resources.

1.05 Romania has significant resources of fossil fuels, comprising oil, natural gas, coal and lignite, but because of their quantity and quality, the capacity of reserves and production to meet the country's needs vary considerably. The high-grade fuels, oil and gas, are in increasingly short supply, while the largest deposits of solid fuels are predominantly low-grade lignite. Oil and gas are found in an extensive belt around the east and southern flanks of the Carpathian mountains and in the Danube plain bordering it; the area has a history of commercial exploitation going back to 1860 but the largest deposits, in the Ploiesti region, are in an advanced state of depletion and the present oil production level of around 14 million tons annually is obtained from a large number of wells having low individual productivity. Exploration continues for deeper producing horizons and for new production on the continental shelf of the Black Sea, but this is not expected to lead to significant production increases in the short term. Non-associated natural gas is found in the Transylvanian Basin and has been extensively exploited since the Second World War, supplanting oil as the largest single source of energy in the Romanian economy. Oil and natural gas between them supply the greater part of the needs of the Romanian economy for fuels at the present time and also form the basis of an extensive refining and petrochemical industry. Romania also has substantial reserves of solid fuels, the greater part of which are lignites of relatively low calorific value. These are nevertheless being rapidly developed as a fuel for industry and for thermal power generation and it is intended that they will replace oil and gas as the main source of energy in Romania. The principal mining district is Gorj in the southwest, where lignite is mined by both opencast and underground methods. Bituminous coal is mined in relatively small quantities in the southwest also, near Petrosani, but geological conditions in the deposits are very difficult and no significant production increases are foreseen. Some of the coals have weak coking properties and are used in the metallurgical industry. There are also small deposits of brown coal and of anthracite which are mined, but they are not of major economic significance. Romania has an appreciable hydroelectric potential, most of it concentrated on the Danube. In the Iron Gates region it is being developed jointly with Yugoslavia. Elsewhere most of the hydroelectric schemes are multipurpose, serving for flood-control and irrigation as well as power generation, and are relatively small in size.

1.06 Romania possesses a wide range of ferrous and non-ferrous minerals but few large deposits and increasingly relies upon imports, especially of iron ore, for its rapidly expanding industrial needs. Iron ore is mined in

the southwest, while non-ferrous metals, particularly copper but also gold, silver, lead, zinc and bauxite, are found in the north and west. Romania also has deposits of non-metallic minerals, most notably salt in the foothills of the Carpathians in the oil-field belt; many of the oil-bearing structures are associated with salt plugs and extrusions. In some areas, the salt plugs include potassium salts in addition to common salt. Also found are deposits of refractory sands, the basis of a long-established glass industry, materials for the brick and cement industries and in smaller quantities, sulphur, mica, talc, asbestos and gypsum.

E. Population and Education

1.07 The population of Romania at the time of the January 1977 census was 21.6 million and is increasing at approximately 1 percent per annum. The present crude birth and death rates, 19.5 and 9.6 per 1,000 respectively in 1976, are low by international standards, and have fallen steadily from levels that produced population growth rates of approximately 1.2 percent per annum during the 1950s. The decrease in the birth rate, which continued steadily until 1967 when the Government introduced measures to reverse the decline, reflects in large part changes in social habits associated with industrialization and urbanization. The measures succeeded in almost doubling the birth rate in the late 1960s after which a new decline has occurred. The decrease in the death-rate, and more spectacularly the decline in infant mortality, from 142.7 per thousand in 1948 to 31.4 per thousand in 1976, attests to improvements in standards of living and increased access to medical services.

1.08 By 1977 the urban population had risen to 47.5 percent, the steady (but compared to many other countries relatively slow) increase since 1947 resulting from the coordination of economic development and settlement patterns. Considerable internal migration has taken place in the last three decades in response to urbanization, industrialization and the Government's attempts to distribute economic activities equitably throughout the country. The transformation of the economy has also been associated with widespread improvements in education. Illiteracy, about 40 percent in the 1930s, has been virtually eliminated and a comprehensive education system has been developed to improve the skills and cultural level of the population.

F. The Economy before 1950

1.09 Before the outbreak of the Second World War, Romania was one of the least developed countries in Europe. Formed from the two principalities of Wallachia and Moldavia which united in 1859, Romania became an independent state in 1877. Over the following four decades economic growth was slow, reflecting the unstable political and economic conditions in the country and within south-east Europe in general. Transylvania joined Romania in 1918 forming a unified Romanian state and the potential for development improved. But because of war damage and in spite of Government actions to stimulate industrial development through protective tariffs, state investment in infrastructure and direct assistance to private enterprise, the Romanian economy remained a peripheral appendage of industrial Western Europe, serving as a

supplier of agricultural products and mineral and energy resources. Industrial production and employment grew slowly, the latter constituting only 8 percent of the labor force in 1938. Such industrial development as occurred was limited sectorally and regionally and was mainly in consumer goods and associated with the production of raw materials for export: little heavy industry existed and the only large-scale modern industry was oil, much of which was controlled by foreign firms. Industry and commerce furthermore was concentrated in a few urban areas, evidence of the limited progress in diffusing industry throughout the economy. The great majority of the population lived in the rural areas working in a low-productivity agricultural sector. Organized largely in large feudal estates (despite spasmodic attempts at land reform) agriculture was poorly developed, providing at a low level the subsistence requirements of the population and increasingly oriented towards the production of export crops. For the majority of the population, economic and social conditions were poor; illiteracy rates were high, infant mortality rates the highest in East Europe and life expectancy low.

1.10 Just as the First World War damage to the economy posed massive reconstruction problems which further impeded the largely ineffectual efforts of the Government to develop a comprehensive industrial base, so the Second World War severely affected the country, weakening the economic base and destroying much of the industrial capacity. A popular uprising removed from power the representatives of the pre-war regime; a broadly-based progressive government formed in 1944 prepared the way for the People's Republic established in 1947. Under the guidance of the Romanian Communist Party (RCP), reconstruction of the economy began and coordinated programs of development in all sectors were initiated, with the intention of converting the backward agricultural economy into a modern industrialized and independent state. In the early years, however, the extent of the war damage and scarcity of investment resources constrained economic growth. It was not until 1950 that national income reached 1938 levels and not until 1953 that the pre-war level of agricultural production was attained. From then on, development proceeded at a rapid pace.

CHAPTER TWO

DEVELOPMENT OBJECTIVES AND STRATEGY

A. Development Objectives

2.01 The long-term economic objectives of the Romanian Communist Party, established by the 11th Congress of the RCP in 1974, can be summarized as:

- (a) the transformation of the economy, through rapid and sustained growth in the production of goods and services and by the application of science and technology, into a technologically-advanced and multilaterally-developed state;
- (b) the predominant position, and thus rapid growth, of industry and agriculture as the material basis of the economy;
- (c) the balanced and equal development of the whole country and the elimination of regional disparities in production and income;
- (d) the elimination of rural-urban inequalities and the diminution of differences between manual and intellectual work, through education, mechanization and automation;
- (e) the restructuring of the labor force to increase the weight of nonagricultural employment;
- (f) Romania's participation in the world economy "on an equal basis" with developed economies, that is, as an exporter of highly-processed industrial and agricultural products;
- (g) the provision of an improved standard of living for the whole population at a level comparable to that in developed countries.

2.02 These goals represent one major element of the overall development goal of the RCP, that is, the construction of socialism and the eventual transition to a communist society. Interpreted in terms of the materialist framework of modes of production, the economic goals are concerned with the development of the forces of production and are regarded by the RCP as necessary for the creation of socialism. 1/ The second major element of the RCP's

1/ "We set out from the fact that the development of the productive forces propels social development, the general progress of mankind", N. Ceaucescu, speech to the Plenary meeting of the Central Committee of the RCP, November 23, 1976.

overall goal has been the evolution of the social relations of production, that is, the economic, political and social relationships between classes and individuals within society. While Romanian government statements on development stress both elements, this report concentrates its attention upon the country's economic objectives and discusses the social relations of production only indirectly, insofar as the impact upon economic growth of the planning, organization and implementation of production is concerned.

B. Development Strategy

2.03 Any description of a development strategy must be anchored to a particular period since, as the economy progresses along a development path, the details, emphases and, in some cases, foundations of the strategy change. In the case of Romania, the fundamental features of the development strategy have remained unchanged throughout the period with which this report is concerned; the strategy can be summed up as the rapid and diversified industrialization of an initially agrarian economy through high rates of investment and under comprehensive central planning of economic activities. The changes in the strategy over time largely concern the attempts of the RCP to move the economy from an 'extensive' to an 'intensive' development path after the mid-1960's. The emphasis of strategy between 1950 and 1965 was upon unbalanced growth, centered upon the creation of new industry, in particular, the producer good sector, with the intention of eliminating what was seen by the RCP as the uneven development of the economy inherited after the Second World War and establishing a broad base for a "sustained drive towards socialism". After 1965, while the emphasis remained upon industrial growth, greater attention was given to a more intensive strategy -- capital deepening as well as broadening, the development of specialized secondary industries and obtaining greater efficiency from existing inputs as well as additional endowments of capital and labor. Furthermore, greater emphasis has been given to the development of agriculture, with increased investment funds being applied to mechanization and the development of the productive base. This chapter discusses the present development strategy as it is laid out in the 1976-80 Plan and the 1981-90 Perspective Program.

2.04 The major components of the strategy are: high increasing rates of saving and investment; rapid and comprehensive industrialization based upon modern scientific and technological methods; the development of local natural resources, including the modernization and reorganization of agriculture; balanced regional distribution of production and income; expansion of foreign trade to meet the demands of industrialization for raw materials and capital goods; and finally the efficient utilization of human resources. The main instrument for achieving the development strategy is comprehensive and compulsory planning.

(1) Consumption and Investment

2.05 A key feature of Romania's development strategy, and a necessary condition for implementing the other components of the strategy, has been the allocation of a high and increasing proportion of national income to investment. In the absence of capital flows of any size, it has been necessary

to achieve this by increasing the rate of domestic savings. During the first plan period, the government divided national income between consumption and investment in such a way as to provide for the basic needs of the population. Since then, it has been government policy to plan for a steady growth of consumption while channelling a large proportion of incremental income towards investment. The allocation of national income between consumption and investment has been based upon the fact that, while investment and consumption constitute competitive claims on resources in any single period, a high rate of growth of accumulation and thus of national income is in the long run the only viable basis for a high and increasing level of consumption. Thus, high rates of investment generate high levels of income which permit in the future higher absolute levels of consumption and investment than would have been the case with a lower rate of accumulation.

2.06 The planning of consumption in aggregate terms has therefore been bound up and generally subordinated to the growth of accumulation and national income. The development strategy has provided for the steady growth of both private and social consumption from the level of basic needs established by the government during the first plan period, and the development of a countrywide network of socialist retail outlets. The growth of private consumption, and its increasing diversity, has been correlated with the increased remuneration of the labor force, so as to avoid excess demand and forced savings; it has also been government policy to expand, through state expenditures, the level of social consumption.

(2) Industrialization

2.07 Industrialization has been the core of Romania's development strategy. Comprehensive industrialization is seen as necessary for the creation of a modern and developed socialist society, for raising the standard of living and for ensuring the country's economic and political independence. Furthermore, the importance of industrialization, and particularly heavy industry, in developing the technical basis of other sectors, especially agriculture, raising the productivity of labor in all sectors and in stimulating the more efficient exploitation of raw materials has been emphasized in the development plans. The program of industrial development has laid great stress upon the creation of heavy industry and the construction of new plants.

2.08 The industrialization strategy places great emphasis upon the use of the most modern technologies and the incorporation of scientific and technological advance. While great efforts have been made in Romania to develop the required technology, it has been necessary to import much in the form of investment goods. It is at this point that the interdependence of different components of the development strategy appears most clearly. An increased capability to import capital goods (and the raw materials needed for industry) has depended upon the growth of exports which, especially in the 1950s and 1960s, were chiefly agricultural raw materials and food products; in turn, the growth of exports has depended upon increases in agricultural production which are largely a function of investments in mechanization, fertilizers, etc., that is, industrial goods. During the last decade, a more balanced export structure has been developed as a result of large increases in industrial

exports. Romania's development strategy for industry has thus required complementary investment in all other sectors of the economy and the development of foreign trade.

(3) Development of Natural Resources

2.09 The development of industry generates both the potential for using more effectively natural resources and an increased demand for such resources. To supply the rapidly expanding needs of the Romanian economy, the state has instituted comprehensive planning of the exploration for and exploitation of raw materials, combining these efforts with policies to economize upon their use wherever possible. Investment funds have been allocated throughout the 1950-75 period for production of ferrous and non-ferrous metals (notably iron ore, manganese, copper and bauxite) and non-metallic minerals (such as sulphur, mica, gypsum and limestone). However, local resources have increasingly been insufficient to meet demand and imports have been necessary. Particularly in the last decade, the Government has secured such raw materials under long-term supply agreements and furthermore has shown interest in investing in joint production facilities abroad.

2.10 Economic growth has also generated increasing demand for energy resources. The development of the four major energy sources - oil, gas, coal and hydroelectric power - has been worked out explicitly within the framework of a national energy plan, the chief goals of which are to maximise the use of domestic energy resources and to minimize wastage of energy resources. As a result, the Government has invested heavily in the production of energy and has built into its planning targets explicit indicators requiring enterprises to reduce energy consumption; in addition, new factories are designed for the most appropriate energy source - frequently lignite - and considerable research has been conducted to devise less-energy intensive methods. It has, furthermore, been an important parameter of government's policy that the use of oil and gas as fuels should be minimized and that they should be used in higher value-added activities. They form the basis of a rapidly expanding chemicals industry. Oil production has been stabilized during the last decade, an expanding excess demand being met by imports of crude oil, and refineries and chemicals works have been established to provide for both domestic needs and the export market.

2.11 The present energy strategy foresees the major sources of power for the future as lignite, HEP, and somewhat further into the future, nuclear power. Production of lignite has grown rapidly since 1947, particularly in the last decade, reflecting the world energy situation and mechanization of mining operations. The first national plan for HEP as a source of power and irrigation was drawn up in 1950; a national grid system for electricity distribution has been established to supply electricity to all parts of the country and thus to permit an equitable distribution of industry and rural electrification, two important features of development policy.

(4) Modernization of Agriculture

2.12 The interrelationship of industrial and agricultural development in terms of foreign trade and imports of investment goods and industrial raw materials has already been pointed out. There are other aspects of this relationship that demonstrate not only the role of industry in modernizing agriculture but also the role of agriculture in stimulating industrial expansion and the overall development of the economy. In addition to providing, through exports of agricultural goods, the means of importing investment goods (especially in the 1950s before the industrial sector itself was large enough to generate a significant export potential) the development of agriculture has been required to provide food for the industrial work-force and raw materials for processing in the industrial sector, as well as providing a source of labor for industrial expansion and a source of surplus for investment before the industrial sector became large enough to generate its own reinvestable resources. The fulfillment of these functions has required investment in agriculture so as to raise the productivity of a declining labor force.

2.13 Government strategy in agriculture has had two major components; reorganization and the growth and diversification of production and its reorientation to high value-added goods. The purpose of reorganization, accomplished primarily through the creation of state farms and collectives during the 1950s and subsequently through refinements in their basic organization, was to create large farming units capable of utilizing efficiently modern agricultural techniques. The strategy for the growth of production has been to reduce the land area used for grain production (production levels being increased through investments to produce higher yields) and to use the land released for industrial crops and fodder crops for livestock. The main source of production increases has been investment in mechanization, improved inputs such as seeds, feed concentrates and fertilizers, and irrigation, so as to increase both land and labor productivity and to reduce the impact of the climate. The restructuring of production towards products for industrial processing and livestock reflects the government's policy to produce higher value-added goods in agriculture, as does the decision to divert grain output from direct export into livestock production, a part of whose output is designed for export as processed products.

(5) Development of International Economic Relations

2.14 Rapid income growth based on the creation of a modern industrial sector generates a greatly increased demand for investment goods and raw materials. As industry's demand for raw materials has outgrown domestic production, their regular import has become necessary. Furthermore, the development of advanced secondary industries has generated a demand for imports of sophisticated capital goods which, despite the increased capacity of the domestic capital goods sector, cannot be produced yet in Romania. Consequently, the continued growth of the Romanian economy has depended a great deal upon the steady expansion of foreign trade. Throughout the 1950-75 period, foreign trade policy has been primarily geared to the expansion of exports to pay for necessary imports. In recent years, however, the stimulation of exports has

been attempted not only to finance imports but also to continue high growth rates in sectors where the size of the domestic market constitutes a constraint to continued growth or the achievement of economies of scale. It also appears to be the case that, especially in the leading sectors of industry, chemicals, metallurgy and engineering, foreign trade is viewed as a means of improving efficiency and product quality by having these sectors exposed more to international markets.

2.15 For diverse reasons, Romania has, particularly since 1960, followed a policy of diversifying the source of its imports and, thus in turn, the destination of its exports. While the volume of trade with socialist countries has increased within the framework of bilateral agreements, trade has been expanded more rapidly with non-socialist countries in the last decade, so as to obtain the capital goods and raw materials required for the development program. In particular, it has been government policy to develop trade with the developing countries to secure directly materials previously obtained through intermediaries in the developed market economies. At the same time, Romania has attempted to change the structure of its exports so as to sell goods embodying a higher domestic value added than agricultural products and raw materials. Successive five-year plans have included ambitious targets to expand the sale of manufactures, both investment goods and consumer products, to all trading partners.

2.16 Romania's attempts to increase and diversify its foreign trade have been carried out within the wider context of a very active policy of international cooperation. It has been government policy to establish agreements with trading partners covering not only trade but also joint production facilities, scientific and technological exchange and a wide range of economic cooperation activities. Furthermore, the government has joined several multilateral organizations, particularly IBRD, UNCTAD, IMF and GATT.

(6) Regional Development Policy

2.17 Within the last decade, more explicit attention has been paid to the equitable distribution of production throughout the economy and the Government has introduced an active regionalization policy designed to distribute more equitably industrial investment and production and thereby, through the growth of industrial employment in each judet, to equalize income inequalities existing within the country. The regional policy has been three-pronged. First, the basis for effective implementation of regional policies has been laid through the creation of machinery for regional planning and management. Second, measures are taken to limit the further concentration of the population and to correlate the movement of the population with the labor requirements of the economy. The most important features have been balanced urban growth, restraining the growth of Bucharest, expanding small and medium-sized urban centers and upgrading villages into small townships. In addition, all manner of public services have been extended to villages. Third, industrial investment has been allocated, where feasible, to judets which have little industry (and consequently, because of the national incomes policy, lower personal incomes).

(7) Development of Human Resources

2.18 Romania's development strategy has also emphasized, as a means to and an end of development, improvements in the level of human resources, through the relocation of the labor force, education and training and improvements in living standards. It has been government policy, particularly since the mid-1960s, to stimulate population growth, both by encouraging, through a wide range of measures, the birth rate and by improving medical services and nutrition. The growth of population, however, remains about one percent per annum and the accomplishment of the development program has necessitated major changes in the location and structure of the labor force. The government has implemented an urbanization program and through investment and training programs has enabled population to be transferred productively from agriculture to industry and other non-agricultural sectors.

2.19 The education and training system plays a major role in preparing the population for employment and it is an integral part of government strategy to tie education and training closely to the needs of the economy. To ensure that education programs are an efficient and effective investment for economic development, the Government carries out periodic reviews of the sector and restructures enrollments and program content in keeping with projections of manpower and skill requirements.

2.20 The comprehensive and coordinated planning and management of economic activities is viewed by the RCP as a necessary condition for the implementation of its development strategy. "To accept the idea that the economy should be left to develop by itself, through the spontaneous mechanism of the law of value, means to give up one of the most important advantages of the new system: the conscious direction of the economy with a view to rationally utilizing all the country's resources to the satisfaction of the general interests of the people". ^{1/} Accordingly, under the overall guidance of the RCP, the country's economic resources were brought under the control of the state and comprehensive economic and social planning was introduced. The basis for management of the economy was laid during 1948 and 1949, with the nationalization of large-scale industry and banks, the establishment of a State Planning Committee and legislation providing for the collectivization of agriculture. The centralized control of the economy's resources provided the necessary condition for an integrated program for economic growth, and the establishment of a State Planning Committee and planning bodies in all sectors and at all levels of activity provided the means by which development could be planned and administered. Details of this system are given in Chapters Three and Four.

^{1/} N. Ceaucescu, Speech to the National Conference of the RCP, December 6, 1967.

2.21 Centralized economic control has remained strong in Romania. In the 1950's and 1960's, when the industrialization strategy focussed on a limited number of strategic choices, centralized planning and control by directives provided an effective way for targets to be met. However, increasing sophistication of the economy produced strains upon this system and towards the end of the 1960's, as Chapters Three and Four show, a more detailed planning structure embodying some elements of decentralized management and planning evolved. In general, however, central control has remained strong and such reforms as have been introduced in the name of decentralization and efficiency have been concerned largely with improving the implementation of plans, the outlines of which remain fixed by the center, and improving the flow of information on which decisions are based.

CHAPTER THREE

NATURE AND TECHNIQUES OF ROMANIAN PLANNING 1/

A. Introduction

3.01 Development objectives, as outlined in Chapter Two, are being pursued within the framework of comprehensive economic planning. The major instrument of economic management is the national plan for economic and social development, which sets out for the economy as a whole, by sector and branch, and on a regional (judet) basis, specific tasks and activities for economic and social entities. The availability of financial resources to implement this plan is ensured through a financial plan prepared concurrently. In addition, other supplementary instruments are being used (e.g. prices, taxes, credits) to help achieve the socio-economic objectives set by the RCP and the Government. Comprehensive planning is facilitated by the social ownership of the major productive resources of the country and the state's monopoly on foreign trade.

B. Evolution of Development Planning

3.02 Development planning in Romania, as an instrument of the state's economic management and control, has been in a continuous state of evolution. It began with the development of two one-year plans in 1949 and 1950. The basic planning period of five years was introduced with the first five-year plan in 1951-55. As economic needs and priorities have been changing through the different stages of the country's development, so has the system of planning as it adapts to new goals. At times, this has required major organizational and procedural changes involving the creation of new institutions or the modification and abandonment of existing ones. With the 1966-70 Plan, the principle of "continuous planning" was introduced and for the first time the plan contained sections for each year, sector, ministry, region and enterprise. The number of targets was increased in the fifth Plan (1971-75), and this and the sixth Plan (1976-80) are the most detailed ones yet developed by the authorities.

3.03 In addition to the scope of the plan itself, the process of plan elaboration has also changed substantially. Three periods can be distinguished in this respect:

1/ This chapter presents Romania's planning process as Bank staff have come to understand it in their discussions with central authorities. The object of this chapter is primarily to convey an understanding of how planning is reported to be organized and undertaken. The principles of sector planning are discussed in subsequent sector chapters. It is not the intention of this chapter to provide a Bank assessment of the actual operation of Romania's planning system and techniques.

- (a) Up to 1959, plan elaboration was centralized and targets were handed down to lower-level units. The State Planning Committee drafted the plan's targets based on the Directives of the Party. Upon Government approval these were given to ministries, which allocated control figures to their general departments; these, in turn, applied the targets to their enterprises;
- (b) During 1960-66, the essentials of a dialogue in plan elaboration were established. The ministries drew up proposals for the plan after discussion with their subordinate units; these were submitted to the State Planning Committee. The State Planning Committee then drafted a plan based on the Party's directives and the proposals. The plan, after approval by the Government, was divided by ministries and subsequently by each ministry's subordinate units.
- (c) Since 1967, the present more elaborate system has been used in which plan preparation starts both at the enterprise level, the State Planning Committee and other agencies for economic analysis, with an extensive reconciliation process at national, ministry and district levels when differences exist. This process is explained in further detail below.

3.04 Since the National Conference of the Romanian Communist Party in 1967 called for the "raising of economic activity onto a higher qualitative level"^{1/} and for the "strengthening of the role of the plan in guiding socio-economic processes"^{2/} the Romanian authorities have undertaken a wide range of institutional, economic and procedural changes designed to improve the planning system and to increase the efficiency of economic management. The changes have not been confined to the institutional organizations alone but have included changes in the policy and practice of pricing, in financing and investment procedures, and in the conduct of foreign trade among others.^{3/} Many of the new procedures have been introduced recently and most of these are discussed separately in this report.

^{1/} Report of the National Party Conference, December 1967, p. 6.

^{2/} Ibid. p. 54.

^{3/} The range of changes is illustrated by the passage of several new laws including the following:

- 71/1968 The Law of Economic Contracts
- 72/1969 The Law on Planning and Execution of Investment
- 2/1970 The Law on Assurance and Control of Product Quality
- 1/1971 The Foreign Trade Law
- 9/1971 The Law on the Transfer of Fixed Assets and Supply of Materials
- 14/1971 The Law on Organization of State Socialist Units
- 8/1972 The Law on Planned Social and Economic Development of Romania
- 9/1972 The Financial Law

C. The Principles of Planning

3.05 Planned economic management is viewed as an essential attribute of Romanian sovereignty and national independence. It is an attribute which follows logically from the social ownership of the means of production and the state's control of distribution and exchange. Apart from this, four major principles can be distinguished in the Romanian planning system:

- (a) The Comprehensiveness of the Plan;
- (b) Continuity of Planning;
- (c) Complementarity of Economic Activity;
- (d) Democratic Centralism.

3.06 In Romania, the plan is a comprehensive instrument that covers the bulk of economic activity in all sectors and administrative jurisdictions (judets). Even the limited resource requirements of sectors outside the direct purview of the plan (e.g. private farming and housing) are included when establishing material balances in the economy for any period of time. The plan is the sole basis for the execution of economic activity at any one time.

3.07 The process of planning is continuous. During each of the planning periods, all economic units seek a reconciliation of present achievements and medium-term plans, adjusting these to coincide with longer-term perspectives. Monthly, quarterly and annual plans are constantly adjusted. Five year plans are made compatible with the perspective program reflecting longer term trends. It is difficult for an outside observer to understand how this continuous reconciliation process works with many intricate adjustments required in diverse economic activities. It appears likely that the microeconomic implications of new directives or national campaigns are left to the enterprise to reconcile in the course of plan implementation.

3.08 Economic activities are viewed as complementary, not competitive; they are oriented towards achieving a common end: the objectives set out by the RCP, as discussed in Chapter Two. Competing demands are reconciled in the formulation of the plan so that it can be derived either from an aggregation of sector/subsector plans (vertical aggregation) or of judet plans (horizontal aggregation). Participation in the production process is undertaken under the framework of contractual obligations resulting from the plan and is encouraged by material, financial, pricing and other incentives. Despite an emphasis recently on achieving improvements in product quality, performance is still largely judged on the basis of achieving volumetric targets. Increasing importance is, however, being given to improving efficiency.

3.09 Democratic centralism denotes popular participation in the formulation of the plan at the enterprise level. However, this deliberation can only be undertaken in correlation with central decisions concerning the growth rates and resource mobilization since resource allocation in the economy at large is a political option. The draft plan is elaborated through a combination of central directives and individual aggregation; that is, draft planning

is both downwards and upwards and any differences are reconciled through a continuous dialogue between the ministries, the judets and the central planning authorities. While this dialogue provides a degree of participation for the entities in the planning process, some proposals of these entities cannot always be included in the final plan.

D. Institutions Involved in the Process of Planning

3.10 All State and Socialist institutions are involved in the process of planning and plan execution. The following paragraphs give a brief description of the division of responsibilities between the major institutions involved: (see also Organization Chart 1).

- (a) The Romanian Communist Party (RCP). The Congress of the Communist party, which is usually held every five years, is the supreme forum for the determination of the direction of Romania's development, and issues the directives that become the preliminary basis for the formulation of each five year plan. The last Congress, the Eleventh, was held in November 1974. In the period between Congresses, the Central Committee of the Party deals with most of the important issues. When necessary, National Party conferences can be convened to discuss important problems arising between Congresses.
- (b) The Grand National Assembly. The assembly is the Romanian parliament. It is the supreme legislative organ and adopts the laws concerning the annual and five-year plans. It has permanent commissions in some branches and fields of the economy that advise the Assembly on the passage of legislation. The Assembly elects the State Council, which acts for it between sessions and controls the application of laws and the activities of all organs of state administration. After adoption of five-year and annual plans, the Council of State divides the plan targets among the ministries, other central bodies and people's councils.
- (c) The Supreme Council of Economic and Social Development (SCESD). Established in 1973, this Council is the chief advisory and deliberative agency in the planning field. It is composed of 150-260 members who represent all areas of Romanian economic and social life. As a joint state-party organ, the SCESD presents studies and conclusions on the long-term prognoses to the State Council and Central Committee of the Party. It also reports to the Grand National Assembly on the efficiency and consistency of the five year and annual plans.
- (d) The Legislative House of People's Councils. The House consists of deputies-members of the executive committees of the people's councils of each administrative jurisdiction (judet). Its

responsibility is to ensure the correlation of centrally planned and local activities and to discuss, approve and submit to the National Assembly those measures affecting "local" activities, including the regional plans.

- (e) The Council of Ministers. This is the highest body of state administration. It is responsible for the management of all economic and social activities. 1/ In the area of planning, it has responsibility for elaboration of plans and submits these to the National Assembly and to the State Council. After their adoption, it supervises their fulfillment.
- (f) The State Planning Committee (SPC). The SPC, which is represented by its President in the Council of Ministers, is responsible for the actual elaboration of the draft plan and for technical tasks involved in planning. The SPC designs a number of plan variants based on its own studies and on the proposals from the technical ministries, other central agencies and the People's Councils. It proposes which indicators and which norms will be used for such matters as raw material use, inventory levels, employment and remuneration. It draws up synthetic balances of the national economy as well as material balances for strategic products decided upon by the Council of Ministers. In terms of plan implementation, the SPC, along with other agencies, oversees plan fulfillment, proposes corrections of imbalances and reallocates resources. Together with the Ministry of Foreign Trade, the SPC works on five-year plans with other CMEA members.
- (g) The People's Councils. The local elected governing body in each of the 39 judets and Bucharest is called the People's Council. The Executive Committee of the Council, consisting of a chairman, two or more deputy chairmen and a number of other members chosen for the life of the Council, is the chief administrative organ of each district Council and directs the planning activity in each district for areas in which it has direct responsibility (housing, maintenance of local public facilities, certain education levels, etc.) The Council also plays a major role in coordinating all economic activities in the region. 2/ Meeting every five years, the Congress of the District People's Councils and of the Presidents of the People's Councils has been established to discuss common problems and serve as a forum for working out programs under their jurisdiction and the means of implementing them, within the framework of the national development plan.

1/ The composition of the Council of Ministers is given in Appendix 1.

2/ The system of regional government and its financing is discussed in Appendix 2.

- (h) Technical Ministries, Centrals and Enterprises. Each major sector of the economy has a technical ministry responsible for its planning. The centrals are independent units of the ministries, and were set up in 1968 to assist them in economic administration. The centrals, each of which directs the operations of a group of enterprises (horizontally or vertically integrated) perform important tasks in the planning process. 1/ They elaborate their own plans based on the proposals of their constituent enterprises, then pass them upwards as proposals to the ministries. They also disaggregate final plan targets of the ministries to their enterprises. The centrals have become "titulars" to the plans of their respective ministries with responsibility for the fulfillment of plan targets. The enterprise is the unit that executes the plan and has to achieve its targets. Enterprises exist not only for production but also for distribution of goods, trade and services.
- (i) The Agencies for Economic Synthesis. These agencies, many of which are ministries, deal with aspects of the economy which are not specific to particular sectors. The agencies represented in the Council of Ministers that are involved in the planning process are the Ministry of Finance (assisted by the banking system), Ministry of Labor, Ministry of Technical Material Supply and Fixed Assets Administration, the Ministry of Foreign Trade and International Cooperation, the National Council for Science and Technology, General State Inspectorate for Investment and Construction, the State Committee for Prices, the General Directorate of Statistics, the General State Inspectorate for Production Quality Control and the Ministry of Domestic Trade. These agencies collaborate with the State Planning Committee and with the technical ministries to coordinate plan aggregates within their respective fields of competence.

E. Planning Techniques

3.11 While econometric models are used as a general reference and comparative framework, their use is rather recent and not extensive or sophisticated. Traditional Eastern European planning techniques still predominate. These consist of synthetic and material balances drawn up for the major products by the Council of Ministers, ministries and centrals and the elaboration of special programs for various branches and sub-branches of economic activities and for groups of products. For the current five-year plan about 160 such programmes were developed.

1/ Industrial organization is discussed in Appendix 3.

(1) Balances and The System of Advance Contracting

3.12 During plan elaboration macro-economic equilibrium is achieved through the use of a number of synthetic balances. The process of preparing synthetic balances is essential in the planning system. Synthetic balances are compiled for such factors as national income, social product, labor force, production capacity, foreign payments, incomes and expenses of population. But the most numerous balances, which are also discussed more extensively below, are material balances. Balances are compiled at all levels to ascertain the feasibility of plan proposals. In the case of an imbalance, one organization must negotiate with another in an attempt to reduce demand or increase supply. A change in one quantity may necessitate changes in other variables, which may generate more imbalance and a new series of negotiations.

3.13 In the determination of material balances, each balance has two sections: one which lists the source of a particular resource and the other which enumerates its uses. Before the balance can be made final (which is done by successive approximations), and its components incorporated in the plan sources must be made equal to uses. The Council of Ministers determines the products for which material balances should be compiled (these are the products of major importance) and designates the coordinator of the balance, (usually the unit which directs the largest share of the production or consumption of the product). With the help of the State Planning Committee, the Council of Ministers is responsible for the compilation of about 200 material balances for products of national importance. Balances for other products are struck by the ministries and centrals. The basic form followed in determining the balances is presented below:

<u>Sources</u>	<u>Uses</u>
Beginning Stock	Consumption
Production	Production
Imports	Investment
Releases from State Reserve	Export
Other Sources	Other Uses
	Increased State Reserve
	Plan Reserves
	Ending Stock

3.14 The coordination of material balances by the central authorities is a difficult process. It has encountered numerous problems in the past. An inefficient geographic distribution of local and central agencies and their warehouses, and growing shortages of some materials at a time of accumulation of unwanted inventories, led to two reforms in 1968 and 1971. These reforms included: (a) changes in the norms of inventories to be held and (b) the establishment of a new institution in planning and management, the Ministry of Technical Material Supply and Fixed Assets Administration. This ministry, in consultation with the State Planning Committee and other state agencies, has the responsibility for drawing up the plan for technico-material supply and for determining the allocation of stocks, supply contracts, and the like.

3.15 The equilibrium in material balances is crucial to plan implementation. As a rule, for the enterprise plan to become effective, enterprises must complete contracts for the purchase of inputs and sale of output consistent with the plan. In this way the planning authority attempts to ensure that the actual demand for inputs and supply of output (including changes in stocks) are balanced and consistent with the plan. The enterprises are legally bound to their procurement contracts. If changes in an enterprise's plan targets require modifications to these contracts, these changes cannot be effected without the renegotiation of the contract with the consent of the supplier. This encourages strict adherence to initially established plan targets. However, in such cases as the recent campaign for the reduction of consumption of raw materials, a process of accommodation is implicitly required between the contractor and the supplier so that national goals can be achieved. Except for items covered by material balances at the level of the central and above, the enterprises generally have the freedom to choose the suppliers or buyers and such factors as quality, size and delivery date are subject to negotiation. This must be of little significance to most enterprises, however, because of the limited number of suppliers, particularly for industrial and intermediate goods. Disputes among the contracting parties are submitted for settlement to the Ministries concerned or the Ministry of Technical Material Supply and Fixed Assets Administration.

(2) Econometric Models

3.16 The quantitative technical basis for Romanian planning is provided primarily by two research institutes under the State Planning Committee. The first of these, the Institute of Planning and Prognosis, is concerned with overall planning methodology and long-term forecasting techniques. The other, the Computer and Cybernetics Center for Planning, does all the computations connected with the plans and develops the sectoral models that form the basis of the sectoral plans. The models can be divided into three categories:

- (a) models for long-term prognosis, covering the period 1976-1990, with extensions up to 2000;
- (b) medium-term models, focusing on the five-year plan;
- (c) sector models for important sectors of the economy.

These are discussed in more detail in Appendix 5.

3.17 While the use of input-output tables has had limited significance so far in Romanian planning, their obvious relevance to planning problems has resulted in extensive research efforts. A 27-sector input-output table was completed about four years ago with the sectors roughly corresponding to the structure of the ministries and was used to establish macro-economic balance for the 1976-80 Plan. This table was actually reduced from an earlier (and the first) input-output table prepared in 1972 that contained 74 industrial sectors. Its application, though, to the Romanian planning was found to be extremely difficult.

3.18 Despite the problems in developing and applying the new technique, experimentation with the models is continuing and some useful applications have been observed. They have helped to identify those branches and sectors which contribute most to national income in relation to the energy, materials, national resources and especially, to imports required. In addition, they have indicated some discrepancies in the balance between sectors.

F. The Use of Plan Indicators and Norms

(1) Indicators

3.19 The responsibilities of the various economic units are established and monitored through the use of indicators, which are in essence obligatory targets through which the economic activities of enterprises, centrals and ministries are controlled. Generally, such indicators are established at three levels: (a) for the macro-economic parameters of the economy; (b) for the various branches of economic activities (that is, for ministries and centrals); and (c) for enterprises. The indicators of the national plan, which include, for example, gross value of output, wage bill, outlays per 1,000 lei of marketable output, labor productivity, investment levels, supplies for domestic markets and exports, are established by law when the plan is approved. The rest of the targets are established by the ministries, centrals and people's councils and enacted into law by a Council of Ministers decree.

3.20 At each level of economic activity, responsibility for performance rests at the next higher level. Thus, the ministries establish the targets for the activities of the centrals, and the centrals for the enterprises. This decentralization in target-setting has introduced a certain flexibility in meeting overall plan targets. A central, for example, could accept reductions in the targets of some of its constituent enterprises if these reductions have no effect on the central's performance as a whole, that is, if there are indications that they would be offset by above-target performance of other units. Similarly, changes in targets of a central of a certain ministry are considered in the context of the ministry's overall performance. Reductions or substantial modifications of targets approved for a ministry are subject to approval by the State Council.

3.21 The nature and particular use of indicators in Romania's planning have encouraged a growth-oriented economic performance. One of the most important indicators, for example, is that of gross value of output. Because a bonus system is partially tied to this indicator (as explained in Chapter Four), all units strive to maximize output to meet established targets. A corrective measure was introduced experimentally in 1973, incorporating net

output into a target indicator, but its use is still limited. ^{1/} The emphasis on improving product quality and efficiency in the production process has, however, been gradually increasing and currently a number of indicators address such factors as improvements in labor productivity and reduction in the consumption of raw materials. The fulfillment or underfulfillment of such indicators has also been incorporated in the bonus/penalties system. The general fulfillment of such indicators has, however, proven to be difficult.

(2) Norms

3.22 In Romanian planning, norms, which are quantitative expressions of existing rules, are prepared for virtually all activities in both productive and non-productive sectors. Among the most important norms are work-time necessary for the completion of an operation, fixed assets required per unit of output, working capital consumed per unit of output and material input per 1,000 lei of output. A system of progressive norms is applied in the elaboration of all plans. This means that future input requirements are not determined by reference to an average result of the past but are based on a combination of the best and average results.

3.23 Norms are established in many different ways. Where information is abundant, norms are fixed on the basis of time, production and staffing studies of specific industries or even plants. When data are limited or a technology is imported, norms are purportedly based on cadre-personnel-production structures in similar sectors in other countries. However, it is apparent from plant visits that this is not always the case as overmanning of enterprises, including those with imported modern technology, has been observed. Norms are also calculated by extrapolating from enterprises of the same size and with the same production profile. If a norm is inaccurate, it would affect target fulfillment.

G. The Planning Process and Types of Plans

3.24 Plan preparation is a very lengthy and time-consuming process in which all entities are involved. The major undertaking is the formulation of the five-year plan. Preparations for the elaboration of the five-year plan begin with the issuance of the plan directives by the Party Congress. The preparation of these begins two to three years before the end of the five-year plan then current. Available studies or prognoses are used and new ones are

^{1/} The use of net output as a target indicator differs from that of gross production (which includes both material inputs, goods in process, services and depreciation) because it emphasizes the production of a finished product, net of input. This indicator discourages physical output maximization and, since it makes no allowance for raw material input, it also discourages enterprises from adopting a product mix favoring heavy or high value products.

commissioned at selected levels of organization and economic activity in order to provide the foundation for drafting the plan directives. These studies, which usually cover each branch and sub-branch of national and regional economic activity, pinpoint products of special importance to the development effort and of strategic value to the country. A subsequent effort is undertaken to establish macro-economic balance by aggregating the results of these studies in elaborating the draft outline of the plan.

3.25 The draft outline of the plan together with the long-term macro-economic prognosis, drawn up by economic branch and by district, is analyzed and approved by the Council of Ministers and then submitted to the Political Executive Committee of the Party. Shortly after the Committee's approval of the outline and prognosis, the draft directives to be issued by the Party Congress are elaborated. A version of the emerging consensus is then received by the SCESD and submitted for adoption first to the Executive Committee and then to a plenary session of the Central Committee of the RCP. The current five-year plan outline and the prognosis up to 1990, as well as the draft directives, were approved by the Political Executive Committee in June 1974. The draft directives for the plan period 1976-80 and the principal guidelines for development for the subsequent 10 year period (1981-1990) were adopted by the plenary session of the Central Committee of the RCP in November 1974.

(1) The Five-Year Development Plan

3.26 Within the bounds of the issued general directives, the five-year development plan is elaborated by the ministries and judets. This process involves the participation of all economic and administrative units in the state hierarchy, which then engage in a successive submission and consolidation of information "upwards" from the enterprise and "downwards" from the plan directives as follows:

- (a) On the basis of their current operations and their expected expansion of output and capacity, enterprises submit to the centrals estimates of their production, together with their needs for current inputs and for investment and working capital. At the same time, these estimates are submitted to the local authority in whose area the enterprise is located. This enables the regional plans to be elaborated simultaneously with the branch ministerial plans.
- (b) The task of the central is to elaborate a plan for its particular branch of industry. Enterprise plans are in this way consolidated in a first degree of aggregation, taking into account both the suggested plans of other enterprises and the overall plan directives. After discussion with their constituent enterprises, the centrals arrive at agreed first drafts of their plans, which are then submitted to their respective ministries.

- (c) The function of the ministries is to prepare the plan for their fields of activity. They try to achieve sector consistency between requirements and availabilities in the light of national priorities. The ministries bear primary responsibility for proposing the creation of new enterprises or the expansion of existing ones, and, together with the local authorities, for the location of new plants.
- (d) At the same time, regional and local authorities are required to prepare regional development plans for the rational use of resources within their respective areas. In continuous consultation with the respective ministries (who have their own representative in a coordinating function attached to the People's Councils), the local administrative bodies play an important role in proposing the nature and location of new investment projects in this area so regional plans are not in conflict with each ministry's plans.
- (e) Together with other "organs of economic synthesis" 1/ the State Planning Committee (SPC) is responsible for correlating the projects proposed by ministries and local authorities and for ensuring macro-economic consistency of both the material and synthetic balances. The SPC together with other organs of economic synthesis is elaborating the draft of the plan and prepares it for submission to the Council of Ministers.

3.27 Once the plan reaches the stages of final draft, it must be approved successively by the various government and party organs in hierarchical order. First, review and approval is obtained from the Council of Ministers. The endorsed plan is examined by the Supreme Council of Socio-Economic Development and subsequently submitted with recommendations to the Central Committee of the Communist Party. The latter, in its plenary session, authorizes the plan objectives as contained in the draft. The plan is finally discussed, approved and ratified by the Grand National Assembly, which passes the enabling legislation.

1/ i.e. bodies such as the Ministries of Finance and Foreign Trade, the Central Statistical Office and others engaged in the economy in a general capacity, see para 3.10(i).

3.28 This Law of the Plan provides the only available published information on the five-year plan. ^{1/} Because the information presented in the Law of the Plan is in an aggregative form, it is possible to know the plan's policy objectives and action themes but not to evaluate the efficiency of inter- and intra-sectoral resources allocation except in very general terms.

3.29 The Law of the Plan provides the macro-economic policy objectives of the Party by (a) setting targets for the economy against which performance will be evaluated and (b) establishing the basic themes for the plan's implementation (for example, improvement in efficiency, technology, product quality, energy conservation). Included in the document are such macro-economic targets as national income growth, investment level, gross production for the industrial and agricultural sectors and for their major products, employment and productivity, standards of living, increases in the volume of international trade.

3.30 The investment requirements are determined in aggregate terms. Apparently only a small number of projects, the major ones, are identified at that stage; for most projects included in the total project analysis is undertaken after their inclusion. This leads to a double bind situation at the time of project analysis for subsequent non-approval of a project would jeopardize the investment target fulfillment of an entity.

3.31 While sector targets may be summarily presented in the most aggregate form in the Law of the Plan, each sector ministry is fully aware of its being a titular of the plan. And, in order to ensure plan fulfillment, performance indicators are developed for each ministry, to be achieved at each level of responsibility by the centrals. The centrals in turn set the targets for the enterprises. This disaggregation of indicators, eventually to the enterprise level, is exercised within a range of discretion, accommodating as much as possible the economic conditions prevailing in different centrals and enterprises as long as the aggregate targets are met.

^{1/} In its final non-published form, the plan is comprehensive and extremely detailed with some 21 chapters. Each chapter, a self-contained plan for each respective field, forms an integral part of plan as a whole. The principal chapters of the plan are: (1) Industrial Production, (2) Agriculture, (3) Water Administration, (4) Forestry, (5) Transportation and Telecommunications, (6) Technological Research and Development, (7) Improvement of Product and Production Quality, (8) Investment in Construction, (9) Geological Exploration, (10) Technical Material Supply, (11) Foreign Trade, (12) International Economic Cooperation, (13) Training and Improvement of the Labor Force, (14) Labor Force, Population Wages and Incomes, (15) Production Costs, (16) Prices, (17) The Supply of Goods and Services for the Population, (18) Development of the Material Basis of Education, Health Care, Culture, Housing, Local Public Facilities and Environment Protection, (19) Social Product and National Income, (20) Centralized Financial Plan, Balance of the Incomes and Money Expenses of Population, (21) Regional Development.

(2) The Annual Plan

3.32 Following practically the same procedures as those for the elaboration of the five-year plan, the draft of the annual plan is prepared in detail about six months before it is due to be executed, i.e. by the middle of the preceding year. It contains the same chapters as the five-year plan and in its published form it is almost a replica of the five-year one in structure, content and style. As an illustration, an informal translation of the 1976 Annual Plan is given in Appendix 5. The targets of the annual plan are based on:

- (a) The provisions within the five-year plan for the year in question;
- (b) The availability of new resources or reserves and the possibility of using more fully existing production capacities as well as of increasing labor productivity;
- (c) Achievements in the previous year, the rate of growth of domestic and external markets, and other factors warranting an adaptation of the original five-year plan targets.

3.33 Because of some flexibility in the planning process, which is finally made concrete in the annual plan, it is not necessarily true that a summation of the annual plans for five years will yield the targets of the five-year plan. It also follows that enterprises may not meet annual plan targets but still meet and surpass the five-year plan, depending on the level at which the former are set.

3.34 In the process of annual plan elaboration, many new projects are introduced. As a rule, these have to be fully prepared about six months before the year of execution, including relevant techno-economic studies and information on the financing and procurement of supplies. In earlier years the proportion of prepared projects was much smaller and this may explain occasional lags in fulfilling investment targets. The project selection criteria combine technical/economic and social considerations 1/. As many as 17 technical and economic indicators are legally specified for consideration in the case of each project but in reality a smaller number is used in approving the projects. Decisions to invest are a matter of policy priorities and a project must integrate first into the plan priorities. Once it is approved, resources will be allocated for it. So, implicitly, a decision to incorporate a project in the plan implies that there is no alternative use of funds that can provide a higher rate of return. Also, since the merit of each investment is judged individually and there is not a single criterion

1/ For a detailed review of project selection and investment criteria, see Appendix 5.

upon which all costs and benefits can be measured, trade-offs between the individual criteria used must be established at some stage of the appraisal process. This calls for a decision on the weights given in each project to each criterion. In many cases the weights can be derived by the priorities in the government's strategy. Finally, to the extent that prices used in evaluating costs and benefits differ from border prices the real net benefits cannot be easily determined.

3.35 After the drafting of the plan, the State Planning Committee, the ministries, centrals and enterprises begin the process of arranging for supply and marketing contracts (para 3.15), in order to make the plan concrete. In the fall, the final amendments to the draft plan are incorporated to include the most updated information on economic performance under the current plan, i.e. harvest results and preliminary estimates of performance for the other major sectors. This draft plan is then presented to the Supreme Council of Economic and Social Development, subsequently to the House of People's Councils, the plenum of RCP and finally to the Grand National Assembly.

3.36 When the plan is approved, the process of its disaggregation begins. This involves among other things what is called the "nominalization" of production targets, i.e. the setting of fixed and obligatory objectives in stated production lines. The Grand National Assembly, through the State Council, and the Council of Ministers nominalize targets only for a range of major products (in 1977 the Assembly nominalized about 60 products, the State Council about 1,300). The ministries and centrals allocate responsibilities for these centrally nominalized products and specify the different types and qualities of the products to be produced; they also nominalize an additional range of products for the enterprises. Thus the enterprises receive some targets that are nominalized by the State Council, some by the ministries and others by the centrals. Such capacities as the enterprises may then still have available can be used to produce products of their own choice, provided supply and purchase contracts can be found. 1/ Once the enterprise, in consultation with the central, has decided upon its additional targets these become obligatory and are entered as such in the plan of the enterprises and centrals. In the end, therefore, nominalization is always 100 percent. In the process of elaboration, however, there is a range of discretion in setting targets at each level, from ministry and central to the enterprise.

H. Financial Planning

3.37 As already mentioned, parallel with the major national effort to formulate the five year and annual development plans, the various units prepare financial plans that identify the resources they will require to implement their physical plans. Financial planning plays a significant role in helping the government attain its development objectives. It has these main objectives:

1/ An enterprise cannot enter production of any product before contracts have been completed.

- (a) ensuring the availability of financial resources required by the economic development plan of the country, and establishing the necessary correlations between these financial resources and the various programs of development;
- (b) ensuring a financial balance within the economy, -- a financial equilibrium between resources and expenditures, a monetary equilibrium between the money supply and the availability of goods and services and a currency equilibrium between resources and expenditures in foreign currency;
- (c) enhancing economic efficiency in all sectors of activity, both productive and non-productive.

3.38 The responsibility for financial planning at the national level is that of the Ministry of Finance, which works in close collaboration with the banking system and other agencies of economic synthesis. The banking system consists of the National Bank of the Socialist Republic of Romania and four specialized banks: the Investment Bank, the Bank for Agriculture and Food Industry, the Romanian Bank for Foreign Trade, the Savings Bank (See Appendix 8 for more details).

(1) The Centralized Five-Year Financial Plan

3.39 The centralized financial plan for the five-year period provides a synthetic balance sheet for the entire economy. The financial plan is prepared with reference to the targets set forth in the development plan and its main purpose is to consolidate the relevant financial information and to determine the consistency of the planning effort. Included in the centralized financial plan are all financial resources and their respective uses; equilibrium between resources and expenditures thus is supposed to become a test of the financial consistency of the comprehensive plan. The centralized financial plan is elaborated on the basis of established value relations especially concerning the domestic and foreign price levels. When preparing the centralized financial plan annually, the impact of changing domestic and foreign prices is considered and, accordingly, the five-year centralized financial plan is corrected. For example, the centralized financial plan for 1976-80 was originally finalized in the prices prevailing at that date (the domestic prices were expressed in 1963 prices). A number of modifications have been introduced, however, with the 1974-76 resetting of production and delivery prices. First, the State Budget for 1977 was expressed in 1977 prices, which were known when the draft budget was being prepared and, second, the 1977-80 centralized financial plan was also corrected to reflect the different price base.

(2) Annual Financial Plan

3.40 Concurrent with the drawing up of the annual plan of the economy, the annual centralized financial plan is being prepared. Initially, the data contained in the five-year financial plan is disaggregated and placed at the disposal of the ministries, the purpose being to provide guideposts for the

preparation of the annual plan. Preparation of the annual financial plan also leads to the preparation of the first draft of the State Budget by the Ministry of Finance. The annual financial plan is an operational document, which presents the targets and financial indexes for the coming year and assists in checking the feasibility of governmental directives and the intersectorial consistency of the economic plan.

I. Plan Fulfillment and Control

(1) Plan Implementation

3.41 The Council of Ministers oversees the execution of the plan but the centrals also play a key role in supervision since the enterprises are directly responsible to their centrals for the plan's implementation. Plan execution is monitored continuously by the centrals, the ministries, local administrative bodies, financial and banking institutions, the State Planning Committee and the Central Council for Workers Control of Socio-Economic Activity, all of which report systematically on progress in target fulfilment. Thus at any given time, the central authorities have an updated and accurate knowledge of the state of national economic performance. An incentives/penalties mechanism is also built into the monitoring system, designed to promote fulfillment, even overfulfillment, of the plan's targets and a more efficient use of resources.

(2) Financial Control

3.42 Financial control is exercised in two ways: preventive and auditing (ex-post control). The main role of preventive financial control is to identify and eliminate non-legal spending and, thus, ensure that business is being conducted efficiently and according to the plan. It is continuously exercised at various levels. At the enterprise level, the chief accountant reviews and approves all financial transactions. The Ministry of Finance and the Bank ensure that no transfer of funds is permitted except within plan guidelines and according to the approved techno-economic documentation for specific investments. Finally, the Superior Court of Financial Control, as a body of the State Council, exercises control functions for the ministries and other centralized state agencies. Ex-post control is undertaken in order to check whether the financial transactions have been performed in accordance with the plan. First, there is internal financial (budgetary) control organized at the enterprise, central and ministries level. This is undertaken at least once a year. Second, the Ministry of Finance has its own control organizations, the State General Financial Inspectorate and at the district level the Territorial Financial Inspectorate, that check on economic, financial and exchange transactions to ensure that they conform to existing laws. Third, the National Bank and the other specialized banks use their inspectors in connection with their credit operations, investment financing etc. Fourth, the Superior Court of Financial Control undertakes similar control for the ministries and other state agencies and checks up on the Ministry of Finance.

(3) Plan Modification

3.43 Modification of the plan during the course of its operation can be made by the authority that approved it at each level of responsibility provided that no contract is underfulfilled (para. 3.15). Without outside permission, an enterprise can change an output target nominalized at the level of the enterprise, provided no contracts are broken or new legally acceptable contracts concluded. For an enterprise to change an output target assigned by the central, it must demonstrate justifiable cause and the central can authorize the modification only as long as the central can continue to meet output targets assigned by the ministry. Likewise the ministry can approve, again given sufficient reason, only those plan changes by the centrals which do not adversely affect the output targets set by the State Council.

J. A Further Assessment

3.44 Romania undertook in the late 1960's and early 1970's measures in planning and management which were intended to increase the responsibility of the enterprises in elaborating and implementing the plan and to orient the economy to a more efficient use of its resources. While these changes were not broad in nature and scope, they were of significance in the context of the centrally planned and managed Romanian economy. Success in their implementation, however, has varied. In the course of the discussion above, some of the implications and difficulties arising have been highlighted. Additional selected topics are being reviewed briefly in this section and the following chapter.

3.45 One of the more important new measures was the introduction in 1969 of a newly found entity: the central or industrial association. It was established as an organ of management between the enterprises and the ministries. The centrals were supposed to assist the ministries in a more efficient management of their constituent enterprises by taking over some of the enterprises' functions such as marketing and budgeting, but not production. However, the potential gains from that reorganization cannot be realized in all cases. While not involved directly in production, the centrals have been responsible for overseeing the productive activities of the enterprises. Some of the centrals maintain a role which is not dissimilar to previous functions of the ministerial directorates that they replaced. In spite of these decentralization measures, therefore, decision making has remained centralized. Decentralization of authority would allow the centrals to seek economies of scale in production operations and internalize externalities.

3.46 Certain conflicts have developed from the role of prices in the resource allocation process. Managers may be directed to use certain materials when they can meet cost reducing targets by selecting alternate inputs. For example, in the 1960's government attempts to convert energy use from gas to coal, which were included in the targets of various enterprises, were largely frustrated because of unchanged lower gas prices prevailing at that time.

CHAPTER FOUR

OTHER MANAGEMENT INSTRUMENTS 1/

4.01 A wide range of instruments is used by the Government to assure the implementation of the Plan and the mobilization of resources required for its success. These include: the system of prices; the institution of a uniform exchange rate to serve not only as a means of linking Romanian prices to world prices but also as an efficiency indicator at which goods should be traded; financial incentives to stimulate workers and management to meet or surpass production targets; and finally, financial instruments that include the State Budget, the banking system and the use of credit, interest rates and money supply. A more detailed discussion of the State Budget and its components and domestic resource mobilization is given in Appendix 7; while the banking system and other monetary instruments are dealt with in Appendix 8.

A. Prices and Pricing Policy

1. Role of Prices

4.02 The present system of prices in Romania dates from 1950 when, with the issue of Decree 142, responsibility for setting prices was removed from individual producers and given to responsible government bodies - the Council of Ministers, relevant Ministries and People's Councils. The decree also established three basic pricing principles which have governed all subsequent price regulations:

- (a) uniformity of prices of similar commodities throughout the country;
- (b) stability of prices through permanent control; and
- (c) monitoring of prices with respect to costs, quality of products and general economic conditions.

4.03 The principal functions of prices at the present time are formally laid out in the Law on Prices and Tariffs, No. 19 of 1971 which was updated and republished on January 1, 1977. These functions in carrying out the role of "attaining the economic policy objectives for socialist industrialization and intensive development of agriculture, for enlarging domestic and foreign trade, ensuring monetary stability and elevating the people's standard of living" are:

1/ This chapter presents the operation of management instruments in Romania as Bank staff have come to understand it in discussions with central authorities. The objective of this chapter is primarily to convey how the instruments are reported to be used, not to provide an assessment of how they operate.

- (a) to serve as a means of aggregation and a measure of value for the measurement of inputs and outputs and contribution of each enterprise and economic unit to social product and national incomes;
- (b) to reflect the social costs of production and thereby to contribute to the allocation of resources to different sectors of the economy;
- (c) to stimulate economic efficiency and qualitative improvement of production and to encourage reduction of the costs of production and increases in labor productivity; and
- (d) to distribute national income and goods.

4.04 In this formal sense, therefore, the role of the pricing system in Romania is essentially similar to that of all other economies, that is, it provides data for the valuation of goods and economic calculations. However, since prices are only one of a number of measures and instruments used for and subordinated to the coordinated planning and implementation of development objectives and are established by the state at fixed levels or within narrow boundaries, a more detailed examination of prices at wholesale and retail levels and their relationship to other instruments available to the Government is required to explain the specific functions of prices in Romania. The operation of the pricing system is discussed in paragraphs 4.09-4.16.

2. Categories and Components of Price

4.05 The principal categories of prices in the Romanian economy are:

- (a) in industry
 - (i) wholesale prices
 - producer prices
 - delivery prices
 - (ii) retail prices
- (b) in agriculture
 - (i) producer prices
 - (ii) contract prices
 - (iii) acquisition prices
 - (iv) delivery prices
 - (v) retail prices

4.06 Wholesale prices have been defined as "the economic means whereby economic enterprises and organizations in the socialist sector conclude the process of buying and selling in the delivery of goods among themselves." 1/ Producer prices constitute ex-factory prices usually paid by enterprises in their sales to each other, while delivery prices (producer prices plus turnover tax) are the prices obtained by enterprises when selling to internal trading enterprises. 2/ Retail prices are the prices at which goods are sold to the population by the trading enterprises.

4.07 Producer prices consist of the planned branch-average unit-cost of production (i.e. branch-average production cost) covering all direct and indirect outlays; plus a pre-defined profit (beneficiu or benefit) which ensures a reasonable profitability for all branches, for a majority of the enterprises in each branch and for most products within each enterprise. The production expenditures entering into the calculation of the producer price were established under Law (No. 19) on Prices and Tariffs, 1971 as follows:

- (a) Raw Materials
- (b) Fuel, Energy and Water
- (c) Wages and Social Security Contributions
- (d) Depreciation of Fixed Assets
- (e) Tax on Production Funds (Capital)
- (f) Land Tax
- (g) Research and Development Expenses
- (h) Interest on Short-Term Credits and Other Financial Expenses
- (i) Profit

The Law also made allowance for the levying of a regularization tax upon the profits of enterprises in cases where, as a result of decreases in production expenses over time, excess profits were made. In January 1977 the Law on Prices and Tariffs was republished to incorporate some changes in the system of price formulation. In the first place, the tax on land was no longer counted as a production expenditure but became a tax to be paid from profits; in the second place, the tax on productive assets was abolished and a separate tax on profits was introduced, through the Law of Taxes on Profits (Decree 391). Finally, the regularization tax was removed.

4.08 For the IAS sub-sector of agriculture, the pricing structure is similar to that in industry; there is a single wholesale price, known as the delivery price, at which all state farm produce is sold to state trading enterprises. For CAPs and private farms, there are three prices at which producers can dispose of produce. Most produce is sold to the trading enterprises at

1/ Dr. G.H. Sica, "Projection and Planning of Wholesale Prices", Bucharest, 1973.

2/ Goods delivered for export are sold to foreign trade enterprises at producer prices.

contract prices (contracts being drawn up at the beginning of the crop year); produce in excess of contracted amounts is also usually disposed of at these prices, contracted amounts simply being increased to cover the surplus. Produce can also be sold to trading enterprises at acquisition prices. Since they are generally lower than contract prices, they usually apply to unforeseen sales made when a CAP member or private farmer needs to dispose quickly of a few animals on small amount of produce. Produce from CAP members' private plots and private farmers is also marketed directly to the population in peasant markets, at flexible prices within bounds established by People's Councils. For state-sold produce, fixed retail prices, uniform across the country but incorporating seasonal variations, are established.

3. Price Reassessments and Operation of the Pricing System

4.09 The functions of the pricing system presented in para 4.05 represent the legislative culmination of a debate on the role of prices, profit and the socialist market which took place in Romania during the 1960s. The debate arose from the increasing complexity and interdependence of the economy and the recognition that the planning and implementation of economic activities required more indirect and decentralized instruments to complement or replace the system of directive planning. In 1967, the Central Committee of the RCP issued directives 1/ proposing a number of changes in the planning and administration of economic activities, in which consideration was given to the active role prices could play in implementing and planning development objectives. Until this time, for many products prices had had largely an accounting function only; their role in the allocation of resources in the socialist sector and in providing appropriate signals concerning economic efficiency was small. This was, perhaps, for the best, since, as the Directives put it, "one of the main drawbacks of the price system in our country lies in the fact that a series of prices are established without the social expenditures incorporated in the given products being taken into account and that the criteria of the law of value which still governs in one form or another any economy based on commodity production are being ignored." If prices gave the wrong signals to economic units, the impact was negligible as long as the allocation of resources and the implementation of production plans were governed by other instruments and management tools which took little account of prices. The increased sophistication of the economy and the increasing impossibility of covering all economic activities with physical indicators raised the possibility that economic units would pursue their financial interests as indicated by the structure of prices and thereby make more difficult the fulfillment of development objectives. As the 1967 Directives stated, the use of inappropriate prices, in particular, made it difficult to raise the efficiency of production, to lower the consumption of inputs and improve the quality of goods. Thus, the major concerns of price assessments have been wholesale prices.

1/ On the Perfecting of Management and Planning of the National Economy.

4.10 In 1956, a State Committee for Prices was established to administer the pricing system and, following discussions of the Central Committee's directives by the National Conference of the RCP and its Tenth Congress, an Inter-Ministerial Commission was appointed to make proposals, under the supervision of the SCP, for improving wholesale prices. Out of these proposals came the 1971 Law on Prices and Tariffs which established the legal and analytical framework for the new pricing policies. In 1974, the application of new producer and delivery prices began. ^{1/} It was formally completed at the end of 1976, although some corrective changes have been made since then. As the Commission on Prices indicated in its report, it can only be a gradual process, in view of the past decisions that have shaped Romania's economic progress, by which prices can be brought closer to social valuations, whether measured in terms of internal values or international prices.

4.11 The price reassessment can be most usefully discussed from two angles; first, the extent to which the price changes reflect more accurately and fully the social costs of production, and second the extent to which the price system working with other managerial tools has been able to carry out the functions delineated in the 1971 Law.

4.12 In one sense, the price reassessment unequivocally led to improved calculations of social costs of production, since between 1963, the date of the previous price resetting, and 1974 producer prices and actual production costs had diverged as a result of technological change and changes in factor productivities. However, the major discussion on prices as a measure of social costs of production centered upon what should be included within the producer price as an appropriate charge for the use of capital. Before 1974, improvements in producer prices (which took place in 1955 and 1963) had not dealt effectively with the question of the calculation and distribution of net profit. Producer prices before 1974 had included charges for capital only insofar as depreciation expenditures were concerned. Thus no charges for the use of capital stock were incorporated, because funds for these purposes were generally provided through the state budget. Once the overall amount of profit and thus the average rate of profit had been determined for each industrial branch, the rate of profit for each enterprise and each product was determined on the basis of production expenditures. The 1974-76 producer and delivery price reassessment introduced for the first time explicit charges on total assets and working capital as a component of production expenditures so as to stimulate a more efficient use of fixed assets and to prevent over-capitalization of production. The rate of profit for each product was recalculated on the basis of all production expenses and the average branch rate of profit so as to take into account fixed assets and working capital. Beginning in January 1977, the tax on productive assets was abolished (para. 4.07); at the same time, a tax on profits was introduced as a means of transferring to the state budget the difference between producer price and production expenditures in excess of planned profit (see Appendix 7). This was done because the authorities wish to increase the role of profit, in cooperation with other indicators, as an instrument for stimulating greater efficiency at the enterprise level.

^{1/} For the stages of implementation, see IBRD Current Economic Position and Prospects of Romania, Annex B, No. 492a-RO, October 11, 1974.

4.13 Insofar as the functions of prices in planning and implementation of economic activity of enterprises are concerned, producer prices are more important in the implementation of plans than in determining the allocation of resources. The allocation of resources is made chiefly through the planning process and the fact that the allocation is made increasingly by indicators of value reflects the fact that the overall structure of producer prices has been made consistent with the country's development objectives. This is of practical importance in the planning process because the reconciliation of enterprise plans aggregated upwards and the macro-economic plan parameters of the State Planning Committee can only be achieved speedily and efficiently if the combination of physical, financial and pricing instruments applied at the enterprise level orient units in the same direction as the central plans.

4.14 In the areas where physical indicators do not constrain the allocation of resources, producer prices clearly do have an impact on production planning. This is most obvious in agriculture where the structure of input and output prices clearly affects the production of goods by private farmers and members of CAPs on their private plots, but it also occurs to some degree in industry, particularly where enterprises have some discretion over product mix and factor utilization.

4.15 Producer prices are also used to orient enterprises towards fulfilling their plans and to evaluate performance in executing plan objectives such as reduction of cost and improved quality of goods, insofar as the structure of prices provides appropriate signals. The fact that specific plan targets for cost reduction and new improved products have been necessary suggests that the structure of prices while improved by the recent exercise is not yet sufficiently finely-tuned to act in every case in favor of these objectives. The Law on Prices and Tariffs provides for the continuous review and improvement of prices and the Government has indicated that, in future, more frequent reviews of price levels will take place, although it remains government policy to maintain a constant structure of prices within each plan period. The need for continued improvement is shown by the adjustments which have been made, particularly in construction, since the producer price exercise was completed.

4.16 While the government's policies towards producer and delivery prices have led to considerable change in their levels and structure, it is the relative lack of change which demonstrates government policy towards retail prices. It is government policy to maintain as stable a level of retail prices as possible. To this end, the five-year plan contains a target for the maximum permissible increase in retail prices, the fulfillment of which is the primary responsibility of the Council of Ministers, the State Committee of Prices and the People's Councils.

B. Foreign Trade Pricing and the Exchange Rate

4.17 Just as the planning and organizational changes stemming from the Directives of the 1967 National Conference of the RCP concerned both the internal organization of the economy and external economic relations (see Chapters Three and Seven), so the reorganization of the pricing system affected both internal and external transactions. The major impact of the pricing reforms upon external transactions has been to expand the influence of international prices upon Romania's domestic price levels and to make use

in a limited way of the relationship between domestic and international prices to help determine the goods suitable for export and import. This has been achieved through the institution of an exchange rate in 1973 and a more appropriate domestic pricing system, which together permit a more instructive comparison of Romanian and international prices.

4.18 Prior to 1973, there was no link between internal and external prices in the form of a generalized exchange rate which could be used to assess the profitability of Romanian participation in foreign trade or to give signals to enterprises that goods could be profitably exported or imported. In view of this, and the fact that domestic prices themselves had a number of deficiencies as well as being dissimilar to the international price structure, the profitability of foreign trade could only be calculated through shadow pricing exercises. These were carried out largely within the planning process; the decision to import was taken mainly on the basis of the comparison between the domestic economy's needs and the resources available to fulfill the plan, and exports were established chiefly to finance the imports. Moreover, the financial results of foreign transactions were not reflected in the books of producing enterprises; they paid for imports and received for exports the domestic price of the good, irrespective of its foreign price. Thus, the gains from trade flowed directly to the state.

4.19 For these reasons and because the leu was not freely convertible, the exchange rates quoted by the government under this foreign trade regime were of limited application. Two rates were quoted. The official rate, which was and remains the official gold price of the leu, 1/ is used only for expressing the value of foreign trade in official statistics, the unit of currency is known as the leu valuta, or foreign exchange leu. The official rate with premium, 2/ which was and remains in use for non-commercial transactions, among others for tourist transactions, was the only operational rate, in the sense that it was the only rate at which non-Romanians could obtain lei. In 1973, the government established an exchange rate (also known as the trading rate or internal conversion coefficient), at a rate of 20 lei: US\$1, which was intended for use in the comparison of foreign and domestic prices of goods. The rate was fixed at 20:1 because it approximated the weighted average of all actual exchange rates for export and import transactions over the previous three years: it therefore represented the average rather than marginal cost of foreign exchange. Its introduction as an efficiency indicator which would show more clearly the comparative advantage of Romanian producers in international markets followed from the recommendations of the 1967 National Conference Directives and subsequent studies that economic calculations in the allocation and utilization of resources should be influenced more directly than previously by the level and structure of international prices. In March 1978 the trading rate was revalued to 18 lei: US\$1.

1/ Defined equal to 0.148112 grams of fine gold, yielding an exchange rate against the US dollar of 6:1 before December 1971, 5.53:1 until February 1973, 4.97:1 until March 1978 and 4.47:1 from then.

2/ Before December 1971 18 lei: US\$1, 16 lei: US\$1 until February 1973, 14.38 lei: US\$1 until October 1974, since when the rate has been 12 lei: US\$1.

4.20 The trading rate has two major roles; to determine whether, in principle, a particular good should be traded or not, and as a starting point for determining the division of foreign exchange gains between the state and the producing enterprise. The ground-rule for determining whether a product should be exported is that the foreign exchange earned must, when converted into lei at the trading rate, be equal to or greater than the domestic price of the good; in other words, the export of a good must cover the full costs of production, including the profit margin. In principle, the basic decision to import is determined in a similar fashion; the foreign price of an imported good is compared with the domestic price at the trading rate. Because the structure of Romanian relative prices is not in line with the international price structure and because enterprises may not see reflected in their domestic costs the full foreign exchange cost of imported inputs (see para. 4.24 for details) or in their receipts the full foreign price of an export (para 4.22) the basic comparison of foreign and domestic prices using the trading rate is complemented by what amounts to a comprehensive shadow pricing operation. For each tradable good, the profitability of trade is also calculated by costing all inputs (traded and non-traded) and outputs in international prices. These calculations are first made in the techno-economic study at the time production of a product within Romania or the expansion of production is being considered. They are also made annually by the foreign trade enterprises, and more frequently for commodities whose international price fluctuates a great deal. These calculations also provide the basis on which the Council of Ministers determines whether products with an effective exchange rate less favorable than 18 lei: US\$1 can be authorized for export.

4.21 Because the structure of Romanian prices does not fully correspond with international price structures, the shadow pricing calculations produce situations in which the export of goods may be economically profitable, even when the basic ground rule cannot be met. (Conversely, there may be cases where the ground rule is met but export is not profitable.) Such cases may also reflect situations where enterprises have not yet attained planned productivity levels. In these cases, exports may be authorized for a year by the Council of Ministers, after individual review at the time the annual plan is prepared. Enterprises exporting under this approval have to take measures to improve their productivity and export performance so that they can export profitably at the trading rate in the future. In the meantime, the enterprises, which exchange the foreign exchange earned from export into lei at the trading rate, receive a payment from a trade equalization fund to help to recover the full producer price.

4.22 The exchange rate also enters into the process whereby foreign exchange gains are distributed between producing enterprises and the state. For exports, standard foreign prices are established annually, calculated on the basis of external prices obtained by enterprises in the previous period and updated to account for the expected world market situation. These prices are used to express in value terms the volume of exports included in the annual plan and to prepare balance of payments projections, but their major operational role is to serve as a benchmark for determining the division of foreign exchange receipts between the enterprise and the state, that is, the price equalization fund. In the case of goods which are exported profitably, i.e.

the price obtained is higher than the domestic price converted at the trading rate, the producing enterprises receive the domestic price in lei, and the difference between the standard foreign price and the domestic price is paid into the equalization fund, that is, the profit from trade accrues to the state. In the case where the enterprise secures an actual price above the standard price, it receives all of the difference as a bonus. Conversely, if it can secure only a lower price than the standard price, the enterprise must pay into the equalization the difference, so that in effect the fund receives the full difference between standard and domestic price. (See para. 4.21 for details of what occurs if exports occur when the actual foreign price is below the domestic price). Thus, the standard foreign price serves as an incentive for firms to seek the most profitable market. 1/ Enterprises also receive bonuses in lei for distribution to employees if they overfulfill their foreign exchange targets. 2/

4.23 For some 'conjunctural' goods, 3/ those goods with large and unpredictable short-term fluctuations in their foreign prices, the system of distribution between producing or importing enterprises and the equalization fund has been modified to protect exporters and importers from exchange losses and gains. For these goods, the equalization fund absorbed all but five percent of any difference between the actual price and standard foreign price.

4.24 The arrangements for imports have also undergone considerable change over the past few years. When the trading rate was introduced, it was intended that the cost of all imports be translated into domestic prices at the trading rate, thereby eliminating the need for a price equalization fund, and that differences between international and domestic prices be dealt with through a system of tariffs. In 1974 import tariffs were established and for a few months the equalization fund was abolished. However, the international inflation of 1974 and 1975 necessitated the reintroduction of the equalization for raw material imports to prevent the profitability of import-using enterprises being impaired and financial flows through the economy being disturbed. Since enterprises received fixed prices for outputs, increasing outlays for raw material inputs would have reduced their profits. At present, enterprises pay the established domestic price for imports, any differences between domestic price and foreign price converted at the trading rate being settled with the equalization fund. As in the case of exports, a standard price system operates to induce enterprises to seek the most economical source of supply. For the import of machinery and equipment, the domestic price

1/ Foreign trade enterprises are encouraged to seek high-priced markets for the producing enterprises because their commission is a percentage of the price.

2/ Before 1974, bonuses were in foreign exchange and usable for additional imports.

3/ 'Conjunctural' commodities are wheat, maize, sunflower oil, sugar, sheep, cattle, live pigs, meat, softwood and beechwood lumber, cement, gas, diesel oil, black oil, nitrogenous fertilizer, caustic soda, sheet iron, concrete iron, profiles, rolled metal and aluminium in lumps.

paid by the final user is established by the conversion of the foreign price at the trading rate plus the appropriate tariff. In the case of consumer goods, the foreign price is converted at the trading rate and the appropriate tariff added to form the domestic cost of the import. Any difference between the cost and the domestic price is reflected in the financial accounts of the importing enterprise. Thus, for investment goods and consumer goods, their import is regulated through the tariff and, in the last resort, the issue of trade licenses. In 1977 new custom tariffs were established, to take into account the changes since 1974 in domestic-international price relationships.

C. Incentives and Penalties

4.25 The present system of wage and salary bonuses has evolved since 1970 when substantial changes were made in the prevailing one, which lacked a sufficient incentive effect. In the earlier system, the bonuses had amounted to a substantial 20-25 percent of the wage fund; and they were paid out of the wage fund. Because they were linked only to the fulfillment of plan indicators, almost nothing additional was paid out when targets were over-fulfilled. In the case of plan underfulfillment, penalties were not imposed on salaries. Thus, in practice the system did not provide an incentive effect.

4.26 The 1970 measures raised basic wages and salaries to incorporate previous bonuses. Basic wages and salaries now average about 95 percent of total earnings. Integrated into the wage system is a new incentive scheme that rewards performance above plan targets and penalizes shortcomings. The maximum impact on wages under this scheme is plus or minus 20 percent. Additional end of year bonuses are also available to workers and these are discussed further below. Wage/salary increases or decreases are usually determined mainly on the basis of the fulfillment or underfulfillment of four indicators. These are divided into quantitative indicators (planned output targets and exports where applicable) and efficiency indicators (labor productivity and material costs per 1,000 lei of marketable output). Some ministries and centrals may establish other indicators as well depending upon the patterns of production of their constituent units. As a rule, the above four indicators have the same weight, but ministries can also set different weights.

4.27 Salaries of employees, technical and administrative personnel are increased or decreased by one percent for each percent of over- or under-fulfillment of the indicators, up to a maximum salary increase/decrease of 20 percent. For management staff, a one percent over- or underfulfillment of the indicators leads to a four percent salary increase or decrease up to a maximum increase or decrease of 20 percent. The salary increases or decreases are applied monthly but an enterprise can make up partly or fully its shortfalls in these indicators in subsequent months and salaries will reflect that. Increases or decreases of salaries in centrals and ministries for over- or underfulfillment of indicators are subject to the same rules.

4.28 End of year bonuses can also be paid to an enterprise's (as well as a central's and ministry's) staff. The bonus fund amounts to two percent of the wage fund. If excess profits are realized, the bonus fund can be augmented

and reach a maximum of eight percent of the wage fund of an enterprise. 1/ There is a formula determining what proportion of excess profits arising from different activities would be allocated to the bonus fund. 2/ While the maximum bonus fund corresponds to a month's wages and salaries for an entity, bonuses can reach up to three monthly salaries for individuals. The existing bonus fund is distributed according to salaries but half of the fund developed from excess profits is distributed by the management according to salaries and the rest selectively. In addition, the management of a unit has at its disposal another bonus fund amounting to one percent of the wage fund which it is entitled to distribute during the course of the year to reward exceptional performance. Similarly, the management is entitled to penalize an individual up to 10 percent of his monthly salary if he has underfulfilled personal tasks, even if the unit at large may have overfulfilled its targets.

4.29 While the new scheme provides substantially more incentives than those prevailing before 1970, its effects have not yet been fully assessed. To an outside observer, it is not clear what trade-offs the enterprise establishes between consistent and significant target overfulfillment that leads to increased salaries as well as bonuses, and the risk that its targets and/or norms may be reassessed if it continues to be a consistently successful performer.

D. Financial Instruments

4.30 The objective of the public finance and banking measures in the early 1970's was to introduce additional elements of profit orientation in the economy and assist in the decentralization of decision making by devolving more resources to local governments and enterprises. The measures have been implemented with some success but, for various reasons explained in Appendices 2, 7 and 8, some of their initial impact had dissipated by 1975. Thus, the dependence on fiscal flows through the state budget has continued to increase. In the remainder of this chapter, only the role and functions of the principal financial instrument, the state budget, and of the major monetary aggregates are discussed.

The State Budget

4.31 The principal financial instrument for plan implementation is the state budget, which in Romania includes the republican and the local budgets. Under the law, it is drawn up balanced but when executed, it is regularly in surplus and the Government has never had to borrow from the National Bank to

1/ Before July 1, 1977 these percentages applied to the gross wage fund. Since then they are applied to the net wage fund as the enterprises (centrals and ministries) now pay a tax calculated on their wage fund.

2/ The following formula was used before July 1, 1977 and it has been slightly modified since then: 20 percent of excess profits arising from increases in productivity and from decreases in material costs, 16 percent from increases in output and 10 percent from other activities.

cover expenditures. These persistent surpluses are not necessarily deflationary in a planned economy like that of Romania, and they may be explained by various factors, such as, for example, increased incomes or unspent investment funds due to shortages of materials and machinery. The budgetary balance is monitored very closely through detailed fortnightly and quarterly reports of the financial and banking system.

4.32 The resources of the republican budget are collected mainly from state enterprises and institutions operating on a republican scale, and from taxes paid by the population. The republican budget finances national economic and social objectives such as fixed investments and other important economic projects, socio-cultural activities, national defense, etc. The local budgets of districts, municipalities, towns and villages are financed by transfers of profits from local enterprises and institutions and from taxes paid by individuals, cooperatives and economic units of other public agencies. The local budgets finance the economic and social activities carried out by the People's Councils and local administration.

4.33 Both the republican and local budgets include reserve funds for contingencies. The use of the reserve funds and any additional financing requirements that develop unexpectedly during the year have to be thoroughly justified and ultimately may have to be approved by the State Council.

4.34 The high growth rates of the Romanian economy attest to the government's ability to mobilize domestic resources and this is discussed more extensively in Chapter Five. The chief instrument for resource mobilization is the system of profit transfers, taxes and other quotas and the government appears to have used it with considerable effect in meeting its needs for investment capital. Most of the resources are collected at the enterprise level since the strict control exercised by the State over individual incomes makes it unnecessary to tax the population heavily. ^{1/} Most of the taxes are state taxes, but as mentioned earlier, there are some local taxes. A synopsis and definition of the taxes, quotas and other payments to the state and local governments, including the new 1977 measures, are given in Appendices 2 and 7.

E. Monetary Instruments

4.35 The role and function of the three major monetary instruments (bank credit, interest rates and the money supply) are discussed briefly below. Recent changes and their current levels are given in Appendix 8.

1. Bank Credit

4.36 An important financial instrument developed in recent years has been bank credit. This instrument was improved in 1970 and the current lending conditions are set out in the Financial Law of November 1972, implemented as of January 1, 1973. The law states that credits can be extended only for

^{1/} As of July 1977, the personal salary tax was removed and in its place a tax on the wage fund paid out by the enterprise was introduced.

specific purposes such as production (including working capital), marketing, investments or minor improvements in an enterprise's plant, and are to be secured by the unit's assets. Credits can only be extended by the banking system and never by enterprises. The government's decision to substitute certain financial for fiscal flows is an important recognition of the competing demands for capital and its cost. Further, the measures adopted on credit terms recognize the need for a more efficient capital use by the enterprises: the average interest rate for such credits increased and the terms were established to reward efficient performers and penalize less efficient enterprises. The total planned increase in funds under the Plan indicates how many new credits can be issued, while the increases in the individual categories for which credit funds are used are, in effect, limits beyond which banks cannot extend credit.

4.37 The level of short-term credit in the economy is provided in the quarterly Credit Plan, drawn up by the National Bank in collaboration with the Ministry of Finance, the other banks and other agencies of economic synthesis. It is based on an analysis, undertaken with the sector ministries, of the activities determined by the development plan and the state budget. The Investment Bank and the Bank for Agriculture and Food Industry draw up, for investment purposes, the Plan for Medium- and Long-Term Credit, in addition to the Short-Term Credit Plan. Bank credit can be divided into three categories: first, long- and medium-term credit, primarily to finance investment needs of enterprises; secondly, short-term credit to finance working capital needs; and finally, consumer credit extended to the public for durable goods purchases and housing. Long- and medium-term credits can be granted to:

- (a) finance centrally-planned investments; it should be noted that the extension of long-term credit for this purpose is a recent phenomenon and of small scale. About 88 per cent of long-term investment by enterprises is financed through the state budget and depreciation funds;
- (b) supplement internal resources of the cooperatives and economic units of other public organizations; this might involve a new investment such as the modernization of facilities, or in the agricultural sector it might be used for the purchase of animals for breeding.

The maturity for long-term credit is up to 10 years (for agricultural cooperatives some credits are extended for up to 12-25 years) and for medium-term credits up to 5 years. Two fundamental provisions for the extension of any bank credit are that the items financed must have been included in the annual plan and their production must have an adequate level of profitability to cover the repayment of the loan within 10 years. Investment credit is also available, with one-year maturity, to offset frictional disturbances in the investment program of the firm, when rescheduling of a project causes a higher level of disbursement.

4.38 The largest percentage of bank credit operations in Romania is composed of short-term credit, chiefly to meet the working capital needs of enterprises, and of these, trade, construction and agricultural organizations are the biggest users. The annual growth in this credit is, of course, dependent upon the increases in production. On average, 45 percent of the working capital requirements of the enterprises is financed by bank credit, while the working capital needs of new enterprises are met by the state budget. Bank credits are repaid from the enterprises' profits or other specific funds. The repayment period is 12 months but it can vary for some branches of the economy. For example, in agriculture, the repayment terms are longer and in industry they are shorter. The National Bank extends credits to industry, trade and transportation. BAFI extends credit to agriculture, forestry and food industry. Agricultural cooperatives and private farmers can borrow from 45 to 60 percent of the value of their contracts with state organizations to finance working capital needs. Finally, the Investment Bank extends credits to the construction sector. The funds of the last two banks can be supplemented by the National Bank. Foreign trade enterprises engaged in exporting borrow from the Bank of Foreign Trade (para. 3.38), repaying their debts once they receive payment from their foreign trading partners.

4.39 Consumer credit is extended through two banks and its availability and terms, as well as the items for which it can be used, vary, depending on the consumer credit policy of the government at any period of time. Installment credits are extended by the National Bank through the state trade units. Consumer demand for the purchase of particular goods can be manipulated by changing the credit terms for these goods, as illustrated by the 1974 case in which the government eased credit terms for passenger cars to eliminate an accumulation of unwanted inventories. In general, changes in credit conditions are used for inventory control. Credits for housing are extended through the National Savings Bank and these usually cover 70-80 percent of the total housing costs with a maturity of 15-25 years. Low income earners obtain the most favorable terms.

4.40 It has already been mentioned (para. 3.42) that the banking system fulfills a complementary auditing function in supervising the financial and economic operations of enterprises, specifically their use of credits and of state budget funds. In actuality, the banks supervise the operations of the enterprises in many diverse ways. Because of the limitations placed on cash transactions, the enterprises depend on them to settle their accounts. Banks may extend credits to economic units for up to 90 days, if they are in temporary financial difficulties. In more severe cases, when an enterprise, for example, encounters certain operational difficulties, it may request the bank for extension of special credit which would be extended conditional upon remedial economic measures to be undertaken by the enterprise. Such credits are extended for a maximum period of six months and the interest rate is set two percentage points higher than current applicable rates. For all outstanding credits and for credits without guarantees, a penalty interest of maximum 12 percent is applied by the bank. In 1974, only five percent of all the bank loans were at the penalty rate reflecting the financial discipline of most economic units. In effect, through their tight control over credit, the banks can force the enterprises to comply with the Plan.

2. Interest Rates

4.41 Interest rates are paid on all credits. These rates are set by the central authority and are not influenced by the demand for and supply of capital nor do they reflect risk since there is no money market in Romania. Conceptually they are more a tax on the use of capital than a price of capital. By the same token, they do not necessarily reflect the social opportunity cost of capital because the return on capital investment is derived not only from interest payments but also from taxes and the net surplus after operations returned by the state enterprises to the state budget. Interest rates, therefore, are relatively low. However, since there is little price increase in the economy, the relatively low rates result in real rates quite high in comparison with those prevailing in many other countries today.

4.42 The Government looks upon interest payments as a device for increasing the efficiency of resource use. Enterprises can borrow only for those projects that have an adequate rate of return and all interest obligations are serviced out of the firm's profits. While it is difficult to know the sensitivity of enterprises and consumers to interest rate levels, undoubtedly it exists. It induces enterprises to follow their stock position more closely and the penalty interest of 12 percent induces enterprises to take measures for a more efficient utilization of resources. The consumer's increased propensity to save and his response to credit charges for some categories of consumer goods also suggest responsiveness to the level of interest rates.

4.43 Interest rates are pegged at a level somewhat below the average profitability of enterprises and the rate structure favors sectors with a particularly heavy demand for working capital. Trading enterprises pay the low rate of three percent on their borrowings; agriculture is charged four percent and industry pays the top five percent. A State Council decree in December 1974 simplified the regulations on interest rates but left the rate structure largely unchanged except for some special credits which were lowered from the 6-12 percent range to 4-7 percent. The rate structure now in existence is given in Appendix 8.

3. The Money Supply

4.44 Money supply is defined as the sum of (a) the balances in the bank accounts of enterprises, organizations and institutions and the state budget; (b) the savings deposits of the population; and (c) the currency in circulation. Cash in circulation is mainly limited to individuals and arises from their transaction with enterprises and among themselves. All other transactions are non-cash. Settlement takes the form of a transfer of funds from one bank account to another.

4.45 Since consumers are free to use their cash income for current consumption, acquisition of dwellings, durable goods and savings deposits, the Government pays particular attention to the planning and control of the money in circulation. For this purpose, the balance of consumer cash income and expenditure, and cash plans, is drawn on a quarterly basis. The purpose is

to match that portion of the income of the population devoted to consumption with the output of goods and services available to consumers. The cash plan is thus a component of the annual plan and it attempts to project the future behavior of households, in terms of expenditure and savings, with the objective of attaining an equilibrium in the cash circuit of the economy.

4.46 Every effort is made to keep the increase of cash in circulation in line with the output of consumer goods, taking into account the requirements of stable retail prices and the increasing monetization of the economy. However, as the money supply is basically determined by the level of production, and current credit and cash plans, its effectiveness as an instrument of economic management is actually rather limited.

PART II

DEVELOPMENT TRENDS AND STRUCTURAL CHANGES

CHAPTER FIVE

LONG-TERM TRENDS, 1950-75

A. Introduction

5.01 This chapter examines the changes in the Romanian economy over the past two and a half decades; it traces the performance of the economy through its major macro-elements and examines the most important issues arising during the period. Further details on the stages of economic growth between 1950 and 1975 can be found in Appendix 6. In addition, the chapter provides the general background for the detailed examination of performance between 1971 and 1975 (see Chapters Six and Seven) and the more specific discussions of plans and performance in various economic sectors contained in subsequent chapters.

B. Economic Growth and Structural Change

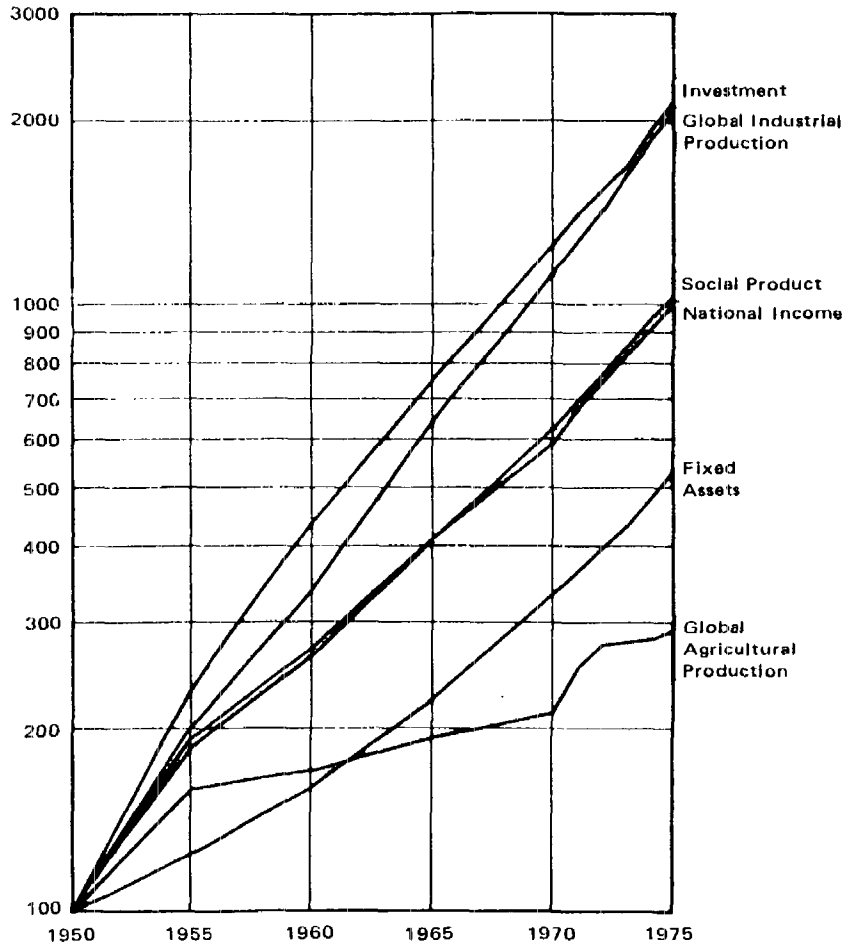
5.02 Between 1950 and 1975 the Romanian economy underwent a radical transformation (Figures 5.1 and 5.2). The level and diversification of industrial production increased rapidly, providing the basis for the modernization and expansion of other economic sectors and a general increase in labor productivity and national income. With the transfer of labor from agriculture to industry, the population became increasingly urbanized. Standards of living improved substantially, not only because of the growth of personal incomes but also because of the provision through the state budget of expanded and improved education, medical services (both of which are free), housing and social expenditures of all kinds. Finally, reflecting the changes in economic structure, Romanian participation in the world economy changed significantly as the level of trade rose and its composition altered. In the following paragraphs, a largely quantitative picture of the transformation is provided. While the data clearly indicate the extent to which rapid economic progress has been made, some care is required in interpreting them because of the methodologies used in their computation by the Romanian Statistics Office. 1/

5.03 According to official statistics, the Romanian economy sustained the highest growth rate of the Eastern European countries between 1950 and 1975 and one of the highest in the world. Over this period, social product and national income increased approximately ten times. Measured in comparable prices 2/, social product rose from 83 billion lei in 1950 to 864 billion in 1975, while national income grew from 35.4 billion lei to 362 billion. The average annual growth rates of social product and national income over the

1/ See the glossary for a definition of national accounting terms in use in Romania, Appendix 4 on Social Product and National Income and on the Romanian data.

2/ See the glossary for an explanation of comparable prices.

Graph I: Major Economic Indicators, 1950-75, (1950=100), in comparable prices



Graph II: Incomes Indices, 1950-75

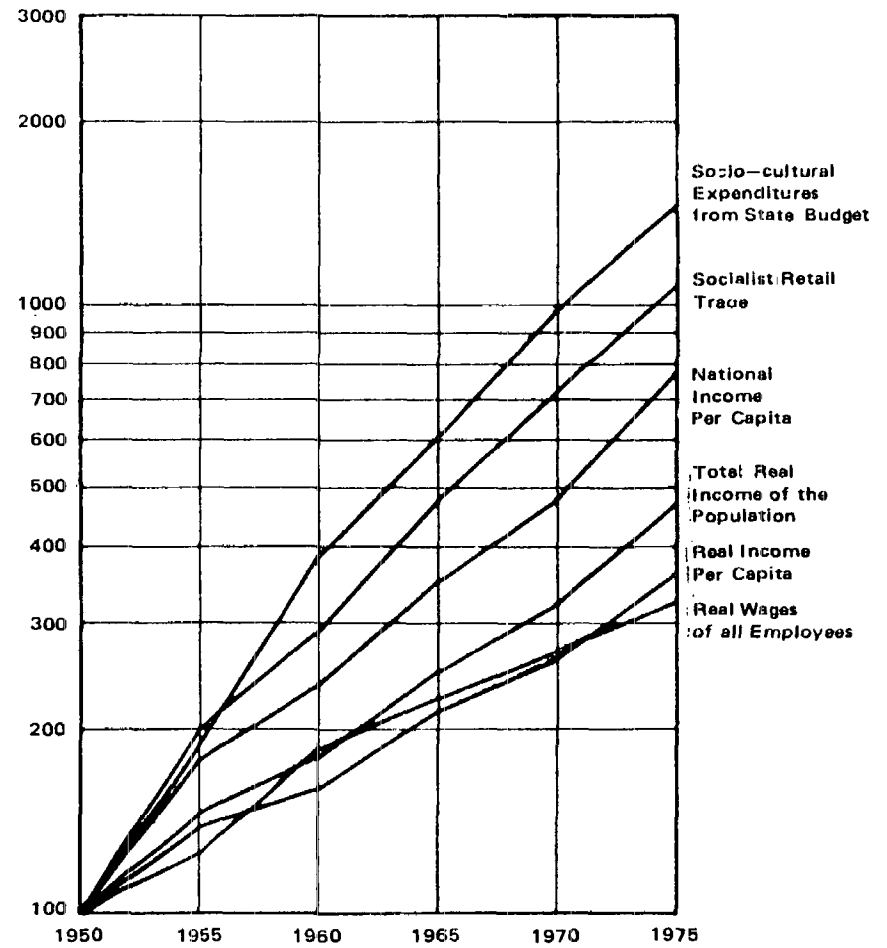
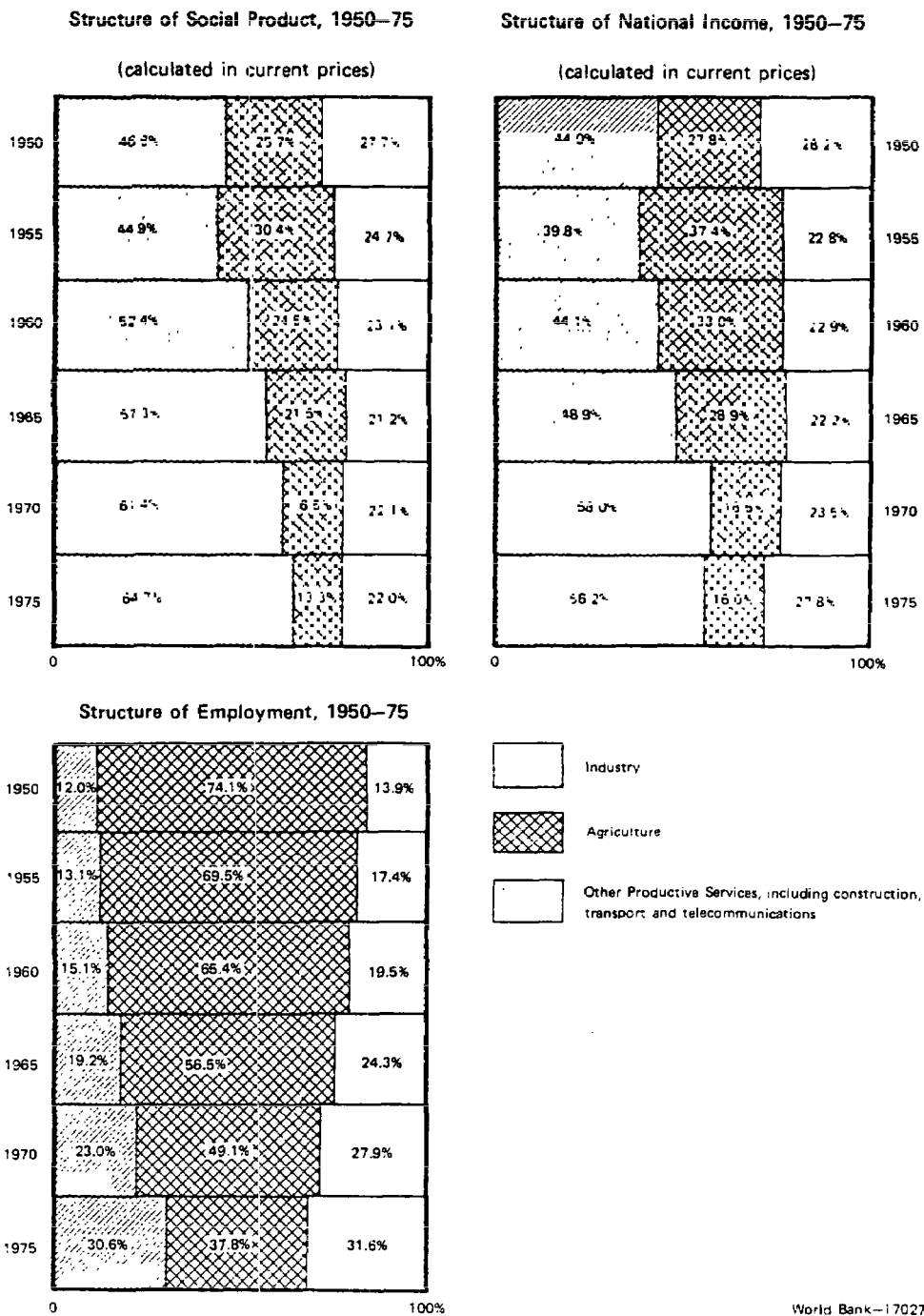


Figure 5.1

Figure 5.2



twenty-five years have therefore been 9.8 percent and 9.7 percent respectively. Since the population growth rate over the same period was only 1.1 percent per annum, per capita social product and national income have also risen at very high rates compared with other developing countries; the average annual growth rates have been 8.7 and 8.6 percent respectively. These aggregate figures should, however, be regarded as approximations of the real economic growth rather than precise measures of it for a number of reasons. In all economies, problems exist in valuing outputs over a period in which there has been significant structural change and large relative price changes. In Romania, these problems have been compounded by the fact that comparable price series are not exactly constant price series and that gross output has been used as the primary plan target at all levels of the economy over the period 1950-75. Nevertheless, all such caveats aside, it is clear that Romania has enjoyed what has been internationally a high economic growth rate over the past two and a half decades.

5.04 The driving force behind the high rates of economic growth has been the high and rapidly expanding volume of investment that has resulted from the government's ability to maintain a growth of consumption below the annual increases in overall productivity and so to raise the saving rate. Between 1950 and 1975, gross investment increased 22 times, from 6.3 billion lei (measured in 1959 prices) to 137.7 billion (in 1963 prices) (Annex 3.3); this represented an average annual increase of 13.1 percent, considerably more than the growth of national income. This growth can be represented more dramatically by the fact that in each plan period the volume of investment has exceeded the volume in the previous ten years. As a result of the high marginal propensity to invest, which in some years has approached 0.5, the proportion of national income allocated to investment rose from 17.6 percent in 1951-55 to 34.1 percent during 1971-75 (Table 5.1).

Table 5.1: UTILIZATION OF NATIONAL INCOME, 1950-75
(in comparable prices)

	National Income	Consumption Fund	Accumulation Fund
1951-55	100	82.4	17.6
1956-60	100	84.0	16.0
1961-65	100	75.7	24.3
1966-70	100	71.2	28.8
1971-75	100	65.9	34.1

Source: Anuarul Statistic.

Note: See technical glossary for a definition of terms.

5.05 The mobilization and allocation of savings and investment in all sectors has been under full central control. The largest, by far, proportion of domestic savings has been appropriated and deployed by the state budget which in turn has operated as a component of the central planning mechanism. All other resources which fall out of the purview of the budget (for example, depreciation funds and savings by agricultural cooperatives and individuals) have been closely regulated and monitored to ensure that their use complements the budgetary resources in the implementation of the development plan.

5.06 Romania's fiscal system has been shaped to provide consistently the bulk of the resources required for the country's planned development effort. Over the last 25 years, the growth of budget revenues has exceeded that of national income and their structure has changed markedly denoting the expansion and deepening of economic activities as well as the effects of the government fiscal measures to enhance the financial viability of the state enterprises. The aim has been to make the economic activities of these enterprises more profitable in the context of the Romanian pricing system, and this is clearly reflected in the sharply increased share of enterprises' profit remissions in total budgetary revenues.

5.07 In 1950-75, revenues of the state budget increased at an average annual rate of 10.5 percent, from Lei 20 billion to Lei 239 billion, versus a corresponding national income growth rate of 9.7 percent (para 5.03). ^{1/} As a proportion of national income budget revenues have remained consistently in the high range of 60-65 percent. They have been at about 50 percent of GNP in the 1965-75 period.

5.08 The impact of the high rates of investment upon the growth of social product and national income has been magnified by the predominance given to the productive sector in its allocation. Approximately 80 percent of total investment over the period was allocated to the productive sector and most of that allocated to the non-productive sector was used to support the expansion of productive activities; for example, investments in education and housing for the newly-urbanized labor force. The high growth rate of net investment, embodied largely in the form of new plants and the diversification of the production base, led to a constant increase in the volume of fixed assets. Between 1950 and 1975, the average annual growth rate of fixed assets was 6.9 percent.

^{1/} National income data is available in comparable prices while budget data is in current prices. Accurate direct comparability of the data is, therefore, not possible. Also, it should be noted that if allowance was made for the expansion in 1955 of the activities included in the socialist sector and the respective growth rates were calculated for the period 1955-75, the respective growth rates would be 8.7 percent per annum for national income and 8.8 percent per annum for revenues.

5.09 The patterns of investment financing reflect the nature of the centralized economic system. As already noted (para 5.04 and Table 5.1) the dramatic growth of investment is highlighted by the fact that in each plan period the volume of investment has exceeded the volume in the previous ten years. The volume of investment in 1971-75 amounted to about nine times that of 1951-55. State funds account for the financing of most gross investment in the economy. Of these the centralized funds and particularly the budget play the major role. This is illustrated in Table 5.2. Investment financed by foreign borrowing is included in the amount reported for state budget financing and is not available separately.

Table 5.2: FIXED INVESTMENT BY FINANCING SOURCE, 1951-75 /1

	1951-55		1956-60		1961-65		1966-70		1971-75	
	Amt.	%	Amt.	%	Amt.	%	Amt.	%	Amt.	%
Total	61.9	100	100.2	100	199.7	100	330.8	100	549.0	100
of which:										
I. Socialist Sector	<u>57.7</u>	<u>93.2</u>	<u>88.2</u>	<u>88.0</u>	<u>187.7</u>	<u>94.0</u>	<u>314.5</u>	<u>95.1</u>	<u>516.7</u>	<u>94.1</u>
A. State Sector	<u>56.7</u>	<u>91.6</u>	<u>84.5</u>	<u>84.3</u>	<u>173.7</u>	<u>87.0</u>	<u>297.3</u>	<u>89.9</u>	<u>495.6</u>	<u>90.3</u>
1. Centralized State Funds	55.0	88.9	79.7	79.5	168.9	84.6	286.5	86.6	478.0	87.1
2. Enterprises' Own Funds	1.7	2.7	4.8	4.8	4.8	2.4	10.8	3.3	17.6	3.2
B. Co-operative Sector	<u>0.9</u>	<u>1.5</u>	<u>3.0</u>	<u>3.0</u>	<u>12.6</u>	<u>6.3</u>	<u>15.5</u>	<u>4.7</u>	<u>18.9</u>	<u>3.5</u>
1. Co-operative and Mass Organizations Funds	0.5	0.8	0.9	0.9	1.6	0.8	4.2	1.3	6.4	1.2
2. Agricultural Cooperatives	0.4	0.7	2.1	2.1	11.0	5.5	11.3	3.4	12.5	2.3
C. Contribution of Population /2	<u>0.2</u>	<u>0.3</u>	<u>0.7</u>	<u>0.7</u>	<u>1.4</u>	<u>0.7</u>	<u>1.7</u>	<u>0.5</u>	<u>2.1</u>	<u>0.4</u>
II. Private Sector	4.2	6.8	12.0	12.0	12.0	6.0	16.3	4.9	32.3	5.9

/1 Data for 1951-65 in 1959 prices and for 1966-75 in 1963 prices.

/2 Services contributed for community works.

Source: Anuarul Statistic

5.10 Just as the overall level of investment and its distribution between productive and non-productive sectors illustrates the priority given by the RCP to rapid growth of production and national income, so the sectoral distribution of investment reflects the priority given to industrialization. Throughout the period, approximately 50 percent of total investment was directed towards industry and, of this, by far the largest amount was allocated to the producer goods industry (Table 5.3). The importance of industry and related sectors in the allocation of investment is reflected in sectoral growth rates and the changing structure of social product and national income since 1950. Compared to the 9.7 percent average annual growth rate of national income, national income from industry increased at 13.5 percent, construction 11.5 percent and transport 11.5 percent, while agriculture grew at only 3.1 percent. Relative growth rates were similar in terms of social product. Consequently, the structure of social product and national income changed significantly with industry becoming the leading branch of the economy. Figure 5.2 illustrates to some degree the change in structure, but essentially underestimates the extent of the changes since relative prices over the period moved heavily in favor of agricultural goods. ^{1/}

Table 5.3: DISTRIBUTION OF INVESTMENT BY SECTOR, 1950-75

	in 1959 prices			in 1963 prices	
	1951-55	1956-60	1961-65	1966-70	1971-75
Total investment	100	100	100	100	100
Industry	53.8	44.9	46.5	50.0	50.5
of which: Group A	46.8	39.2	41.5	42.4	42.1
B	7.0	5.7	5.0	7.6	8.4
Construction	3.7	2.5	3.4	3.9	4.7
Agriculture and Silviculture	11.3	17.3	19.4	16.0	14.4
Transport	9.4	7.5	8.1	9.6	9.1
Telecommunication	0.9	0.6	0.7	0.7	1.1
Trade	2.4	2.1	2.5	2.9	3.5
Non-productive services	18.5	25.1	19.5	17.0	16.7
of which: housing	10.1	15.6	11.6	9.5	9.3
education	1.5	1.3	1.7	1.5	1.6
health	1.8	1.7	1.2	1.2	0.9

Source: Anuarul Statistic.

5.11 The changes in economic structure between 1950 and 1975 were accompanied by changes in the growth and distribution of population, the structure of the labor force and the level and diversification of its skills. The

^{1/} Between 1950 and 1959, the price of agricultural goods tripled in relation to industrial goods. Thus, the change in structure during the 1950's is greatly underestimated in figure 5.1.

growth of population and of the labor force was quite low over the period; population grew at a little over one percent per annum while the labor force increased still less quickly, at 0.8 percent per annum. (See Chapter Eight for details). The most notable changes in employment were in its regional and sectoral distribution. Between 1950 and 1975, the rapid growth of industry and its related sectors resulted in a transfer of labor from agriculture and an associated increase in urbanization. During this period, the agricultural labor force fell from 6.2 million to 3.8 million, while non-agricultural employment almost tripled, rising from 2.2 million to 6.3 million, that is, from 26 to 62 percent of the labor force (Figure 5.2). Urbanization progressed with industrialization, but at a slower rate; Romania has been one of the few developing countries in which growth of non-agricultural employment increased more quickly than the growth of urban areas. In 1950, 75 percent of the population lived in rural areas and 72 percent of the labor force worked in agriculture. In 1975, the proportions had changed to 57 percent and 38 percent respectively. These trends reflected the government's efforts to locate industrial employment in both rural and urban areas and the attempts to control the influx into cities and thereby economize on housing expenditures. (For further details see Chapter Eight).

5.12 The increases in national income and the transfer of labor from low-income agriculture to higher-income industry have generated substantial improvements in the population's standard of living since 1950, although the increases were below the growth of national income per capita. While the latter rose at 8.6 percent per annum between 1950 and 1975, the total real income of the population rose at an annual rate of 6.4 percent. As Figure 5.1 shows, a major reason for this increase has been the rapid increase in socio-cultural expenditures which grew at an annual rate of 11.4 percent. Wages grew at a more modest rate, 6.6 percent per annum. (For further details, see Chapter Nine).

5.13 The growth of the economy has had implications for the level and structure of foreign trade. Between 1950 and 1975, the volume of foreign trade, measured in current prices, rose from 2.7 billion lei valuta to 53.1 billion, an average annual growth rate of almost 13 percent. Throughout the period, foreign trade both played an important role in the growth of economy and also mirrored the success of development policies through changing levels and structure of exports. The level of imports rose throughout the period, more or less at the same rate as national income (Annex 4.1), while the structure of the import bill was dominated by capital goods and raw materials throughout the period. Despite the technological improvements and productive capacity of its capital goods industry, Romania's industrialization strategy has required a continued increase in capital goods imports and they have comprised some 35 percent of total imports during the period. As Romania's requirements for capital imports became more sophisticated during the 1960's, so Romania had to develop its trade with the developed market economies largely because such goods were not available within CMEA. Imports of raw materials also maintained their high share of the total, reflecting the rapidly expanding needs of industry for materials either not available in the country or for which domestic reserves and production were inadequate. The

other category of imports indicative of the growth trends in Romania is industrial consumer goods, whose declining share throughout the period demonstrated in part the success at the final stage of Romania's import-substitution strategy and also the limitations maintained during the period upon the imports of such goods.

5.14 It was, however, in the structure of exports that the transformation of the Romanian economy between 1950 and 1975 was most clearly mirrored. As exports increased between 1950 and 1975 at virtually the same rate as imports, so their composition changed significantly. In 1950, 75 percent of all exports were raw materials, chiefly agricultural products and oil, while industrial goods constituted only 11 percent of the total. In 1975, industrial exports had risen to 55 percent and raw material exports, while growing at an annual average of approximately 10 percent, had diminished to 34 percent of the total. While of lesser relative importance in recent years, exports of industrial raw materials and agricultural products have played an important role in financing imports from developed market economies. Unlike other European countries, which generally ran a deficit in agricultural trade, Romania's surplus enabled the country to expand trade with the West in advance of developing competitive industrial exports. One other particular feature of Romania's exports has been the very rapid growth of capital good exports, from 4.2 percent of the total in 1950 to 25.3 percent in 1975, an increase of some 120 times. Further details of the export trends are given in Chapters Seven and Ten.

CHAPTER SIX

THE FIFTH PLAN (1971-75)

A. Introduction

6.01 The purpose of this chapter is to complete the assessment, started in Chapter Five, of Romania's economic performance since 1950, by examining development policies, plans and achievements during the fifth Five-Year Plan period, 1971-75. In looking at the policies, the indicators and targets of the Directives and the final plan, the process of implementation and the overall achievements of the economy during the five years, the chapter uses the 1971-75 plan period to illustrate, in concrete terms, the operation of the planning and management system that was outlined in Chapters Three and Four. The chapter does not discuss in detail the performance of each economic sector - such discussions are found in the relevant sectoral chapters - but provides an overall assessment of developments in the economy and discusses the most important macro-economic issues, in particular regional development, qualitative improvement and efficiency of production. Because of the importance given to foreign trade by the Romanian Government and by the report in its discussion of Romania's prospects, the discussion of foreign trade between 1971-75 is included in a separate chapter, Chapter Seven.

B. The Major Features of the Plan

6.02 The preparation of the Fifth Plan began formally in 1969 at the 10th Congress of the RCP with the publication of general guidelines for the development of the economy between 1971 and 1980 and specific Directives for the preparation of the 1971-75 Five-Year Plan. The guidelines for the decade emphasized, in view of the progress made between 1966 and 1968 in fulfilling the targets of the 1966-70 Plan, the continuation of a high rate, and even an acceleration, of economic growth. They also indicated a continuation of the strategy adopted in previous plan periods - high rates of investments, the primary importance of industry, increases in labor productivity and economic efficiency and the introduction throughout the economy of improved technologies - while introducing new emphases which mirrored the progress made by the economy in the previous decade. The guidelines gave particular attention to improvements in the structure of industry (a reflection of concern about the appropriate division of national income between investment and consumption) and the increased importance of electro-technical, chemical, metallurgical and engineering industries; the promotion of technical progress in all branches of the economy and the development of indigenous technological and scientific research; the improved regional distribution of production; and changes in the level and structure of foreign trade.

6.03 It was within this framework that the Directives for 1971-75 were prepared. Measured against the 1966-70 Directives, they represented the RCP's commitment at least to maintaining the rate of economic growth (see Table 6.1). A comparison of the two sets of Directives produces a number of noteworthy points: first, despite a slowdown in the growth rate of gross

Table 6.1: ECONOMIC INDICATORS FOR 1971-75 PLAN

Indicators	1975 Level Compared with 1970 (in comparable 1963 prices) (1970 = 100)		
	Directives of the 10th Congress of the RCP	Law of the 5-Year Plan	Achievements
1. Social Product	-	-	165
2. National income	145-150	169-176	170.6
3. Gross industrial production	150-157	169-176	184.7
4. Gross agricultural production <u>1/</u>	128-131	136-149	125.4
5. Volume of freight transport	130-142	-	154.8
6. Volume of foreign trade <u>2/</u>	140-145 <u>2/</u>	161-172 <u>2/</u>	206.1 <u>3/</u>
7. Volume of investment from state funds <u>1/</u>	148-153	165	168.3
8. Value of fixed capital activated from state funds <u>1/</u>	-	-	167.8
9. Increase in the number of personnel in the national economy	107.8-109.8	119.6	123.3
10. Labor productivity per worker in			
- republican industry	137-140	142	137
- construction and assembly	127-131	135	146.1
- railroad transport	133-135	133	127.2
11. Reduction of expenses per 1000 lei in commodity output in national industry	6-7%	11-12%	9.2
12. Socialist retail trade sales	130-135	140-147	148.3
13. Volume of services for the population	140-145	155-161	168.6
14. Number of houses constructed <u>4/</u>	500,000	522,000	511,700
15. Wage fund	130-135	153	-
16. Real wages of personnel	116-120	120	120
17. Real incomes of peasants	115-120	122-130	-
18. Total real income of the population	-	140-146	146
19. National income per capita	137-142	-	162.6

1/ 1971-75 annual average compared with 1966-70 annual average.

2/ 1971-75 volume in 1970 prices compared with 1966-70 volume in current prices.

3/ 1971-75 volume in current prices compared with 1966-70 volume in current prices.

4/ From state funds and with assistance of state funds.

Source: Directives of 10th Congress of RCP
Law of the Plan 1971-75
Communiqué regarding fulfillment of the Plan over 1971-75

industrial production and the same rate of growth of investment as between 1966 and 1970, national income was projected to grow more rapidly than in the previous plan. It is assumed that this resulted from both a planning assumption of lower ICORs and lower unit expenditures on raw materials and labor and also from anticipated improvements in the performance of non-industrial sectors, especially agriculture. Second, the 1971-75 Directives envisaged a significant deceleration in the expansion of wage-earners, thereby predicting the success of steps to economize on labor (as well as other inputs), to obtain most of the planned production increases from more efficient use of existing inputs and to strike a more desirable balance between labor in the spheres of production and administration. In both of these cases, it might be said that the targets reflected the anticipated impact upon the economy of the reforms in planning and management approved by the National Conference of the RCP in 1967 (see Chapter Three). Third, the Directives indicated the continuing increase in the proportion of national income allocated to investment. The increase in the consumption fund (which was to comprise 68-70 percent of national income between 1971-75), measured indirectly by the growth rates of wages, retail sales, services and socio-cultural expenditures, was to be below that of national income; indeed, the Directives for 1971-75 indicated that the growth rates of wages and retail sales were to be a little below the rates in the 1966-70 Directives.

6.04 Between the 10th Congress and the publication of the Law of the Plan in November 1971, the indicators were revised upwards several times in response to progress during the last two years of the 1966-70 Plan and the gradual refinement of the draft Plan. In May 1971, targets were raised following a more optimistic assessment of the impact of the 1970 floods; further increases were built into the plan in October of the same year, due to expectations that Romania could anticipate further improvements in her foreign trade performance. As Table 6.1 shows, the final draft published as the Law of the Plan envisaged that the economy would grow at a substantially faster rate than originally intended, ^{1/} and that the additional resources and growth possibilities identified during the preparation of the Plan were to be directed largely towards

^{1/} Since the projected 1975 levels are based upon different 1970 levels in the Directives and the Plan Law (in the former, it is an estimate of 1970, in the latter the preliminary results), the increased targets in the Law on the Plan may indicate not only a real increase but also a change in the base-year figures. A similar word of caution is required concerning an evaluation of plan achievements. Straightforward comparisons of targets and actuals given in percentage terms do not necessarily show whether targets have been met or not, because targets are based upon preliminary results of the previous planning period and achievements upon actual results of the previous period. For example, in year t, the preliminary production estimate is 100 units. The plan target for the following year t + 1, requires growth of 10 percent, meaning 110 units. Suppose actual production in year t is 105 units and production in year t + 1 is 110 units. Target output in year t + 1 is attained, but not the target growth rate.

investment rather than consumption, so that the accumulation fund between 1971-75 would amount to some 30-32 percent of national income. National income was planned to grow at 11.1-12.0 percent per annum compared with 7.7-8.5 percent in the Directives; gross industrial production was planned to grow at 11.1-12.0 percent per annum compared with the earlier target of 8.5-9.5 percent and gross agricultural production at 6.4-8.3 percent compared with 5.1-5.6 percent in the Directives. The targets in the Law of the Plan indicated that the increased growth would be assured both by increases in resources and through their more efficient utilization. On the one hand, a larger volume of investment - some 470 billion lei instead of the 420-435 billion lei of the Directives - and a larger increase in personnel - one million instead of 400,000-500,000 - were planned. On the other hand, targets for increased labor productivity and reductions in the costs of production were increased, in keeping with the attention given to more efficient utilization of productive resources and the embodiment of technical progress in new investment. The increased targets for production and investment generated greater import requirements of raw materials and investment goods as well as greater export potential; the Law of the Plan projected a substantial increase in Romania's foreign trade, a 1971-75 volume 61-72 percent above that of 1966-70, compared with a 40-45 percent increase in the Directives.

6.05 While the Law of the Plan projected larger increases in targets for the productive sector, targets for consumption were changed less, the latter maintaining the rates of per capita growth planned for the previous plan period. The increase in the growth rate of the wage fund (53 percent over the five years compared to 30-35 percent in the Directives) represented a revised target for the number of wage earners and a 20 percent increase in real wages per employee. The upgrading of targets for socialist retail trade and services to the population also mirrored the accelerated transfer of labor, while the requirements laid out in the Plan for diversification of consumer goods production, qualitative improvements and improved territorial distribution of production were an aggregate of measures to meet the population's needs more effectively. The Plan also projected increases in other components of socio-cultural expenditures, notably pensions (planned to increase by 18 percent between 1970 and 1975) children's allowances (planned to increase by 27 percent) and housing, in which 522,000 units were to be constructed from state funds. Finally, one area in which the Plan did envisage a larger increase than the Directives was the real incomes of peasants; this reflected the Party's wish to reduce the gap between wages of cooperative members and state employees and to stimulate agricultural production through price and wage incentives as well as greater volumes of investment. Taking these elements of private and public consumption together, the Plan projected that the real incomes of the population should increase 40-46 percent over the five-year period.

6.06 Further revisions were made in the Plan following its publication as law. These occurred in 1972 when the National Conference of the RCP passed a resolution calling for fulfillment of the Plan in four and a half instead of five years. This acceleration was planned on the basis of the successful fulfillment of targets for industrial production and investment during 1966-70 and the achievements of the 1971 annual plan; during 1971 the growth of industrial output exceeded the target and agricultural production grew rapidly

following the poor 1970 harvest. As a result, the Conference stipulated that 1975 levels of industrial output should be 40-60 billion lei higher than initial targets, thereby permitting national income to be 20 billion lei above the level in the Law of the Plan. To obtain this improved performance, emphasis was to be placed not upon increasing the volume of investment but upon improving the efficiency of production through fuller utilization of capacity, technical progress, reduction in the use of fuels and raw materials, improved organization and reallocation of personnel.

C. Plan Implementation and Achievements

6.07 The achievements of the Fifth Plan period are shown in Tables 6.1 and 6.2; they demonstrate that the Romanian economy enjoyed considerable success in meeting the targets laid out in the Law of the Plan, and thus in overfulfilling the Directives of the 1969 Congress. Indeed, industrial production and investment overfulfilled their respective plan targets. However, the economy fell a little short of the accelerated targets adopted at the 1972 National Conference.

6.08 Over the five years, social product and national income, measured in comparable 1963 prices, increased from 523 billion to 864 billion lei and from 212 billion to 362 billion lei, respectively; these increases represented average annual growth rates of 10.5 percent and 11.3 percent, respectively, the latter just exceeding the lower bound of the Plan target. In keeping with the priorities and targets established in the Plan, the sector with the highest rate of growth was industry, which overfulfilled its aggregate plan target, while the growth of agriculture was considerably below target. Gross industrial production, ^{1/} measured in comparable 1963 prices, rose from 319.5 billion lei in 1970 to 586.9 billion lei in 1975, the average annual growth rate of 13 percent exceeding the Plan target's upper bound of 12 percent. As a result, the Plan target was fulfilled two months before the end of 1975 and some additional 30 billion lei of production was obtained; achievements therefore fell only a little short of the revised target adopted by the 1972 National Conference. Both Group A and B industries exceeded the upper limits of their respective plan targets, with Group A industry, as in previous plans, exceeding the target by a wider margin; the average annual growth rate of Group A was 13.7 percent compared to the Plan target of 11.7-13 percent, and of Group B 11.1 percent compared with a target of 9.5-11.0 percent. (For further details of sub-sector performance, see Chapter Ten).

6.09 Gross agricultural production, measured in comparable 1963 prices, rose from 68.6 billion lei in 1970 to 93.8 billion lei in 1975, a 37 percent increase and an average annual growth of 6.5 percent. However, measured in terms of a Plan target which required the average annual production during 1971-75 to be 36-49 percent higher than the annual average for 1966-70, the increase was only 25.4 percent. As Table 6.2 shows, the major gains in agricultural production during the period were made in 1971, when production rose 19 percent after a poor harvest in 1970, and again in 1972. As a result,

^{1/} See the glossary for the distinction between gross industrial (agricultural) production and social product in industry (agriculture).

Table 6.2: ECONOMIC INDICATORS FOR THE ANNUAL PLANS

Indicators	Units	1970	1971		1972		1973		1974		1975	
		Achievements	Plan	Achievements	Plan	Achievements	Plan	Achievements	Plan	Achievements	Plan	Achievements
1. Social product	b.lei ^{1/}	523.4	-	584.0	-	641.0	-	708.0	-	788.0	-	863.7
2. National income	b.lei ^{1/}	212.1		240.7		264.7		293.0		329.5		361.9
3. Gross industrial production	b.lei ^{1/}	319.5	326.8	357.8	368.6	399.4	414.2- 428.7	457.0	501.0	524.0	582- 591	586.9
4. Gross agricultural production	b.lei ^{1/}	68.6	91.4	81.6	97.8	89.2	106.8	89.9	113.0	91.2	- ^{6/}	93.8
5. Volume of freight transport	b.ton/km	93.9	102.4	102.4	110.6	100.3	107.6	107.4	120.0	119.1	129.9	145.4
6. Volume of foreign trade	b.lei valuta ^{8/}	22.9	27.0	25.2	30.3	28.8	35.0	36.0	50.9	49.8	60.7	53.1
7. Volume of investments from state funds	b.lei ^{1/}	68.2	75.8	75.7	87.2	83.4	93.8	91.0	118.0 ^{10/}	119.7 ^{10/}	142.7 ^{10/}	137.7 ^{10/}
8. Increase in the number of personnel in the national economy		5.1m ^{1/}		250,000	205,000	255,000	235,000	185,000	250,000	195,000	6.4m ^{1/}	6.3m ^{1/}
9. Labor productivity ^{2/} in												
- republican industry	lei ^{1/}	159,300	168,935	168,441	181,921	180,931	198,650	197,466	216,600	210,794	239,000	225,760
- construction and assembly	lei ^{1/}	64,100	68,555	69,092	73,300	73,881	78,230	80,622	85,370	87,240	95,500	94,220
- railroad transport	ton/km	343,500	357,420	359,295	378,400	374,572	452,430	454,185	475,000	479,940	498,500	495,780
10. Maximum expenses per 1000 lei of commodity output in republican industry	lei ^{2/}	872.9	874.1	879.4	852.7	863.7	837.4	853.7	879.7	897.8	875.0	873.6
11. Socialist retail trade sales	b.lei ^{2/}	93.7	100.4	102.6	108.8	108.8	120.9	117.2	128.7	129.5	140.8	140.8
12. Volume of services for the population	b.lei ^{3/}	- ^{6/}	- ^{6/}	- ^{6/}	20.1	20.5	22.8	22.8	25.6	25.9	28.4	27.8
13. Number of houses constructed ^{4/}												
14. Wage fund	b.lei ^{2/}		103.0	103.8	109.4	109.3	120.9	117.7	134.0	129.6	154.5	137.1
15. Real wages of personnel	lei/mo.	1302							1456	1442	1602	1542
16. Real incomes ^{5/} of the peasantry	lei/mo.		- ^{6/}	- ^{6/}	- ^{6/}	- ^{6/}	- ^{6/}	- ^{6/}	950	898	980	
17. Total real income of the population	b.lei	160		181		194		203		219		234

Notes:

- | | |
|---|---|
| <p>1) in comparable 1963 prices</p> <p>2) social product per employee</p> <p>3) in prices in effect on January 1, 1971</p> <p>4) from state funds</p> <p>5) including proceeds of private plots</p> <p>6) not available from Plan Law and/or achievements</p> | <p>7) total number of personnel</p> <p>8) plan figures are in projected current prices, while achievements are in actual current prices</p> <p>9) in current prices</p> <p>10) total investment in the national economy</p> <p>Source: Anuarul Statistic, Law of Five Year Plan 1971-75 and Annual Plans.</p> |
|---|---|

Table 6.3: ANNUAL GROWTH RATES OF MAJOR ECONOMIC INDICATORS,
1971-75 (in comparable prices)

	1971	1972	1973	1974	1975	1971-75 average
Social product	11.7	9.8	10.4	11.3	9.6	10.5
National income	13.5	10.0	10.7	12.5	9.8	11.3
Gross industrial production	12.0	11.7	14.6	14.7	11.8	12.9
Group A	12.0	11.7	14.8	15.5	14.4	13.7
Group B	10.7	11.9	14.7	11.9	6.3	11.1
Gross agricultural production	18.9	9.5	0.8	1.1	2.8	6.5
Volume of freight transport	9.0	-2.0	7.0	11.0	21.9	9.1
Construction output	7.7	7.2	7.2	3.8	7.9	6.9
Volume of foreign trade ^{1/}	10.3	14.3	24.8	38.3	6.6	18.4
Volume of investment	10.5	10.4	8.3	13.3	15.1	11.5
Fixed assets	9.2	8.2	8.8	10.4	11.7	9.6
Number of personnel	5.2	4.7	3.8	3.3	4.6	4.3
Labor productivity in						
- republican industry	4.5	5.7	7.8	6.9	7.2	6.4
- construction and assembly	5.9	7.5	9.0	9.0	7.6	7.9
- rail transport	4.7	4.9	6.5	5.7	3.2	4.9
Socialist retail trade sales ^{2/}	9.1	6.3	7.5	10.2	7.7	8.2
Socio-cultural expenditures	7.6	9.7	10.6	7.4	6.8	8.4
Real wages of personnel	2.2	1.8	3.2	4.5	6.9	3.7
Total real income of the population	13.2	6.8	5.6	7.2	7.0	7.9
National income per capita	12.4	8.9	9.8	11.3	8.7	10.2

^{1/} in current prices

^{2/} in prices in force on January 1, 1971

Source: Anuarul Statistic

further increases above the Plan targets were anticipated at the RCP Conference of 1972, but agricultural production stagnated in the face of poor climatic conditions between 1973 and 1975. (For further details, see Chapter Eleven).

6.10 The sectoral growth rates led to further structural change within the productive sector, with industry strengthening its position as the leading branch of the economy. The extent of the change is shown, in differing ways, by Tables 6.4 and 6.5. The former provides indices of the growth of each sector's contribution to social product and national income measured in comparable prices and shows the relatively high growth of industry. Table 6.5 shows the changing structure of social product and national income in current prices; between 1970 and 1975, industry's share of social product increased from 61.4 percent to 64.7 percent, while agriculture's fell from 16.5 percent to 13.3 percent and construction's declined from 10.6 percent to 8.6 percent. For national income, Table 6.5 does not show the increasing weight of industry because of relative price changes during the period 1973-75.

6.11 The growth in production and changes in economic structure between 1971-75 were accompanied, and to a large extent generated, by a large investment program designed to ensure "the steady growth of the entire production potential of the country, improvement in the territorial distribution of the forces of production, amelioration in the structure of the national economy, improvement in the population's housing conditions and development of the material resources of socio-cultural activities." 1/

1/ Communiqué on fulfillment of the 1971-75 Plan.

Table 6.4: GROWTH OF SOCIAL PRODUCT AND NATIONAL INCOME,
BY BRANCH OF THE ECONOMY, 1970-75
(In Comparable 1963 Prices)

Year	Total	Industry	Construction	Agriculture	Transport and Telecommunications
Social Product					
1970	100	100	100	100	100
1971	112	111	109	121	108
1972	123	123	117	130	116
1973	135	141	123	132	126
1974	151	159	129	134	135
1975	165	176	140	139	156
National Income					
1970	100	100	100	100	100
1971	113	111	110	131	109
1972	125	126	119	140	119
1973	138	147	124	133	132
1974	155	167	131	130	144
1975	171	186	144	130	169

Source: Anuarul Statistic.

Table 6.5: STRUCTURE OF SOCIAL PRODUCT AND NATIONAL INCOME 1970-75
(in current prices)

Year	Industry	Construction	Agriculture	Transport and Tele- communications	Other Productive Services in- cluding Trade
Social Product					
1970	61.4	10.6	16.5	4.7	6.8
1971	60.4	10.3	18.1	4.5	6.7
1972	61.1	10.1	17.1	4.5	7.2
1973	62.2	9.6	16.1	4.4	7.7
1974	63.6	8.9	14.1	4.1	9.3
1975	64.7	8.6	13.3	4.2	9.2
National Income					
1970	58.0	10.4	18.5	6.0	7.1
1971	56.0	9.6	22.2	5.5	6.7
1972	56.5	9.5	21.2	5.5	7.3
1973	58.1	9.1	18.5	5.6	8.7
1974	56.6	8.3	15.9	5.4	13.8
1975	56.2	7.6	16.0	5.8	14.4

Source: Anuarul Statistic.

The Plan target for investments from centralized state funds (which comprised some 87 percent of total investments in the national economy between 1971 and 1975) was slightly overfulfilled, achievements being 8 billion lei above the target of 470 billion lei, and according to the Plan communique, the actual sectoral distribution of investment approximated the planned amounts, with industry receiving 57.2 percent of total centralized state funds, agriculture 16.1 percent, transport and telecommunications 11.4 percent and construction 5 percent (Table 6.6).

6.12 The total volume of investment in the national economy during the Fifth Plan was 549 billion lei, a larger amount than was invested during the Third and Fourth Plans together (Annex 3.3). As a result, the proportion of national income directed towards the accumulation fund between 1971 and 1975 was 34.1 percent (Table 5.1), which surpassed the Plan target of 30-32 percent. This is a strong indication of the efforts made during 1971-75 to accelerate the rate of growth of the economy as well as evidence of the difficulties facing the economy in implementing the targets of the 1972 National Conference. As the later discussion on efficiency indicates in greater detail, the accelerated growth called for by the Conference could not be provided for by improvements in resource use and efficiency but had to be secured through additional inputs of capital and labor (see also para 6.14).

Table 6.6. PLANNED AND ACTUAL INVESTMENTS FROM CENTRALIZED STATE FUNDS, 1971-75

(in comparable 1963 prices)

Sector	Planned 1971-75		Achievements 1971-75	
	b. lei	%	b. lei	%
TOTAL	470.0 ^{1/}	100	478.0	100
of which:				
industry	281.2	58.1	273.3	57.2
construction	18.5	3.8	23.9	5.0
agriculture	81.4	16.8	76.8	16.1
transport and telecommunications	53.6	11.1	54.4	11.4
trade	13.2	2.7	<u>2/</u>	-
municipal services	8.1	1.7	<u>2/</u>	-
housing	14.3	3.0	<u>2/</u>	-
education and health	9.6	2.0	<u>2/</u>	-
scientific research	4.5	0.9	3.8	0.8

Source: Law of the Plan 1971-75
Communiqué on fulfillment of 1971-75 Plan

^{1/} components do not add to total but equal 484.4 b. lei. Percentages for sectors are based on this higher figure.

^{2/} not reported in Plan communiqué

6.13 The distribution of the total investment volume followed closely the priorities laid out in the Plan: 83.3 percent of the total was allocated to the productive sector and the sectoral distribution continued the previous plan period's emphasis upon industry (Annex 3.4). Some 277 billion lei (50.5 percent of the total) was directed towards industry, of which 231 billion lei (42.1 percent) went to Group A industries, in particular to metallurgy, machine building, chemicals, fuels and energy. As a result of these allocations, the ability of Romania to supply a higher proportion of its own capital goods increased; in 1975, almost 75 percent of all equipment investments were produced in Romania. Group B industries were allocated 45.9 billion lei (8.4 percent) and as a result of this increased allocation and the higher investment during the 1966-70 plan period, light industry enjoyed one of the highest annual growth rates (13 percent) of the industrial subsectors. The next largest investments were in agriculture with 79.2 billion lei (14.4 percent of the total), and transport and telecommunications with 55.7 billion lei (10.2 percent), followed by construction with 25.9 billion lei (4.7 percent). During the 1971-75 plan period, greater attention was given to regional distribution of investment; a discussion of regional considerations is presented in paras 6.26-33.

6.14 The overfulfillment of the plan target for investment was matched by overfulfillment of the target for the number of wage earners. While the occupied population increased from 9.9 million to 10.2 million, the number of personnel rose from 5.1 million to 6.3 million, an increase of 1.2 million (23.3 percent above the 1970 level) compared with a Plan target of 1 million (19.6 percent). The increase in the number of personnel involved essentially a transfer of labor from agriculture, the number of whose occupied population declined from 4.85 million to 3.84 million while the number working in industry rose from 2.28 million to 3.11 million. Over the period, 1971-75, therefore, the percentage of the occupied population working in agriculture declined from 49.1 percent to 37.8 percent, while industry's share rose from 23 percent to 30.6 percent. Further details of employment, and in particular, participation rates and urbanization, are discussed in Chapter Eight.

6.15 In terms of the percentage of national income allocated to the consumption fund, the economy between 1971-75 failed to fulfill the target of 68-70 percent, since only 65.9 percent of national income was reported as going to the consumption fund. However, the growth of national income was such that the growth of the consumption fund, 7.5 percent per annum over the Plan period, was higher than in previous plans and made possible large enough increases in personal incomes and socio-cultural expenditures of the Government to fulfill Plan targets. Total purchasing power of the population, expressed in terms of real income, increased by 46 percent between 1970 and 1975, thereby meeting the upper bound of the Plan target. According to the Plan communique, the wage fund rose by 51 billion lei (an increase of 53 percent) during the Plan period, denoting a slight overfulfillment of the Plan target which was due to the higher than targeted increase in personnel. Nominal and real wages more or less increased according to the targets; through increases in the minimum wage and general wage increases, the nominal monthly wage rose to an average of 1,813 lei in 1975, just over the target set in the Plan and to 1975 lei in December 1975, thereby attaining the goal set out in the National Conference

of the RCP in 1972. The increase in real wages was 18.4 percent over the five years, just short of the 20 percent target of the Plan. Increases in the incomes of peasants also occurred through the introduction of minimum wage and increases in procurement prices. It is not clear whether the Plan target of a 22-30 percent increase in real incomes was attained, but monetary incomes are reported in the Plan communique to have increased by 28.7 percent.

6.16 Funds allocated from the state budget for socio-cultural needs also increased, by 50 percent over 1970; expenditures totalled 50.9 billion lei in 1975, an average of 7,420 lei per family and financed improvements in education, health, and pensions (for further details, see Chapters Eight and Nine, and Appendix 10). State funds were also used to construct 511,700 housing units, virtually meeting the Plan target of 522,000 (for further details, see Chapter Twelve).

6.17 In the absence of Plan targets for consumption, its growth must be estimated through the surrogate measures of socialist retail trade sales and the volume of services carried out for the population. In both cases, the upper bounds of the targets established in the Plan were exceeded. Socialist retail trade sales increased by 48.3 percent over the five-year period compared with a Plan target of 40-47 percent. In 1975 sales totalled 140.8 billion lei, measured in current prices. The volume of services for the population totalled 27.8 billion lei measured in 1971 prices in 1975, an increase of 68.6 percent over 1970, thereby exceeding the planned growth of 55-61 percent (for further details, see Chapter Nine). Savings by the population, mainly for the purchase of houses and durable consumer goods, which were in increased supply during the Fifth Plan, also grew. Savings deposits of the population reached 44.9 billion lei in 1975, an average annual growth of 16 percent over the plan period.

6.18 In summary, Romania's economic performance during the Fifth Plan indicates that the country succeeded to a large extent in formulating consistent plans and carrying them out. With the notable exception of agriculture, production targets were largely met and while they were assured by additional injections of investment and labor to offset the less than planned improvements in efficiency, the transfer from consumption to investment was not sufficient to prevent targets for consumption from being met.

D. Economic and Technical Efficiency

6.19 It has been shown in earlier chapters and in section C of this chapter that, while the main engine for economic growth has been the expanding level of investment in all sectors and the transfer of labor from agriculture to industry, increasing attention has been paid to improvements in the efficiency of economic operations since the beginning of the 1966-70 plan period. This has included measures to improve the allocation of resources (through improvements in planning and management of the economy) as well as their utilization (through the introduction of specific plan targets for cost reduction, qualitative improvements and reduction in resource consumption). Guidelines

for specific programs and legislation were mapped out by the National Conference of the RCP in 1967. ^{1/} They stipulated better organization and management of the branches of material production by allotting more responsibility to enterprises and by creating large scale units; improved planning at central and enterprise levels; improved organization of the supply of materials for production; better utilization of financial tools and indicators and, in consequence, a more effective financial plan; reforms in the price system to provide correct signals to enterprises in their implementation of the plan; and finally, as a major task, the overall improvement of efficiency by shortening the commissioning period for new assets, increasing the degree of capacity utilization, ensuring a high degree of raw material processing, improving the quality of products for both internal and external markets, incorporating scientific and technological research in production and minimizing consumption of inputs.

6.20 After 1967, and particularly during the Fifth Plan period, steps were taken to implement these measures through both legislation and new procedures. The details of the planning and organizational changes are given in Chapters Three and Four; this section looks at the impact of these measures insofar as an assessment can be made and compares them with the targets published in the Plan.

6.21 Two efficiency targets were published in the Plan: labor productivity per worker in industry, construction and rail transport and the reduction of expenses per 1000 lei of marketed industrial output. Both are synthetic indicators, combining in a single index changes in more than one economic variable. Thus, an improvement in labor productivity (which is defined as gross product per worker) may measure capital deepening, improved labor skills, improved management, higher-value product mix, etc. Nevertheless, in the absence of more direct measures of efficiency, they serve as a useful starting point.

6.22 Labor productivity in republican industry increased by 37 percent over the plan period, an average annual increase of 6.5 percent, reflecting the infusion of investment and new technology and managerial improvements (see Chapter Ten for further details). The increase, however, fell short of the targeted increase of 42 percent, according to the plan communique because of deficiencies in the organization of production and capacity utilization; it may also have been the result of overmanning (see para 6.14 and Chapter Ten). Labor productivity in construction, growing 46 percent, exceeded its plan target of 35 percent, a performance attributable to the accelerated capitalization and mechanization of the sector (see Chapter Twelve). Labor productivity in rail transport increased 27 percent compared with a target of 33 percent; the shortfall appears to have been due to a lower than planned increase in goods traffic.

^{1/} Report Concerning Measures for Perfecting the Management and Planning of the National Economy and for Improving the Administrative-Territorial Organization, Agerpress, 1967.

6.23 The Plan communique also reported an improvement in the efficiency of fixed capital; the volume of gross production per 1,000 lei of fixed capital increased 8 percent during the plan period. As in the case of the labor productivity figures, this measure is a synthetic indicator summarizing the impact of changes in various variables. In the absence of a plan target or more detailed information, it is not possible to evaluate the result.

6.24 Since both the published plan targets are defined in gross output terms, they contain the influence of many factors. For example, an increase in labor productivity, measured as gross product per worker, could as well denote increased material expenditures or an increase in the complexity and stages of production as increased net output per worker. In principle, more appropriate measures of efficiency would be the proportion of national income in social product and capital-output ratios, but some care is required in their interpretation since the aggregate ratios also measure a number of factors. 1/ According to published data 2/ the capital-output ratio 3/ for the productive sector as a whole did not change between 1970 and 1975; in both years, its value was 2.55 and the incremental capital-output ratio (ICOR) 4/ for 1971-75 was 2.56. Changes in the sectoral ratios, absolute values of which are not available from published data, are shown in Table 6.7. In spite of the constant increase in the ratio for construction and for agriculture after 1973, the stability of the overall rate was maintained by the increasing weight of declining ratios for industry and transport. The decline in industry's capital-output ratio reversed itself in 1975; it is unclear whether this was due to inefficient use of new capital assets or to the fact that, with the large effort in 1975 to commission new capital before the end of the plan, gains in output were delayed to the following plan period. The overall incremental capital-output ratio of 2.56 for 1971-75 was quite low by international standards. 5/ While international comparison of ICORs can be spurious for a whole range of reasons, it remains the only measure of the efficiency of capital available, in the absence of detailed data on capital good costs and information on enterprises' activities. In view of the fact that the ICOR during the 1971-75 plan was similar to the overall capital-output ratio and that the Romanian ICOR was not substantially different from those of other countries at a similar level of development, one may conclude that there was no great change during the plan period in the overall efficiency of capital.

1/ Such as natural resource endowment, present economic structure, present level of infrastructure, structure of investment and short-run factors such as capacity utilization, as well as pricing of capital.

2/ Anuarul Statistic.

3/ The ratio of fixed assets to national income.

4/ The ratio of change in fixed assets to change in national income.

5/ Comparable figures (1968-73) were 3.4 for Spain, 3.3 Greece, 2.2 South Korea, 2.9 Turkey, 1.4 Brazil.

Table 6.7: SECTORAL CAPITAL-OUTPUT RATIOS 1970-75

Year	Capital - output ratio /1			
	Industry	Construction	Agriculture	Transport and Telecommunications
1970	100	100	100	100
1971	101.8	105.5	84.0	100
1972	99.2	112.6	85.7	98.3
1973	95.2	119.4	98.5	96.2
1974	95.8	128.2	110.0	97.2
1975	99.5	139.6	121.5	92.9

/1 Ratio of fixed assets to national income (in comparable prices).

Source: Anuarul Statistic.

6.25 In principle, an increasing ratio of national income to social product also denotes an improvement in economic efficiency, that is increased value-added for given material expenditures. During the fifth plan, national income grew more quickly than social product, as a result of which the ratio of national income to social product rose from 40.5 percent in 1970 to 41.9 percent in 1975. A similar trend was shown for each sector, with the exception of agriculture where largely because of climatic difficulties increased inputs did not achieve large production gains. Again, these aggregate measures suggest a trend but can not be put forward as certain evidence of increased efficiency because in some cases changes in the ratio reflect changes in sectoral and intra-sectoral composition of output quite unrelated to efficiency. Nevertheless, the above figures and statements from the Plan communique do suggest that progress was made between 1971 and 1975 in increasing the efficiency of economic operations, especially by moving towards a product mix with a higher value-added and producing economies in the use of fuels and raw materials. The Plan communique reported that the value of products obtained per unit of processed raw materials increased substantially in a number of branches, especially in mechanical engineering and metallurgy where it rose by 43 percent over the five years. Particular attention was paid to increasing value-added and the quality of processing in exported goods so as to improve the efficiency of foreign trade. The Plan also established targets for the reduction of material expenditures; in industry, material expenditures were to be reduced by 11-12 percent, but a reduction of only 9.2 percent was achieved, the shortfall being attributed to managerial deficiencies and failure to commission on time and to utilize fully new technologies. Special efforts were made to economise on raw materials and fuels, particularly following the rise in the price of oil in 1973 (see Chapter Fourteen for further details). Scientific research was directed towards improving industrial techniques so as to minimize use of fuels; for example, it was announced in 1975 that improvements in iron-smelting technology would permit a reduction in the use of coal. Studies were commissioned within government branches to identify economies, for example, in transport (for details see Chapter Thirteen); and

sector and subsector-specific targets were established (for example, in 1974 it was announced that in future 25 percent of paper needs was to be met through recycling used paper). Finally, producer prices of basic materials were reset during 1974-76 during the repricing exercise, to reflect more accurately their real cost and to encourage more efficient utilization of resources.

E. Regional Development

6.26 Regional development policy, first given special prominence in the 1966-70 Five-Year Plan directives, was emphasized more strongly during the 1971-75 plan period. In order to distribute production, employment, incomes, education and medical services more equitably through the country and to reduce substantially the imbalances in economic and social conditions, the plan stipulated that increased investment in productive facilities and non-productive services should be allocated to less industrialized and poorer judets. The plan proposed that, as a result, industrial production in the poorer judets would increase by 20-27 percent per annum compared with the national increase of 11-12 percent. No further specific targets were published in the Law of the Plan.

6.27 The implications for location of investment and employment and regional distribution of production were reported in more detail in the plan communique. The communique indicated that for the less-developed judets the growth of investment between 1970 and 1975 exceeded the national average. Compared with a 70 percent increase in total investment, investment rose by 220 percent in Dimbovita, 190 percent in Gorj and Tulcea and above 100 percent in Dolj, Bistrita-Nasaud, Botosani, Alba, Satu-mare and Vaslui. As a result, these areas experienced a higher than average growth of fixed assets. The poorer judets also enjoyed higher rates of growth of gross output than the economy as a whole (Table 6.8); information provided by the Government indicates that all but three of the nineteen judets which had gross industrial production of less than five billion lei in 1970 fulfilled or overfulfilled their plan target 1/ (Table 6.8). As a result, the number of districts with a low volume of industrial production decreased, as shown in Table 6.9.

1/ The rapid pace of growth in the less-developed judets, however, was not sufficient, with the exception of Harghita, to meet the ambitious provisions established at the National Conference of the RCP in 1972. In the directives, annual growth rates for the following judets were given: Bistrita-Nasaud 20.3 percent, Teleorman 21.6 percent, Harghita 15.8 percent, Dimbovita 22.6 percent, Salaj 25.4 percent and Tulcea 28.1 percent.

Table 6.8: GROSS INDUSTRIAL PRODUCTION, BY JUDET 1970-75
(in comparable 1963 prices)

Judet	Gross Industrial Production			
	1970 '000 lei	1975 '000 lei	Plan Target	
			1975 1970	1975 1970
Alba	4,409	8,106	124	184
Arad	6,951	11,585		167
Arges	10,441	21,937		210
Bacau	10,659	16,336		153
Bihor	7,738	14,036		181
Bistrita-Nasaud	898	1,808	201	201
Botosani	1,811	3,388	147	187
Brasov	21,838	38,295		175
Braila	6,751	11,198		166
Buzau	3,602	9,059	231	251
Caras-Severin	8,643	11,478		133
Cluj	11,446	20,334		178
Constanta	6,619	12,842		194
Covasna	1,658	3,494		211
Dimbovita	4,864	11,372	217	234
Dolj	10,166	18,073		178
Galati	10,497	25,425		242
Gorj	3,374	5,802	173	172
Harghita	3,154	6,579	184	209
Hunedoara	16,747	21,503		128
Ialomita	2,872	5,272	161	184
Iasi	8,731	19,113		219
Ilfov	4,312	7,433	170	172
Maramures	5,068	7,952		157
Mehedinti	2,451	6,447	233	263
Mures	10,827	17,171		159
Neamt	8,175	15,933		195
Olt	3,858	13,456	341	349
Prahova	20,142	32,247		160
Satu-mare	3,610	7,688	160	213
Salaj	782	2,082	260	266
Sibiu	11,414	21,287		186
Suceava	5,906	9,928		168
Teleorman	3,040	6,970	255	229
Timis	11,544	20,659		179
Tulcea	1,453	2,675	250	184
Vaslui	2,243	4,907	209	219
Vilcea	2,777	5,638	200	203
Vrancea	2,058	4,223	145	205
Bucharest Municipality	55,947	103,147		184
Total	319,476	586,878		183.7

Source: Anuarul Statistic

Table 6.9: LEVELS OF GROSS INDUSTRIAL PRODUCTION, BY JUDET, 1965-75
(in comparable 1963 prices)

Value of Production	Number of Judets		
	1965	1970	1975
< 5 b. lei	30	19	8
5 - 10 b. lei	6	12	11
10 - 15 b. lei	3	5	7
15 - 25 b. lei		3	11
> 25 b. lei			2

Source: 1971-75 Plan Communiqué.

6.28 The growing importance of an industrial work force in the poorer districts also reflects the increasing industrialization of the less-developed regions; in 1975, the number of districts with more than one-fifth of their inhabitants categorized as personnel was 32, compared with 27 in 1970 and only 18 in 1965. Similarly, the population employed in non-agricultural activities was more than fifty percent of the occupied population in 27 districts in 1975 compared with only 13 in 1970. Accompanying these increases was a trend towards greater urbanization, to permit efficient provision of social and cultural services. These included improved medical services (for example between 1970 and 1975, infant mortality rates in the poorer districts showed a radical improvement), centralized water and sewerage systems, better education, etc. Further details are given in Chapter Eight on human resources.

6.29 The above statistics provide some evidence of the positive achievements of regional development policy. However, they demonstrate changing levels of production and employment in each judet rather than changes in their distribution or in per capita terms. Therefore, an analysis was carried out of the changes in regional distribution of per capita output. Since figures on output per judet are not published, a proxy was calculated using published data on social product in industry, agriculture and construction, and converted into per capita terms. Such series were obtained for the years 1967 and 1974 and a coefficient of variation 1/ of this output variable was calculated in both absolute and per capita terms, including and excluding Bucharest (Table 6.10).

1/ Co-efficient of variation is a normalized variance defined as

$$cv(x) = \frac{\text{Var}(x)}{x} \times 100$$

Table 6.10: CO-EFFICIENT OF VARIATION OF PER CAPITA OUTPUT BY JUDET

	1967	1974
Absolute (i)	54.09	55.27
(ii)	83.36	90.90
Per capita (i)	42.34	42.84
(ii)	43.26	44.30

Note: (i) excludes Bucharest
(ii) includes Bucharest

Table 6.11: COEFFICIENT OF VARIATIONS OF PER CAPITA OUTPUT
IN INDUSTRY AND AGRICULTURE

	Industry		Agriculture	
	1967	1974	1967	1974
Absolute (i)	75.45	67.88	46.65	53.06
(ii)	132	111	49.00	54.19
Per capita (i)	66.83	56.37	40.03	41.08
(ii)	68.48	58.47	43.19	43.87

6.30 These calculations show that industrial production has become more equally distributed; in other words, they demonstrate that the government's policy for regional development, which is phrased in terms of industrial distribution, has been implemented successfully. The conclusion is supported further by a calculation of the coefficient of variation for the distribution of the population engaged in industrial production; figures on the number of employees in industry by judet were converted into a proportion of population and a coefficient of variation calculated. Table 6.12 shows that, in addition to a general increase in the proportion of the occupied population in each judet working in industry, the disparity between judets in the distribution of the industrial work force has declined.

Table 6.12: COEFFICIENT OF VARIATION OF INDUSTRIAL EMPLOYMENT BY JUDET

	1967	1974
(i)	58.66	46.45
(ii)	60.92	48.16

6.31 The calculations also show that, between 1967 and 1974, the distribution of agricultural production became less equal, and with sufficient strength that the overall distribution of output between judets became no more equal. The increasing inequality in the distribution of agricultural production results from the constraints imposed by natural conditions upon the regional allocation of investment in the sector. The government has announced that attempts will be made to distribute agricultural production more equitably, insofar as there are plans to make each judet as self-sufficient as possible in food production and to distribute large scale livestock operations equitably. However, such measures are unlikely to have more than a marginal impact upon the inequality of the distribution of agricultural production.

6.32 So far, this discussion of regional distribution has been phrased in terms of output and employment. Lack of data on wages by judet prevents any conclusion that the regional distribution of incomes has also improved. However, since the wage levels in industry are higher than those in agriculture, it is likely that a reduction in the disparity in levels of industrialization has also led to a reduction in income disparities between judets. According to the partial data available, (Table 6.13) the gap between the average incomes of the richest and poorest judets diminished a little between 1970 and 1975. It is probable that the gap is reduced further, in terms of total real income of the population, by the allocation of socio-cultural expenditures on the basis of national norms.

Table 6.13: INCOME LEVELS, BY JUDET, 1970 and 1975

	Average income in lei per month		
	Lowest Judet	Highest Judet	<u>Highest</u> <u>Lowest</u>
1970	1260	1613	1.29
1975	1631	2035	1.26

Source: Data supplied by Romanian authorities.

6.33 As a result of the government's figures and additional calculations, it can be concluded that Romanian regional policy has been successful insofar as both industrial investment and production have been directed towards the less-developed judets. Furthermore, the data indicate that the pace of these changes has been in general as fast as or more rapid than planned.

CHAPTER SEVEN

FOREIGN TRADE AND INTERNATIONAL ECONOMIC RELATIONS

A. Introduction

7.01 The development of the Romanian economy over the past twenty-five years has been accompanied by the rapid growth of foreign trade and the expansion of international economic relations with socialist, developed market and developing countries. Between 1950 and 1975, the volume of foreign trade measured in current prices rose from 2.7 billion lei valuta 1/ to 53.1 billion, an average annual growth rate of approximately 12.6 percent. Over the past decade, there has been a distinct acceleration in the rate of growth, the average annual expansion for 1965-75 equalling 15 percent and for 1970-75 18.4 percent. To some extent, this is explained by international inflation, but more importantly, underlying the current price data there has been a steady acceleration in the real growth of foreign trade. This can be measured not only in terms of the ratio of trade to GNP -- approximate calculations by the Bank suggest the ratio in 1975 to have been somewhat above 20 percent compared to 12-14 percent in the early 1960s 2/--but also by the fact that the sectors upon which the economy depends for much of its growth, e.g. chemicals, metallurgy and engineering, have been those in which the importance of foreign trade has increased most. The impetus for the expansion has come largely from the side of imports to meet the needs of Romania's industrialization. On the one hand, the pace of industrial development has outpaced the domestic resource base, initially iron ore and coal in particular and since 1968 crude oil also; on the other hand, the change of emphasis in the industrialization strategy towards the development of advanced secondary industries has generated a demand for imported capital goods.

7.02 It has been the needs of the leading sectors of industry for raw materials and investment goods that have led to larger growth rates of trade with non-socialist countries. Between 1960 and 1975, the average annual rate of growth of imports from developed market economies was approximately 18 percent and from developing countries substantially more, albeit from a low base. To pay for these imports, Romania has made great attempts to expand exports, particularly industrial products, to all three trading areas. Romania has adopted a very comprehensive approach towards international economic relations. It has formalized trade relations through agreements which have also established the basis for technological and scientific exchange, and cooperation in production; it has attempted to negotiate the reduction of trade barriers; and it has joined and participated actively in a number of international organizations such as IBRD, IMF, GATT and UNCTAD. These outward-looking actions have

1/ See the glossary and Chapter Four for the definition of this currency unit.

2/ The figures for the early 1960s are quoted from J.M. Montias, "Economic Development in Communist Romania", p. 147.

resulted in large increases in exports and economic cooperation of various kinds, most especially with the developing countries. A surplus on its trade with the developing countries has enabled Romania to finance some of its deficit with the developed market economies, whose markets Romania has had greater difficulty in penetrating. The overall deficit that Romania has typically run with the convertible currency area has been financed by external borrowing.

7.03 The purpose of this chapter is to explain the importance and operation of foreign trade in the Romanian economy. Its specific tasks are threefold; first, to describe the role of foreign trade in the Romanian economy and the changes in that role as the country's economic profile has changed; second, to outline the foreign trade planning system; and third, to examine in some detail foreign trade and international economic relations during the 1971-75 Plan period. The chapter should be read in conjunction with a number of other sections in the report; the section on foreign trade pricing in Chapter Four; the discussion of foreign trade in Chapter Five and Appendix 5 which examine the development of trade and international economic relations over the period 1950-75; and the paragraphs on trade in the sectoral chapters. Wherever possible, the discussions are supported by official data and also information from unofficial sources, but since information on balance of payments and external debt is given to the Bank by the government on a confidential basis the discussion of these elements is necessarily carried out in non-quantitative terms.

B. The Role of Foreign Trade

7.04 The major role played by foreign trade in the Romanian economy over the past two and a half decades has essentially been to obtain resources which have been unavailable domestically and required to meet production plans. In pursuing a development strategy emphasizing the broadening of its economic base and rapid and comprehensive industrialization, Romania explicitly rejected the notion that its development should be governed by its comparative advantage as it appeared in the period immediately after the war. During the 1950s and for much of the following decade, Romania's participation in world trade was determined largely by the size and structure of an import bill generated through the planning of domestic supply and demand; exports were regarded, in principle, as desirable only to the extent that imports had to be financed, and as efficiently as possible.

7.05 During the past decade, trade has gradually become a less passive element of the economy, mainly as a result of changes on the sides of exports. Whereas the size and structure of trade continues to be derived largely from domestic supply and demand conditions which are determined within the planning process, the government has become more willing to exploit, within limits, a newly-established comparative advantage, especially in industry. As section C of this chapter and the section on foreign trade pricing in Chapter Four show, planning and pricing reforms have been adopted to reduce the insulation of the economy from international influences and to assist in determining the export activities in which Romania can most profitably specialize. As a result, export activities have an increasing role in exposing enterprises to

international competition so as to stimulate improvements in efficiency and product quality and the assimilation of new production processes, and thereby to improve the marketability of Romanian exports. In addition to providing a more appropriate basis for establishing Romania's comparative advantage, such measures have had the purpose of securing imports with the minimum expenditure of domestic resources.

7.06 Export activities have also a role in maintaining the growth rate, particularly in sectors where the size or growth of the domestic market has been a limiting factor. In such cases, exports have enabled the continuation of growth rates beyond the capacity of the domestic market or have allowed production at a level sufficient to secure economies of scale.

C. Foreign Trade Planning

7.07 Foreign trade is a state monopoly in Romania. ^{1/} This monopoly encompasses not only all import and export operations but also all international accounts, thus creating also a monopoly of foreign exchange. It exists to ensure that foreign trade activities are fully subordinated to the requirements of the country's development strategy and is implemented through the planning system. Since every branch of the economy is connected directly or indirectly with foreign trade, questions of control and administration of the latter are inseparable from those concerning domestic economic activities. Therefore, this section should be read in conjunction with Chapter Three. The nature of foreign trade planning and the changes it has undergone in the past decade parallel to a great extent the arrangements in the internal economy. This section looks at the institutions and planning process governing the foreign trade sector as bank staff have come to understand them in discussions with Government officials.

1. Foreign Trade Institutions

7.08 The institutions concerned with the planning and implementation of foreign trade operations are set out, and have their responsibilities outlined, in the Law (no. 1) on Foreign Trade, 1971. Prior to this law, responsibilities for carrying out foreign trade were vested in a single ministry, the Ministry of Foreign Trade, which had under its general direction a number of foreign trade enterprises responsible for securing imports and selling exports.

^{1/} The scope of foreign trade is defined in Article 3, Law (no. 1) on Foreign Trade, 1971 as "commercial and economic and technico-scientific cooperation transactions with foreign countries with regard to: sales, purchases, and exchanges of commodities, services, international transportation and forwarding, designing and commissioning of projects, technical assistance and cooperation, sale consignment and warehousing of goods, agencies and commissions, financial and foreign currency operations, insurance, tourism, and in general, any act or facts of trade, as well as market research, tenders, proceedings, negotiations and agreements to such operations".

By the mid-1960s, the insulation of domestic enterprises from international markets was hindering the development of foreign trade, especially on the side of exports. Along with proposals for improving the organization for domestic economic activities, the Directives of the Central Committee of RCP, 1/ issued in 1967 as a blueprint for a more sophisticated management system, recommended that foreign trade be reorganized to carry out its functions more effectively and, in particular, that the Ministry of Foreign Trade's sole responsibility over the sector be ended by the decentralization of some foreign trade responsibilities to the sectoral ministries, centrals and producing enterprises. Between 1967 and the present, the government has adopted a series of laws and measures establishing new institutions and delineating the responsibilities of all bodies involved in trade. The most important and comprehensive of the measures was the Law (no. 1) on Foreign Trade of 1971. The following paragraph gives a brief description of the present division of responsibilities between the major institutions involved.

7.09 (a) Council of Ministers: The highest body of state administration - it has general responsibility for the administration and control of international economic relations.

(b) Ministry of Foreign Trade: The Ministry has overall responsibility for the planning and implementation of foreign trade activities. The major elements include the preparation, in coordination with the State Planning Committee, and implementation of the foreign trade plan which comprises a separate chapter of the five-year plan; the authorization of imports and exports through the issue of licenses; joint responsibility with the State Planning Committee, Ministry of Finance, National Bank and Bank of Foreign Trade for working out and securing the balance of payments; negotiation, in collaboration with the Ministry of Foreign Affairs and other interested bodies, of agreements with trading partners; the investigation of foreign markets; the organization of economic representation through diplomatic missions or trade offices in foreign countries; and the general coordination of external economic relations.

(c) Ministry of Finance: The Ministry has major responsibility for foreign currency and controls jointly with the Ministry of Foreign Trade international transactions in which foreign currency is involved.

(d) Bank for Foreign Trade: Established in 1968 as a specialized unit of the External Operations Department of the National Bank, the Bank has the primary function of facilitating trade by organizing trade payments, obtaining domestic and foreign credits and concluding such banking arrangements as are required domestically and internationally. It administers Romania's foreign exchange reserves and payments agreements (See also Appendix 8).

1/ On the Perfecting of Management and Planning of the National Economy.

(e) Ministries: Each sectoral ministry has responsibility for coordinating the planning and implementation of external economic relations specific to its sector, and ensuring the fulfillment of its part of the foreign trade plan. The Ministry of Transport has the specific responsibility for overseeing the implementation of the external transport plan.

(f) Centrals, Foreign Trade Enterprises and Productive Enterprises: The Law on Foreign Trade widened the category of economic units able to carry out foreign trade, stipulating that trade could be carried out directly by centrals, production enterprises, specialized foreign trade enterprises, units supplying services or goods in foreign countries or to foreign interests in Romania (e.g. ARCOM) and any other such economic units that are authorized to trade. In 1969, the majority of specialized foreign trade enterprises previously under the Ministry of Foreign Trade were made the responsibility of their respective sectoral ministries and since 1971 there have been a number of reorganizations which have affected both the number of units operating directly in the foreign trade sector and their responsibilities. Since December 1974, foreign trade has been carried out by 41 specialized foreign trade enterprises (34 under sectoral ministries and 7 under industrial centrals) and by export and import bureaus of the ministries and centrals. The foreign trade enterprises, which are jointly responsible to their sectoral ministry and the Ministry of Foreign Trade, are established as separate legal entities with their own management and employees and specific commercial responsibilities established by law. They are required to support all their activities from their revenues and to operate at a profit. At the same time, production enterprises were made directly responsible for their own trade activities, even when they were carried out through the centrals or foreign trade enterprises. Centrals and production enterprises now have responsibilities for preparing a trade plan and for implementing the final trade targets built into the annual plan and handed down from the ministry.

(g) Other Bodies: A number of other institutions play an important role in Romania's foreign trade. The Chamber of Commerce is responsible for developing relations with foreign firms, economic organizations and professional associations and staging trade fairs at home and abroad. It has affiliated with it an Arbitration Commission for the settlement of foreign trade disputes. Also affiliated with the Chamber is Argus, an agency established in 1971 whose original function was to serve as a representative of foreign firms in Romania but which has recently moved into assisting firms to set up their own offices and acting as the channel through which they recruit Romanian personnel. The State General Inspectorate for Product Quality Control has responsibilities in cooperation with the ministries for controlling the quality of goods and services supplied and purchased by Romania in the foreign trade sector. In 1967 the Institute for the Study of International Economic Conjuncture ^{1/} was formed to study the appropriate development of Romania's foreign trade, and in 1971 the Romanian Association for Marketing (AROMAR) was established with responsibilities to improve the quality of market research and services for Romanian exports.

^{1/} Renamed in 1977 "The Institute of World Economy."

2. Planning Process

7.10 The planning of foreign trade is carried out within the same overall framework as the planning of domestic activities. The five-year plan for the economy contains a separate chapter on foreign trade and payments which sets out the overall targets for exports and imports and specifies for each level of organization responsibilities and targets. In essence, the central foreign trade plan is a volumetric and financial projection of exports and imports for the five-year period in the field of trade, which constitutes the main part of the overall balance of payments. The five-year plan does not include a projection of the balance of payments, but this can be put together from the provisions of the tourist and transportation plans and the guidelines for actual capital flows. During the implementation of the five year plan, balance of payments projections are drawn up for use as management instruments for the overall development of international economic relations.

7.11 The planning process for foreign trade occurs simultaneously with that of domestic activities and is essentially similar to the planning for other sectors with a derived demand for goods and services. Each economic unit prepares as part of its draft plan projections of export and import needs based upon investigative surveys of foreign markets and data on domestic production and demand forecasts. Aggregation of enterprise plans through centrals and ministries to the level of the State Planning Committee produces projections for the economy as a whole of import requirements and permits their comparison with the results of the SPC's summary schemes and econometric models. The process of iteration and negotiation at each level of the organizational pyramid produces a final plan which after approval is disaggregated and presented to each level in the form of export targets and import allocations expressed in value and volume terms. Because of the inherent uncertainty of foreign trade, targets in the five-year plan are expressed in general terms. More detailed targets are given in the annual plans.

7.12 The overall foreign trade plan is divided into two chapters covering separately plans for convertible and non-convertible currencies. Prior to the 1976-80 plan, the plan was also divided into separate chapters for socialist, developed market and developing countries, but no such division is included now. This development, and the fact that it is the total plan, rather than the two chapters, that is divided into import and export plans illustrates the increasing commercial orientation of foreign trade activities. The import plan is specified by various categories; the most important commodities are designated in volume terms, others are in value terms, while there is also a residual category, not specified by commodity but allocated by value and ministry. The plan also is divided on the basis of use as follows:

(a) imports for production:

- (1) raw materials, designated primarily in volume terms and calculated according to production norms and technical coefficients.

- (2) parts and other production inputs, designated in volume or value terms.
- (b) imports for investment:
- (1) capital goods for specific projects, broken down by project.
 - (2) capital goods not specified by project, for which a total value is given for each ministry and technical specifications defined.
- (c) imports for final consumption:
- (1) for important goods, volumes are specified.
 - (2) for all other goods, value terms are used.

The export plan is also broken down in to value or volume terms for major commodities. In general, the predominant target for each administrative level is given in value terms but in certain cases volumetric targets are also given.

7.13 In addition to planning foreign trade internally, the Romanian government organizes its economic relations with its trading partners so as to reduce as much as possible the uncertainty in the sector and to avoid jeopardizing internal development programs which are dependent upon foreign inputs. Romania has conducted most of its trade and payments within the framework of specific inter-country agreements. In the past, these agreements were generally bilateral in nature for both trade and payments, but in recent years the tendency has been for payments to become multilateral, payments with non-socialist countries being made increasingly in convertible currencies. At the end of 1975, Romania had signed 112 general cooperation agreements, 185 sectoral agreements and 235 joint venture agreements and had a great number still under negotiation.

7.14 The most institutionalized trade agreements signed by Romania are those with socialist countries. They are negotiated bilaterally, for a five year period, during the preparation of the five-year plan and consist of a general framework agreement supplemented by annual protocols which settle details of purchases and deliveries. The agreements generally contain binding quotas, i.e., quotas up to which import and export licenses must be issued. Prices for transactions are set at "negotiated world prices" which are now based upon moving averages of international prices adjusted for speculation, fluctuations, etc. Settlements for trade under these agreements are carried out in transferrable roubles through the International Bank for Economic Cooperation in Moscow. The institution of a multilateral settlement system within CMEA means Romania no longer has to balance trade with each country.

7.15 Agreements with non-socialist countries have involved similar attempts to guide the development of trade along predictable lines, but in general the stipulations in the agreements have been more indicative than

binding. The agreement usually runs for up to five years and provides a framework for trade and in many cases scientific and technological cooperation, joint production and commercial ventures, exploration for raw materials and technical assistance agreements. Further details of these various agreements are given in the following section.

D. Foreign Trade and International Economic Relations in the Fifth Plan (1971-75)

7.16 The goals set for the development of the Romanian economy between 1971 and 1975 necessitated a further considerable increase in the volume of foreign trade. Continued growth of material production, particularly in industry, generated additional imports of raw materials and capital goods which, in view of Romania's cautious approach towards expanding its external debt, had to be largely financed by increased exports of industrial and agricultural goods. Thus, Romania's participation in world trade during the Fifth Plan, as before, was largely subordinated to the requirements of the domestic economy and dictated by the insufficiency of domestic resources and raw materials and the inability to supply internally all the sophisticated capital goods and installations required by the strategy of complex industrialization. As a result, much of foreign trade policy in this period was concerned with the development of marketable export goods and with obtaining stable long-term supplies of raw materials and access to industrial technology.

7.17 The Law of the Plan projected an increase of 61-72 percent in the volume of trade, measured in 1970 prices, during the Fifth Plan compared with the volume achieved during 1966-70; translated into absolute terms, the target equalled 151-160 billion lei valuta. The Plan forecast that imports during the 1971-75 plan period would total approximately 75 billion lei valuta in 1970 prices, an increase of 54 percent compared with the 1966-70 volume measured in current prices; and in keeping with the internal development of the economy, it was envisaged that the major elements of import growth would be raw materials and machinery and equipment. The Plan envisaged that raw material imports would increase at approximately the same rate as total imports, while purchases of machinery and equipment would more than double.

7.18 The Plan established both quantitative and qualitative goals for exports between 1971-1975. The target for the growth of exports, 14.3 percent per annum, was considerably higher than that of imports and reflected the Government's plan to secure a positive trade balance by 1975 in both total and convertible-currency trade and to minimize the growth of external debt. In absolute terms, the target implied a volume of exports totalling 85 billion lei valuta during the plan period. The Plan also indicated that there would be changes in the geographical distribution of trade; while the Comecon countries would remain Romania's largest export market, 1/ trade with developed market economies and developing countries was to increase rapidly to finance the increased imports of raw materials and technology. In addition, the Law

1/ Trade with Comecon was planned to increase by 50 percent during the Plan period.

of the Plan required that the efficiency of exports be increased; all bodies involved in foreign trade were to ensure "the increase in export efficiency, the diversification of the forms of foreign trade, the exploration of the foreign market and the study of conjunctural trends in perspective." ^{1/} The increased efficiency of exports, that is, the improvement of Romania's resource terms of trade, was to be brought about largely by the general increase in productivity of the Romanian economy, reductions in production cost, improved quality and the availability of more highly processed and technologically-advanced goods for export. In particular, it was planned that exports of machinery and equipment and chemicals (projected to constitute 41 percent of total export value in 1975 compared with 30 percent in 1970) and the products of light industry, notably clothing, footwear and wood products, all embodying a high degree of added value, would be increased at a rapid rate. While general improvements in productivity and quality and sophistication of products provided an important basis for increased efficiency, it is clear, from the measures proposed at the National Conference of the RCP in 1967, that further improvements in efficiency were anticipated from the more efficient organization of foreign trade under the Ministry of Foreign Trade and International Economic Cooperation and also from the more direct exposure of enterprises to the international market (for details, see Chapters Three and Four).

7.19 In addition to these policies, a major emphasis in the 1971-75 trade plan was the development of economic cooperation with all trading partners. The primary purpose of agreements for cooperation was similar to the bilateral trade agreements they in some cases replaced, that is, to introduce a measure of stability and certainty into foreign trade. A further purpose was to provide a framework for joint ventures, cooperation in production, the transfer of technology and similar forms of inter-state cooperation. On the side of imports, emphasis was placed upon the negotiation of long-term contracts for raw materials and joint exploration and exploitation enterprises, especially in LDCs, so as to ensure continuity of supply at advantageous terms. Such agreements were also intended to permit the establishment of joint ventures within Romania, to develop economic cooperation and introduce advanced technology, modern management techniques and scientific research into the Romanian economy. On the side of exports, the foreign trade plan envisaged the establishment of joint production and commercial ventures in other countries, as a means of exporting Romanian-made machinery and equipment and technology. While the major emphasis during the Fifth Plan period was clearly to be placed upon the development of widespread cooperation with the developed market economies and developing countries, it was also planned that Romania would continue to expand its economic relations with all socialist countries, including Comecon members.

1. Trade Performance

7.20 The total volume of foreign trade between 1970 and 1975 increased from 22.9 billion to 53.1 billion lei valuta in current prices, an average annual growth rate of 18.4 percent. Imports increased 2.26 times from 11.8

^{1/} Article 24, Law of the Plan 1971-75.

billion to 26.5 billion lei valuta and exports 2.39 times from 11.1 billion to 26.5 billion lei valuta over the plan period, average annual growth rates of 17.7 percent and 19.0 percent respectively (Annex 4.1). As a result of the faster growth of exports, Romania succeeded in balancing its overall trade in 1975 (Table 7.1). Measured in the same terms as the Five Year Plan target, the volume of trade during 1971-75 was 106 percent higher than the 1966-70 achievements. An immediate comparison between achievements and the targeted increase of 61-72 percent over the 1966-70 volume is not possible since the former is expressed in current prices and the latter in 1970 prices. In the absence of price indices relating specifically to Romanian trade, it is difficult to separate volume and price effects, especially for trade with non-Comecon countries and to provide an accurate assessment of Romanian trade performance during the period by using these aggregate data. There are two further reasons why an assessment at the aggregate level is not useful; first, Romania participates in two discrete trading areas, the non-convertible currency area of socialist countries and some trade with developing countries, and the convertible currency area encompassing most trade with developed market economies and the developing countries. As the tables on trade balances and commodity structure of trade show, Romania's trading position in the two areas (and within the convertible currency area its position in relation to the developing countries and the developed market economies) differed considerably. Secondly, the state's monopoly in foreign trade means that the trade figures reflect changes in trade policy in response to both internal and international circumstances. Thus, the remainder of this section attempts to assess performance of foreign trade during the Fifth Plan by examining more disaggregated figures.

Table 7.1: VOLUME OF TRADE BY CONVERTIBLE AND NON-CONVERTIBLE AREAS
1970-75

	<u>1970</u>	<u>1971</u>	<u>1972</u>	<u>1973</u>	<u>1974</u>	<u>1975</u>
	------(in m. lei valuta)-----					
A. <u>Total Trade</u>						
Exports	11105	12606	14373	18576	24226	26547
Imports	11761	12616	14465	17418	25563	26548
Balance	-656	-10	-92	+1158	-1337	-1
B. <u>Convertible Currency Trade</u>						
Exports		4980	5950	8181	13016	14110
Imports		5285	6348	8509	14637	14661
Balance		-305	-398	-328	-1621	-551
C. <u>Non-convertible Currency Trade</u>						
Exports		7626	8423	10395	11209	12438
Imports		7330	8117	8909	10927	11888
Balance		+296	+306	+1486	+282	+550

Source: Ministry of Finance

7.21 The major features of Romania's trade are shown in Tables 7.1 and 7.2 and Annexes 4.1-4.8. Between 1970 and 1973, the growth of trade proceeded at a fairly rapid rate, although as Table 7.2 shows, somewhat less rapidly than projected in the annual plans; 1/ average annual growth rates for exports and imports were 10.8 percent and 8.2 percent respectively. This permitted a reduction in the overall deficit from its 1970 level of 656 million lei valuta and in 1973 the economy actually had a surplus of 1158 million lei valuta. Furthermore, Romania's trading position with each trading area improved. 2/ Trade with socialist countries increased by almost 40 percent between 1970 and 1973, compared with a target growth of 50 percent between 1970 and 1975, the greater growth of exports (49 percent against only 30 percent for imports) leading to an increase in Romania's surplus in non-convertible currency trade. The surplus with developing countries also increased, the rate of growth of imports (mainly crude oil, minerals and metals and raw materials) exceeding marginally that of exports (122 percent compared with 118 percent). In its trade with developed market economies, however, Romania succeeded in reducing its deficit only a little from 1250 million lei valuta in 1970 to 1230 million lei valuta in 1973; in that period exports rose by 82 percent while imports increased by only 60 percent.

1/ Since the targets for foreign trade in the annual plan are cast in estimated current prices while achievements are in actual prices, a shortfall in performance may, in principle, be due to either inaccurate price predictions or lower volumes of trade.

2/ Care is required in interpreting the figures for trade with LDCs and developed market economies, since exports and imports are categorized in Romania by country of payment rather than country of origin or destination. Thus trade figures quoted by Romania for countries with important commodity exchanges may not equal those countries' own figures.

**Table 7.2: VOLUME OF TRADE WITH DEVELOPING COUNTRIES AND
DEVELOPED MARKET ECONOMIES
1970-75**

	1970	1971	1972	1973	1974	1975
----- (in m. lei valuta) -----						
A. Total Trade with Developing Countries and Developed Market Economies						
Exports	4652.3	5448.8	6351.6	8966.8	13726.0	14333.6
Imports	5417.8	5825.3	6995.7	9173.9	15561.7	14990.0
Balance	-765.5	-376.5	-644.1	-207.1	-1835.7	-656.4
B. Trade with Developed Market Economies						
Exports	3284.5	3992.6	4549.0	5980.2	9455.4	8225.0
Imports	4534.0	4880.6	5767.7	7212.1	12108.5	10762.3
Balance	-1249.5	-888.0	-1218.7	-1231.9	-2653.1	-2537.3
C. Trade with Developing Countries						
Exports	1367.8	1456.2	1802.6	2986.6	4270.6	6108.6
Imports	883.8	944.7	1228.0	1961.8	3453.2	4227.7
Balance	+484.0	+511.5	+574.6	+1024.8	+817.4	+1880.9

Source: Ministry of Finance
Anuarul Statistic

7.22 Trends in trade were much less favorable, however, in the remaining two years of the plan period. In 1974, the surplus on total trade was replaced by a deficit of 1.3 billion lei valuta as exports grew less rapidly than planned and imports increased considerably faster than anticipated. The causes were both internal and external: growth of exports, 30.6 percent compared to an annual plan target of 43.5 percent, was constrained by the failure of the harvest, which reduced agriculture's exportable surplus, and by the world recession, which severely affected the growth of exports of machinery and equipment, textiles and garments. In addition, trade restrictions were imposed on important Romanian exports such as beef, textiles, shoes and fertilizer. Large increases in the price of oil and other raw materials, and of machinery and equipment, raised the cost of imports substantially and the total import bill increased by 46.8 percent compared with the plan target of 38.8 percent. Consequently, the favorable developments of the previous three years were reversed. The trade deficit with the developed market economies grew to 2.65 billion lei valuta, as imports rose by 68 percent while exports increased by only 58 percent; the surplus with the socialist countries decreased to less than half a billion lei valuta, in part because export goods were shifted to convertible currency markets. In the case of trade with the developing countries as a group, Romania suffered only a slight deterioration in its trade balance, partly as a result of the structure of exports whose prices rose to compensate for the increase cost of oil and other raw material imports,

and partly because of the trading and cooperative agreements established with many developing countries during the fourth and fifth plan periods.

7.23 In 1975, the foreign trade sector experienced further problems. Demand for Romanian goods continued to be limited by the world recession, especially in the case of textiles, machinery and wood products, and less foreign exchange than anticipated was earned because international market prices, particularly of chemicals, cement and timber, stopped rising. Internally, severe floods reduced the planned supply of export goods, mainly from agriculture but also from some industrial sectors, by some 1.1-1.2 billion lei valuta. While in 1974 the large deficit had been financed through capital inflows without the imposition of restraint upon imports in 1975, the Government dealt with the unfavorable developments by accepting the need to reduce or delay some planned imports, particularly from the convertible currency area, and by running down stocks. As a result, imports grew by only 3.9 percent and with export growth of 9.6 percent the overall trade account was practically in balance. The deficit with the developed market economies was reduced by a small amount to 2.54 lei valuta, with both exports and imports falling by 13 percent and 11 percent respectively. In the case of trade with developing countries, Romania's surplus increased rapidly, reflecting further success in expanding exports of machinery and equipment and industrial consumer goods to the oil-producing countries; exports to developing countries increased 41 percent in 1975 while imports increased by 22 percent. Trade with socialist countries continued to grow steadily, exports and imports increasing by 16.4 percent and 15.5 percent respectively.

7.24 Thus, in the last year of the plan period, the foreign trade sector registered a lower rate of growth than planned, as internal and external factors inhibited the growth of exports. In some cases, this led to a decrease in imports of machinery and equipment, in others, the substitution of imports from Comecon for goods from developed market economies, and in yet other cases, the substitution of local investment goods.

7.25 In the course of the fifth plan, substantial changes took place in the geographical distribution and commodity structure of trade. In current price terms, the weight of socialist countries in Romania's foreign trade diminished; in 1970, 58.1 percent of exports were sold to and 53.9 percent of imports were obtained from this source; in 1974, the percentages had fallen to 43.3 percent and 39.1 percent respectively, before rising again in 1975 to 46.0 percent and 43.6 percent respectively. In the meantime, both developed market economies and developing countries had assumed more important positions, with the growth of the latter the most striking. While the proportion of exports to and imports from developed countries had risen from 29.6 percent to 31.0 percent and from 38.6 percent to 40.5 percent of the total respectively, trade with developing countries increased over four times in current price terms. A radical change in the level and relative importance of trade with the developing countries occurred with the oil price increase. In 1974, Romania's trade with them rose by 56 percent (exports increasing 43 percent and imports by 76 percent). A further increase in total trade of 34 percent in 1975 (43 percent for exports and 22 percent for imports) meant that in that year total trade with developing countries was 19.5 percent of overall trade, more than double the 1970 proportion.

7.26 The changes in geographical distribution of Romania's trade, however, were less striking once the impact of differential price changes between convertible and non-convertible trade is accounted for. Approximate calculations using world price indices suggest that, measured in constant prices, the socialist countries maintained their share of trade with Romania and that the major change in distribution was the declining share of trade with the developed market economies and, correspondingly, the rapid growth of trade with the developing countries. From an examination of the foreign trade data, one can only conclude that, while the oil price increase caused the terms of trade to move heavily against Romania ^{1/} notwithstanding the benefits Romania derived from price increases for its chemical fertilizer, petroleum product and energy exports, Romania took full advantage of its economic and political relationships with developing countries in general, and the oil-producing countries in particular, by exchanging large amounts of machinery and equipment, food and raw materials for food production and industrial consumer goods for the oil it required.

7.27 The commodity structure of trade also continued to change between 1971 and 1975, especially in exports where the changes implied some success in implementing Plan targets for improving the efficiency of exports (Annex 4.4). In part, the structural changes reflected relative price changes, in part the changing needs and productive resources of the economy. In aggregate, the structure of imports changed little during the period, comprising almost exclusively imports of capital goods and raw materials. The proportion of capital goods in total imports declined from 40.3 percent in 1970 to 34.7 in 1975, the decrease occurring in 1974 and 1975, reflecting the foreign exchange constraints in those years and the increased ability of the Romanian economy to provide its own capital goods. The proportion of fuels, minerals and metals rose from 30.4 percent to 38.2 percent during the same period not only because of the increase in the price of crude oil (and increases in the volume of its import) but also because of increased requirements of metals and minerals. If imports of other raw materials are included, the proportion of all imports in the form of raw materials rose from 42.8 percent in 1970 to 52.0 percent in 1975 (Annex 4.5).

7.28 The changes in the structure of exports mirrored to a great extent the progress of industrialization in Romania and also the limitations of the process. Industrial goods (machinery and equipment, chemicals and industrial consumer goods) continued to increase their proportion of exports, increasing from 47.9 percent to 52.2 percent. While the growth of industrial consumer good exports was no more than the growth of exports as a whole, machinery and equipment and chemicals enjoyed the highest growth rates, their combined share of exports rising from 29.8 percent in 1970 to 36.1 percent in 1975 (but falling short of the plan target of a 41 percent share in 1975). Correspondingly, the share of raw materials in exports declined; the decline in the share of exports of foodstuffs and agricultural raw materials reflected the growth of

^{1/} An analysis carried out by the Bank of Romania's trade with developing countries suggests that a bundle of exports capable of purchasing 100 lei worth of imports from developing countries in 1970 would obtain only 60 lei worth in 1975.

domestic processing industries and the relatively low growth rate in agriculture, while the slight decline in the share of fuels, metals and minerals masked the offsetting effects of price increases and volume decreases as domestic needs took a higher proportion of supply.

7.29 The structure of exports and imports also varied by trading area, demonstrating Romania's position in the world economy (Annexes 4.7 and 4.8). In its trade with developing countries, Romania sold machinery and equipment and other industrial products in return for raw materials; in its trade with socialist countries, Romania appeared as a supplier of capital goods and consumer products in return for capital goods and raw materials; and in its trade with the developed market economies, Romania stood as a developing country, exporting raw materials and simple industrial manufactures in return for sophisticated capital equipment and raw materials.

2. Cooperation Agreements and Joint Ventures

7.30 In recent years Romania has become a strong advocate of international and technical cooperation with all countries of the world; this represents an important change from previous periods when cooperation focused mainly on Comecon. The diversity of these relations is exemplified by Romania's participation since 1971 in GATT and since 1972 in the IMF and IBRD and by the signature of some 250 agreements covering various forms of cooperation for the development of raw material and energy supplies, for access to advanced technology and the stimulation of Romania's exports of goods and technology.

7.31 Romanian cooperation with foreign countries and companies was intensified during the Fifth Plan, both within Romania and in developing and developed countries. However, it was abroad where most headway was made in the form of partnerships in the construction of industrial units, provision of Romanian equipment and know-how mostly in geological exploration, provision of turnkey projects, the establishment of joint production and commercial ventures and, last but not least, in the field of technical assistance.

7.32 The erection of industrial plants abroad has been an important instrument of export promotion for machinery and equipment and the composition of such projects gives some idea of the relative strengths of Romanian equipment manufactures. In the course of the last ten years Romania has taken part in the construction of over 50 industrial units, of which about 10 were in the chemical industry, seven in petroleum and mining, seven in wood processing and building materials, and six in the field of mechanical and electrical engineering. From the available limited project list, it appears that Romanian efforts were concentrated on countries in the Middle East and Asia. In the field of chemicals and petroleum, plants were set up or are being set up for the production of sulphuric acid and fertilizers (Turkey, Egypt), sodium products (Iran, Egypt) and for oil refining (Syria, India, Pakistan). Other projects included wood processing plants (Iran, Sri Lanka, People's Republic of the Congo), cement works (Syria), cotton mills (Sudan, People's Republic of the Congo), power plants (Egypt, Philippines), and several production and assembly plants for transport equipment, notably tractors (Iran, Egypt, but also Canada, USA).

Of more recent date is Romanian participation in geological exploration, concentrated mainly in the Middle East, Africa and Latin America and covering exploration for phosphates, a wide range of ferrous and non-ferrous ores and oil. A large number of projects are at present being constructed or under negotiation.

7.33 Romania's capital participation in joint ventures abroad rose substantially between 1970 and 1975. Romania is currently 1/ a shareholder in 28 production enterprises abroad 2/ and in a total of 35 commercial joint ventures. Joint ventures abroad have various purposes. Probably a majority of them are geared towards increasing and broadening raw material supplies of Romanian industry; they include both production and shipping companies. Others have been established to promote Romanian exports and to gain a foothold in new markets. This type of joint company focuses on production and export of Romanian products and is found both in developing countries and in some industrial countries. Yet others have the more general objective of trade promotion, such as the joint banking companies set up in Egypt, U.K., France and the Federal Republic of Germany.

7.34 Of the 28 production-oriented joint ventures, 11 are in mining, seven in agro-industries, including cotton, four in the exploitation of tropical hardwood, two in light industry, and one each in machine building, construction materials, rubber and transportation. The remaining three companies are servicing and assembling enterprises. Within the total number, Romania also is participating in international consortia for the exploitation of iron ore in Gabon and Guinea and natural rubber in Liberia. Commercial joint ventures serve mainly marketing objectives. They usually provide Romania with access to distribution and servicing facilities for its exports and are important in establishing a more permanent presence in foreign markets. Participation in commercial firms abroad makes it possible for Romanian products to be sold through already existing distribution networks (normally those of the partner firm), to keep adequate stocks of spare parts and to perform essential servicing jobs. Romania has established such commercial partnerships in Western Europe, North America and in some developing countries.

7.35 Finally, Romania has also increased its exports of technical and consultancy services, particularly in chemicals, power and petroleum refining through the agencies RomConsult and ROMENERGY.

7.36 International economic and technical cooperation within Romania has also developed quickly, especially within the last two years. No joint ventures with CMEA members have yet been established, although at least one is under negotiation, but considerably more progress has been made in joint ventures with non-socialist countries. Following the formulation of a legal framework for the establishment of joint companies in Romania (Decree no 424

1/ As of October 1977.

2/ Romania is also participating in three ventures in cooperation with socialist countries.

of Nov. 2, 1972), Romania has succeeded in establishing to date eight production joint ventures in industry and transportation, of which three have commenced production. The formation of two more such ventures has been announced but they have not been formally established yet. The eight ventures established to date operate, or will be operating, in the production and marketing of chemical fibers, reducing gears, EDP equipment, electronic-medical equipment, precision chains, feedstuff, and passenger cars, and in the operation of marine transportation. The latest two ventures will produce aircraft and petro-chemicals. The foreign capital participation, limited to a maximum of 49 percent, have come from Italy, the Federal Republic of Germany, the USA, France, Austria, Japan and Libya. Operating in areas of advanced technological requirements, the companies are expected to contribute to increasing Romania's export potential by providing new production lines and upgrading existing ones. Moreover, training programs in these plants are to contribute to the dissemination of technical and organizational know-how. (Further details on capital plans associated with these ventures are given in para 7.45.)

7.37 Another form of foreign cooperation with Romanian firms within Romania, more important so far than joint ventures, takes place through licensing and technical assistance agreements. Some cases of major impact are generally known such as the licensing and assistance agreements between Renault and the Dacia Automobile Works, between the Swedish ASEA and the Electroputers Works (diesel-electric locomotives), but on the whole little information is available on this subject.

3. Invisibles

7.38 Romania recorded a deficit on invisible transactions as a whole throughout the fifth plan period, as a result of developments in both trade and capital accounts. An increasing surplus on tourism (for further details see Chapter Fifteen) was more than offset by net payments for transportation and telecommunications and other services, particularly interest on external debt. The expansion of Romania's trade was accompanied by a rapid expansion in payments to other countries for transportation services while the growth of receipts was constrained by the limited growth of Romania's merchant fleet (see Chapter Thirteen for further details). Similarly, net payments for other services grew over the period as interest payments on foreign borrowings were made.

7.39 Romania ran a small surplus on invisibles with the non-convertible currency area which was insufficient to offset the deficit with the convertible currency area. The surplus, however, diminished during the plan period from 200 million lei valuta in 1971 to 75 million in 1975. This reflected both growth in Romanian tourist expenditures in Eastern Europe and the gradual transition from surplus to deficit in transportation services. The deficit with the convertible currency area doubled between 1971 and 1975, from 345 million to 750 million lei valuta. Deficits in transportation and other services increased steadily throughout the period, offsetting the surplus on tourism. A major feature of the latter was the very slow growth of tourist payments to convertible currency countries.

4. Capital Flows and External Debt

7.40 In overall terms, Romania was a net importer of capital during the fifth plan period, thereby financing a large part of its deficit on trade and services and increasing the size of its external debt. However, an overall assessment of capital flows and external debt is not very useful since Romania's position with convertible and non-convertible currency areas differed greatly. With the convertible currency area, Romania was a capital importer, while with the non-convertible currency area it had a net capital outflow which, in fact, consisted of goods.

7.41 Between 1971-73, the inflow of medium and long term capital from the convertible currency area was sufficient to cover the deficit on current account, to repay credits made available to Romania between 1966 and 1970 and to permit a restructuring of foreign debt. It was government policy during this period to liquidate the outstanding short-term debt and an examination of the capital flow and external debt figures shows that the policy was successfully carried out to the extent that less than 700 million lei valuta of short-term debt remained at the end of 1975. In 1974, medium and long term capital inflows increased greatly. The inflow was required to finance the large current account deficit and to reduce further short-term debt. In 1975, the inflow declined to 4.1 billion lei valuta, as attempts were made to reduce imports of goods. The net inflow also decreased substantially since the size of annual capital repayments continued to increase. A further feature of the capital account between 1971 and 1975 was the increasing importance of medium and long-term credits extended by Romania to finance its exports of machinery and equipment. However, the growth of such credits was limited to some extent by Romania's ability, in its trade with developing countries in particular, to exchange its exports directly for crude oil and raw materials.

7.42 In all years of the plan period, the trade surplus with the non-convertible currency area was offset by a net capital outflow, which constituted chiefly repayments of principal on medium and long-term loans (given during previous plan periods to finance investment projects) and credits extended by Romania on short, medium and long term to finance exports to developing country trading partners. Capital inflows were relatively small, comprising mainly loans from the International Investment Bank (IIB) and repayments of export credits advanced by Romania in previous years.

7.43 The implications of the capital movements for Romania's external debt were that between 1972 and 1975 total external debt almost doubled. The major part of the debt was held in convertible currencies. Repayments by Romania in the early years of the plan period reduced non-convertible currency debt and by the end of 1975, it was a small amount only, the largest part of which was short term. It would appear that Romania is now a creditor country insofar as the non-convertible currency areas is concerned.

7.44 Between 1972 and 1975, Romania's convertible currency debt also almost doubled. At the end of 1975 all but four percent was medium and long term debt, reflecting the successful attempts to reduce the level of short term debt. Almost all of the external debt (about 80 percent) was suppliers

and financial credits from major trading partners, particularly Germany, Italy, UK and France. Of this, a large portion, about 40 percent, was guaranteed suppliers credits. Almost alone of Comecon countries, Romania has not greatly expanded borrowing from US and European banks. In 1975, total net borrowing from such sources totalled US\$670 million, ^{1/} approximately US\$80 million less than in 1974. The term structure of suppliers' credits, many of which are government guaranteed, is five to eight years at 7-8 percent, while financial credits have maturities of five to six years at 8-9 percent. As of the end of 1975, approximately half of the debt was due for repayment within three years and all but 15 percent within five years. In 1975, the debt service ratio was 17 percent, approximately the same as it had been throughout the plan period since trade receipts and debt repayments both grew rapidly.

7.45 In the past, the Romanian government has displayed a cautious approach to external debt, as demonstrated by the debt service ratio and attempts both to improve the structure of debt and to expand exports as rapidly as possible. It has also tried to diversify sources of borrowing and to negotiate long term loans. The operations of the Franco-Romanian and Anglo-Romanian Banks were expanded during the fifth plan period and in early 1977, the creation of a German-Romanian Bank was announced. As discussed in paragraph 7.36, long-term equity capital has been secured in this form of joint ventures; to date, the six ventures which have progressed beyond the stage of signing have led to an inflow of only US\$10-15 million. The ventures announced during 1977 will have a far more substantial capital inflow: OLT-CIT, the venture with Citroen for the production of passenger cars, is to involve a total transfer of some US\$250 million; even larger flows are expected as a result of an agreement with Kuwait, still to be signed, for the construction of a petro-chemical complex costing US\$1.25 billion. Furthermore, it attempted to secure capital from three new sources; the multilateral agencies (IMF and IBRD), bilateral sources including OPEC countries and the Eurocurrency market. Romania joined the IMF and IBRD in 1972. By October 1977, Romania's gross borrowings from the Fund stood at US\$363.5 million (not including the gold tranche) with a further US\$45.7 million of the latest stand-by arrangement undrawn. Romania became an active borrower from the Bank in 1974 and between then and 1977 secured loans totalling \$697 million. To date, IBRD remains the most important source of long term funds available to Romania and only limited progress has been made in tapping other sources. In 1975, a US\$100 million loan was negotiated from Kuwait, as part of a general cooperation agreement; the loan carries a 9.4 percent interest rate with a maturity of eight and grace period of three years. In the same year, the US Eximbank, having suspended lending in 1974 following loans of \$40 million, approved a \$22 million loan to finance machinery imports. The eight year loan carries an interest rate of 8-1/4 percent. Romania has also borrowed on the Eurocurrency market. A small initial borrowing of some US\$6 million was made in 1974 to finance the first joint venture, Resita-Renk. In 1976,

^{1/} The sources of this data were East-West Markets, April 5, 1976 and East-West No. 150, March 25, 1976. East West Markets, October 4, 1976 suggested that total indebtedness to western banks at the end of 1975 was approximately \$1 billion.

arrangements were made to borrow \$50 million but the loan was cancelled because the terms were not acceptable to the Government. Subsequently in early 1977, a \$50 million loan was successfully floated, at a rate of 1.25 percent above LIBOR and an additional \$75 million loan was negotiated in April.

7.46 In conclusion, it can be said that Romania has been largely successful in financing its current account deficit with the convertible currency area through capital inflows and that it has succeeded in improving the structure of outstanding debt. It has been less successful, however, in diversifying the sources of its debt, especially at the long term end of the market where IBRD remains the main lender. As a result, most of Romania's outstanding debt remains in the form of medium term suppliers and financial credits.

5. Balance of Payments and International Reserves

7.47 As a result of the trade and capital movements described above, Romania ran a deficit on its overall balance of payments in three of the five plan years but in no year was the deficit significant in relation to the size of transactions. It is more instructive, however, to consider separately the balance of payments result for convertible and non-convertible currency areas. The convertible balance was in deficit for three of the five years, 1971, 1973 and 1975. In 1971, 1972 and 1974 capital inflows more or less offset the deficit in current account, while the large deficits of 1973 in particular and 1975 were offset by monetary movements, chiefly by borrowings from the IMF. As a result, Romania's convertible currency reserves remained fairly constant over the period, although measured in terms of the import bill they declined markedly. While this decline is not as significant as in market economies in view of the Romanian state's monopoly over trade, it does indicate the scarcity of convertible foreign exchange.

7.48 The non-convertible currency balance was in deficit for four of the five years, capital outflows exceeding the current account deficit in all but 1973. Monetary movement adjustments were made through payment agreements with each trading partner.

CHAPTER EIGHT

HUMAN RESOURCES - POPULATION, MANPOWER PLANNING, EDUCATION AND TRAINING

A. Population and Manpower Planning

1. Population

8.01 According to the January 1977 census, Romania's population totalled 21.6 million. The population pyramid is well structured with about 25 percent of the people 14 years or younger and about 10 percent 64 years or older. (The 1975 population pyramid is given in Chart 1.) Life expectancy is 70 years.

8.02 For over a decade, government policy has been strongly pro-natalist and directed to improve the age structure of the population at large as well as meet the expected needs of the economy in the late 1980's, when the demand for manpower in a rapidly expanding industrial sector can no longer be met by transfers from the agricultural sector as in the past.

8.03 In the early post-war period, and especially between 1949 and the mid-1950's, the birth and death rates had showed a moderate decline; population growth then was approximately 1.3 percent a year. Birth rates, after peaking at 27 per thousand in 1949, also began to decline gradually. A decline in birth rates continued for the next ten years encouraged by government legislation that made abortion readily available. By 1966, it had reached the low point of 14.3 per thousand with population growth down to 0.7 percent. It was at this point that the Government sharply reversed its demographic policy.

8.04 The new pro-natalist program was wide-ranging. Abortions were severely restricted; child payments were increased and extra allowances were given to families with more than five children. There were also special tax concessions to parents and a liberal maternity leave policy during pregnancy and for children raising while retaining 80 percent of wages and full seniority credit.

8.05 The policy had an immediate impact. In one year (1966-67), the birth rate nearly doubled (from 14.3 to 27.4 per thousand); it eventually stabilized at 20 per thousand. The growth of the population rose to slightly over one percent a year, the approximate rate prevailing at the present time.

8.06 A new population census, the first since 1966, was taken in January 1977. Significant new detailed demographic data is expected to be available in 1979. In the meantime, it is useful to look at the UN population estimate issued in May 1975. Using their high variant population projection (with an annual population growth of 1.1 percent), total population is estimated at 28 million in the year 2000. (It is worth noting that even this high variant projection of 28 million is two million under present Romanian estimates for that year.) The table below (Table 8.1) provides comparisons in urban-rural composition as well as by sex and age for the years 1975 and 2000.

Table 8.1: POPULATION: 1975 and 2000

	1975 <u>Actual</u>	2000 <u>U.N. Estimate</u>
Total (million)	21.25	28.0
Urban (%)	43	63
Rural (%)	57	37
Sex (%)		
Male	49	50
Female	51	50
Age (%)		
0-14	25	27.6
15-64	65	60.8
65 and over	10	11.5

Source: Anuarul Statistic and Selected World Demographic Indicators by Countries 1950-2000, prepared by the Population Division, Department of Economic and Social Affairs of the United Nations Secretariat, May 1975.

8.07 The most substantive trend projected here is that of an increasing urbanization of the population (over half of it will be urban by 1982), and the increasing proportion of the population 14 years and younger and 65 and over. The dependency ratio is expected to increase to about 644 per thousand and life expectancy should reach 72 years.

2. Urbanization ^{1/}

8.08 The changing pattern of urbanization in the post-1950 period is best illustrated by a comparison with the population movement in earlier years. During the period 1930-48, total urban population increased by 22 percent, at an annual growth rate roughly equal to the national rate of population growth (Annex 1.4). Of this increase of 662,000, 60 percent was concentrated in the capital city, Bucharest. During the later period of more rapid urbanization, 1948-75, when urban population increased by 147 percent, Bucharest's population increase was substantial but its share of the total urban growth declined dramatically to 12 percent. No other city approached its scale however; in 1975, Bucharest was 7.1 times greater than the next largest city, Cluj-Napoca.

8.09 In the late 1940s, the Government instituted a new policy to curb migration into the bigger cities (while these later were referred to as "closed cities" they were not really closed but entry into them was restricted). The

^{1/} In Romania urban, semi-urban and rural areas are defined by law and not by a common statistical denominator. This makes comparisons of migrant flows with those of other countries very difficult.

policy is considered to have been successful. It continues to the present day but in more recent years, it has become more closely linked to the dispersion of employment opportunities outside the metropolitan areas. One measure of its success is the higher proportion of rural migrants in small towns in 1973 than 25 years earlier. While the proportion of population living in urban areas increased from 23 to 43 percent, the number of districts that were more than 25 percent urbanized nearly tripled. The largest segment of the population, 54 percent, lived in judets 25 to 50 percent urbanized (Annex 1.7).

8.10 Migration, rather than differences in birth rates, accounts for the character and extent of urbanization within the country. Actually, it was not until 1974 that the urban birth rate caught up with and passed the rural one. A study of the seven largest urban areas (Annex 1.8) provides a detailed analysis of the population influx during the entire period, 1930-73. One of the more interesting findings is that in 1966, almost 60 percent of the population in these seven centers was born elsewhere. Detailed evidence of the magnitude and direction of migratory flows for the period 1968-73 may be seen in Figure 8.1 below and Annex 1.9.

8.11 Of the 1,885,597 migrants from one locality to another, the rural-urban stream was the dominant one. About two-thirds of the migrants were from rural areas and of these, 60 percent headed for urban centers. It should be noted, however, that the urbanization of the country has lagged behind the growth in industrial employment. Consequently, while less than forty percent of its labor force is presently employed in agriculture, more than half of the people (about 57 percent) continue to live in rural areas.

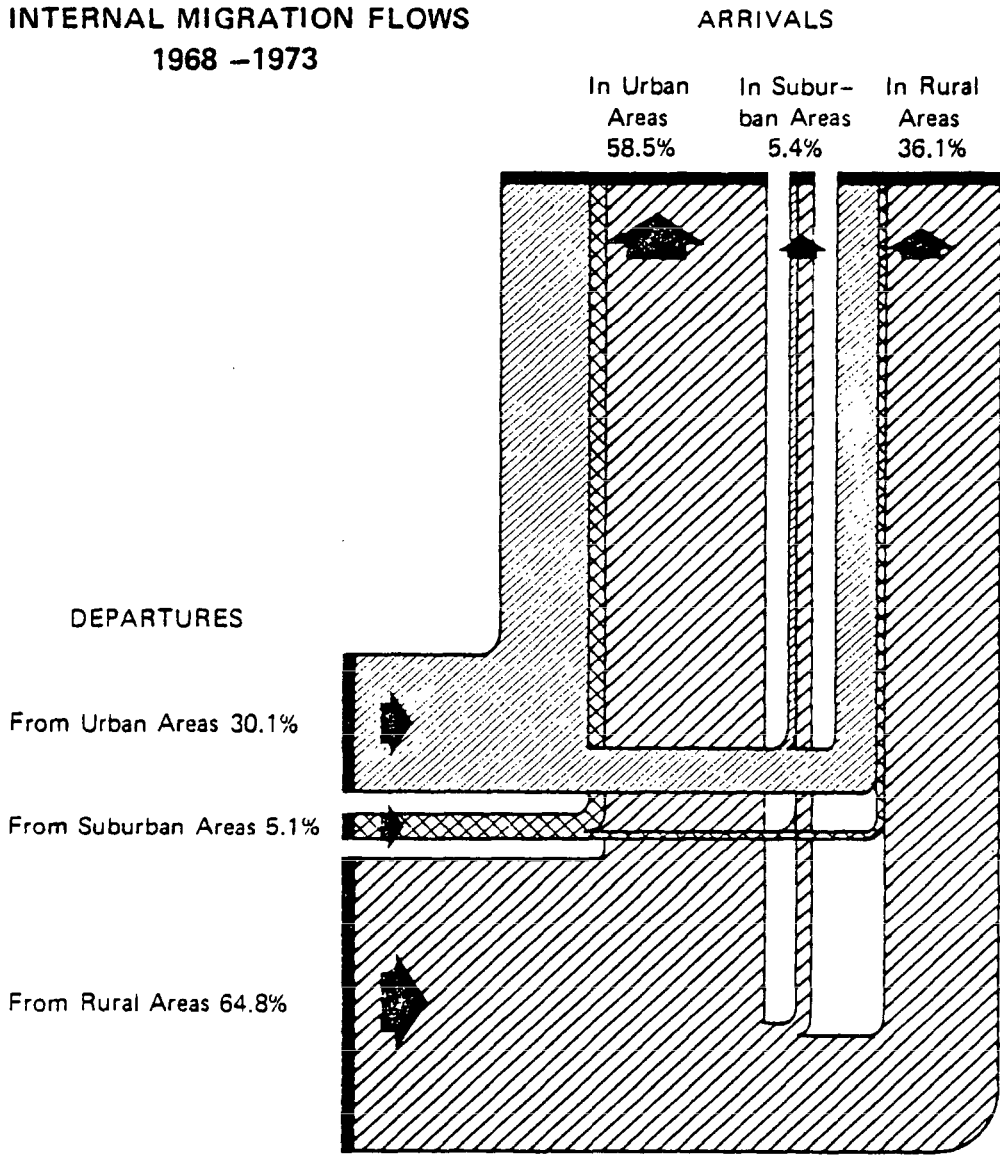
8.12 The pattern of age distribution among migrants remained much the same during this period. The rates of migration from rural areas to urban centers were highest among those 20-24 years old (Annex 1.10). Roughly 60 percent of those arriving in urban areas were between 15 and 29 years of age. Urban net immigration, the balance between departures and arrivals, rose steadily from 9.9 per thousand urban residents in 1968 to 15.3 per thousand in 1973. Correspondingly, rural areas have had a greater net population loss - from 6.3 per thousand to 9.8 per thousand. Variance in the rate of arrivals from other urban areas did not influence the total urban migration balance and the rate of immigration from suburban areas has remained constant, which suggests that virtually all of the increase in the urban migratory balance has been due to an increase in the rate of rural-urban migration.

8.13 The migratory pattern is unlike that of many other countries in which older people leave the cities for rural areas. On the contrary, the net rate of migration into the urban areas has increased for those between 55 and 57 years of age and again for those 60 years and older. It is in the middle years - from 25-54 - that there is a steady decline in urban influx. This may possibly be attributed to the impact of the Government's regional industrialization policy.

8.14 Table 8.2 shows the net immigration by sex within the five districts with the largest gain in population.

Figure 8.1

**INTERNAL MIGRATION FLOWS
1968 -1973**



100 = 1,885,597

World Bank-17024

Table 8.2: IMMIGRATION BY SEX IN DISTRICTS WITH HIGHEST POPULATION GAIN
(1968-73)
(Per 1000 Residents)

<u>Sex</u>	<u>Arad</u>	<u>Brasov</u>	<u>Bucharest</u>	<u>Constanta</u>	<u>Timis</u>
Male	2.6	2.6	11.5	3.2	3.2
Female	2.7	3.4	15.1	4.4	4.5

Source: Demographic Yearbook of Romania, 1974.

8.15 Women, apparently, have been much more on the move than men, especially to the capital city, Bucharest. A partial explanation for this is found in the rapid rise in the education of rural women (from 25 percent of total enrollments in 1950 to 50 percent in 1973). Finding themselves better equipped educationally, women may have sought more persistently employment in the fast-growing urban centers. Undoubtedly, many non-working women have also followed male heads of households who had migrated and settled in new urban jobs.

3. The Labor Force

(a) Growth and Structure of Employment

8.16 Total employment increased from 8.4 million in 1950 to 10.2 million in 1975 (Annex 1.11), at an average annual rate of 0.8 percent. This is lower than the population growth rate, which will be explained below. As a result of the Government's rapid growth and full employment strategies, employment in the state sector has expanded rapidly. In state salaried activities (agricultural and non-agricultural) employment tripled between 1950-75 from 2.1 to 6.3 million.

8.17 Table 8.3 shows the growth of the labor force and the dynamic changes that have taken place in its structure, paralleling the transformation of the economy from a predominantly agrarian to an industrialized one.

Table 8.3: EMPLOYMENT: GROWTH AND STRUCTURE 1950-1975

<u>Sectors</u>	<u>1950</u>	<u>1960</u>	<u>1970</u>	<u>1975</u>	<u>Growth Index</u> 1950=100 <u>1975</u>
Total Employment (000)	8377.2	9537.7	9875.0	10,150.8	121
percent of which	100	100	100	100	
Agricultural <u>/a</u>	74	66	49	38	62
Industrial <u>/b</u>	19	26	39	49	316
Services <u>/c</u>	7	8	12	13	227

/a Includes agriculture and forestry.

/b Includes industry, building, transport, telecommunications, trade.

/c Includes municipal services, education, art and culture, public health social assistance, physical culture, science and scientific research administrations.

Source: Anuarul Statistic.

8.18 In the course of the past 25 years, industry has generated about two million jobs and become the most important source of employment in Romania. Growing at an average annual rate of 5.1 percent during 1951-75, industrial employment rose from 0.8 million in 1950 to 2.8 million in 1975. The emerging job opportunities were largely filled by recruiting agricultural and non-agricultural labor, predominantly people under 25 years of age with no prior job experience in industry. While since the 1948 education reform, the education system has been increasingly oriented toward meeting the training requirements of the growing economy, particularly in 1950-60 and in some industrial branches, the demand for trained manpower was not satisfied by the available supply and extensive on-the-job training and in-plant short training courses had to be organized to compensate for the excess demand of skilled labor.

8.19 Government policies have deliberately sought to mobilize female labor for industrial work, particularly during the past decade. As a result of this, female employment in industry increased from 375,200 in 1961 to 534,100 in 1967; and its expansion during the past decade brought it to over one million in 1975. In 1975, about 36 percent of the total industrial labor force were women. Industry now employs more women than does any other branch of the state sector of the economy.

8.20 The intensity of employment generation in industry had resulted in a rapidly growing demand for physical and social infrastructure and for additional social services. This demand has often been in excess of supply capabilities, involving a considerable strain on existing facilities. Despite the large program of housing in urban areas the demands for housing are still unsatisfied, especially in Bucharest. Elsewhere, too, there have been problems in housing and other social infrastructure but the provision of dwellings and other facilities by the industrial firms themselves has helped to alleviate the situation. In addition, transport facilities have been in increasing demand throughout the country as many industrial laborers have found it necessary to commute, sometimes over fairly long distances. Another consequence of the rapid expansion of industrial employment has been the need for extensive training and retraining facilities, both within industrial plants and outside, because of the background and age composition of the new labor force (para 8.18).

8.21 With a substantial portion of the labor force still employed in agriculture where the potential for productivity increases from advanced technology is quite high, Romania's unabated industrialization drive is not yet constrained by any anticipated serious labor shortages. However, some shortages of specific labor exist in the growth industries. The Government has emphasized the potential contribution of the economy's "labor reserves" to the country's future industrial development. Official reference is made primarily to the "reserves" of the rural sector and the Government has sought either to attract them to urban centers or to locate industrial production activities in rural areas, a policy that would probably reduce the social costs of migration. While not yet a problem, the changing age structure of the rural labor force, due to the migration of the younger element, may soon require a more careful selectivity about the type of industry that should be located in these rural

areas. Already special attention is being given to the "reserve" of rural women capable of undertaking industrial jobs and this consideration has entered into project selection criteria. In this context, the Ministry of Labor has developed a nomenclature of jobs in handicrafts and other specialities more suitable for women, which established the guidelines for the participation of rural women in industrial activities.

8.22 Analysis of labor participation rates and employment practices in the various sectors, which are discussed in more detail later in the report, clearly suggest two additional sources of labor reserves in the economy: urban women and labor reserves in industrial enterprises.

(b) Labor Mobility

8.23 In Romania, everyone of working age who desires a job is entitled to one by law and the State ensures the placement of all individuals. Therefore, open unemployment does not exist. However, at any given time there are undoubtedly a certain number of labor force members who are not employed. These, in Romania, are not classified as unemployed but as "in the process of changing work". 1/ (In many respects this parallels the frictional or search component of unemployment found in labor markets of industrialized economies.) There is no way to estimate the magnitude of this phenomenon or the characteristics of those without work and the duration of the waiting period of unemployment, all of which are relevant to the assessment of resource costs. Withdrawals and re-entries into the labor force are frequent, and rates of turnover and inter-enterprise transfers are quite high. Because of the emphasis on the utilization of all available manpower (see para 8.35), such shifts are subject to regulation. Withholding one's productive labor from the economy is considered anti-social (except, for example, where medically justified or in the case of women when child-caring responsibilities are greatest) and is basically not tolerated. At the extreme, they are directed by the government to work in their area of qualification.

8.24 While there are few formal limitations to labor mobility, such mobility is rather restricted. If a worker is not to lose accumulated seniority rights, his transfer to a new job must be agreed upon by his current employer. Where such a job change leads to a promotion or better utilization of skills, the current employer cannot block it in principle. Seeking employment in enterprises in "closed cities" (para 8.09) is difficult but achievable through "temporary" residence obtained with the assistance of these enterprises. In some sectors, possibilities exist to obtain seasonal labor services. For

1/ The "occupied population" working in organizations is counted annually but does not include job-seekers. The "active population", which is larger than the "occupied" population because it includes job seekers and military trainees, is estimated by the census, but there is no distinction between the employed and job-seekers. The latter are classified as employed in the occupation to which they will eventually be allocated; so, in effect, this component of unemployment is statistically defined away.

example, an agricultural cooperative worker can enter into a contract with a construction enterprise for a specified number of days' work that also allows him to meet his full working obligations to the cooperative.

8.25 Qualified workers (graduates of vocational and industrial schools) are free to apply for transfer to another enterprise, after fulfilling their contractual obligations to their first employer (generally three years in duration). Non-skilled workers can ask to transfer at any time. Evidence on turnover rates indicates that such shifts are not uncommon among lower-paid and young workers who are seeking higher pay, or among professionals seeking greater job satisfaction. Fulfilling the "employment guarantee" is made still more difficult by the fact that in Romania the aim is not just to provide any job to a seeker but one within the worker's field of specialization.

(c) Participation Rates

8.26 Questions regarding the nature of imbalances in the supply and demand for labor are also raised by some labor force trends, in particular those of participation rates. Between 1956 and 1972 the ratio of the total labor force to the population of working age declined steadily (Table 8.4).

Table 8.4: PARTICIPATION RATES 1955-75
(Ratio of occupied to working age population (15-59 years))

1955	85.0	1966	83.1
1956	86.8	1967	82.5
1957	85.0	1968	81.8
1958	84.8	1969	81.2
1959	84.5	1970	80.1
1960	84.8	1971	79.8
1961	84.4	1972	79.3
1962	84.3	1973	79.1
1963	84.0	1974	78.9
1964	83.4	1975	79.0
1965	82.8		

8.27 In a period when total working age population rose 19 percent, the participation rate of workers fell 7 percent. This is not explained alone by the expansion of the student population and the increase in the average duration of schooling since students 16 years and older are included in the active population. The authorities have advanced two additional explanations: an increasing number of pensioners in the age group 55-60 years and the withdrawal of women for a number of years (up to seven in order to raise children).

8.28 The fall in participation rates may also reflect the lower participation rates in urban compared with rural areas during a period of relatively rapid urbanization. In this connection it is interesting to note that the participation rate for males is virtually the same in rural and urban areas whereas that for females is nearly 50 percent higher in rural areas. This

probably reflects three factors. First, family incomes are higher in urban areas, thus encouraging women to substitute leisure for work. Second, there may be relatively fewer unskilled jobs suitable for women in urban as compared with rural areas. Third, women have in the past received less education than their male counterparts. (In 1966, the proportion of the male population with education beyond the primary level was roughly double that of the female population.) Women, who in the past had received less education, would be at a disadvantage when competing for jobs in urban areas, though there is legislation which stipulates complete income equality between sexes.

8.29 The imbalances which have accompanied urbanization - a scarcity of unskilled urban jobs and current or projected scarcity of skilled urban labor - are not easily susceptible to short-run solutions. As previously noted, the government's pro-natalist policy is designed to meet the needs of a rapidly growing industrial sector that is expected to be skill and capital intensive by the late 1980s. The rapid increase in educational opportunities for women on the post-primary level should also be beneficial.

(d) Skill and Educational Attainments

8.30 The substantial national educational efforts of the past twenty-five years are documented in Annex 2.1. From 1950-75 when total population increased by about 20 percent, the size of the total student population more than doubled. In 1956, only 13.2 percent of the total male population and 9.6 percent of the female population had attended school for more than four years; by 1966, these proportions had risen to 22.8 percent and 16.6 percent respectively (Annex 2.2). The more substantial increases were those in the rural population, particularly among women.

8.31 The limited published data on the educational/occupational matrix of the labor force show dynamic improvements in its educational/skill composition and particularly in the increases of technical and administrative personnel.

Table 8.5: EDUCATION/SKILL COMPOSITION OF LABOR FORCE, 1961-1968

	('000)		
	<u>June 1961</u>	<u>June 1964</u>	<u>September 1968</u>
Total Employment	3,377.4	3,924.8	4,550.1
(a) Workers	<u>2,456.3</u>	<u>2,888.7</u>	<u>3,403.0</u>
- qualified	1,939.6	2,225.1	2,777.0
- not qualified	516.7	663.6	626.0
(b) Technical/Administrative	<u>670.2</u>	<u>803.6</u>	<u>967.1</u>
- with higher education	235.5	284.6	337.6
- with secondary education	434.7	519.0	585.8
(c) Unclassified positions requiring primary or less than primary education	250.9	232.5	180.0

Source: Revista de Statistica, Bucharest, November 21, 1970.

4. The Role and Functions of Trade Unions

8.32 Most of Romania's workers are organized into trade unions, which are established in all enterprises, institutions and communes. These unions have a multifaceted role in the political, economic and social spheres. On one hand, they are the main vehicles for the Party to communicate with the workers, organize mass education campaigns, provide feedback on draft laws, and also to act in an indirect role monitoring worker performance and behavior. On the other hand, the unions exercise the rights and duties of workers as both producers and owners of the means of production. In this role, they may propose legislation affecting the working people, or ensure equity in the distribution of benefits and pay system as guaranteed by law. Because of the multi-functions and mass representations of the trade unions, they have de jure participation in all executive bodies, for example, in the Council of Ministers, People's Councils, the enterprises' or institutions' management committees. The consistency of the unions' activities with national socio-political and economic objectives is achieved through the Socialist Unity Front, which is a standing union political body under Party leadership, and also through the participation of the chairmen of the unions in the executive bodies mentioned above. The horizontal and vertical coordination of these activities is provided by the General Union of the Trade Unions of Romania under which the individual unions are grouped in 13 branches of economic activity.

5. Manpower Planning

8.33 In Romania, in contrast to other countries where it is practiced, manpower planning is not concerned solely with forecasting the demand of the labor market for new entrants from the educational system. Rather, the allocation of the labor force among sectors, occupations and geographical areas, as well as its training, are subject to comprehensive planning. Though subordinated to the planning of capital investment, it is subject to the legal requirements both of full employment of the labor force and of a minimum ten years of education. While responsibility for all decisions rests wholly with the central authorities, enterprises and other institutions participate in the formulation and implementation of the plan, particularly in determining specific labor requirements and equilibrating supply and demand. Manpower planning directs the options available to job-seekers but individuals still have a say in selecting a field of study, career, place of residence and employer.

8.34 The educational system (and its planning) is a means through which manpower planning seeks to attain its objectives. To the extent feasible, the policy aims to bring about the redistribution of the labor force to meet the needs of a rapidly growing economy. Occupational rigidity, for example father to son skills is much reduced because of the changing skill requirements and greater educational opportunities. Emphasis is on the orientation of new entrants towards workpaths different from their parents rather than the shifting of workers from activities in which they are already well established. The crux of the problem is to orient those who are younger and with minimum or no experience to work in the newer and more sophisticated industries.

8.35 Planning is coordinated by the State Planning Committee in conjunction with the Ministries of Education, Labor and Finance. The Ministry of Education and other interested agencies is responsible for education planning which ensures that the physical school capacity and teaching staff are adequate to provide the necessary training at each level of education; this is based primarily upon national and regional demographic projections and estimated manpower requirements.

8.36 The Ministry of Labor planning is concerned with achieving future balances between the demand and supply of labor within skill categories. Within this category, demand projections are based on anticipated growth of production as well as on changes within its structure. Other factors are the degree of technological development, the labor intensity of work, the utilization rate of capital and the optimality of the base year employment level.

8.37 Supply projections relate to entrants from the educational system and to losses from deaths and migration or from occupational change. Also considered are changes in participation rates, hours and intensity of work. As a general rule, adjustments in the system are made on the supply side through control of entry and orientation of enrollments in the educational and training system.

8.38 The Romanian projections of labor demand and supply are more comprehensive and more frequently revised than those found in the manpower plans of other developing countries. They cover all categories of labor and are updated annually. Projections are not only made for the four broad occupational categories (workers, foremen and technicians and professionals), corresponding roughly to educational attainments (respectively, basic education of 10 years, lycee and higher education), but also for over 100 occupational specializations within these categories.

(a) Demand Projections

8.39 In Romania, because the increase in output and changes in labor productivity over the planning period are given parameters, demand projections are restricted to estimates of output elasticity for labor demand. In effect, it is the manpower required to fulfill a production target that is estimated. This does not mean that output targets are determined without regard to conditions of labor supply. If labor capacity is a binding temporary constraint on the achievement of the output target in some enterprises, their plan will be adapted and measures will be taken to train necessary labor. If labor is in surplus, adjustments are made in either the output target, the technological configuration of production or a combination of the two or the surplus labor will be transferred to other enterprises in need of it.

8.40 In order to account for the likelihood of technological change, the estimates of the output elasticity of the demand for labor are based on micro-studies of the relationship of output to employment in both foreign and domestic enterprises of varying sizes and technological sophistication. From the perspective of educational planning, the influence of technical change on the occupational composition of demand is of equal, if not of greater, importance than its influence on the aggregate output elasticity of demand. Disaggregation, therefore, of the projected demand for labor is essential. There are two procedures for estimating the output elasticity of demand within specializations, and the selection of either depends on the availability of information regarding the organization of production within sectors.

8.41 Where information is relatively scarce, the "coefficients method" is employed. First the number of workers required to fulfill the target output is estimated. Then estimates are made of the requirements for the other occupational categories on the basis of the existing ratios among workers and other personnel. These are disaggregated to the level of the subsector and to enterprise level because of variance at that level in technology and organization of work and hence in the shape of the occupational pyramid. The estimated occupational structure of demand is then modified to allow for expected changes during the following five to ten years due to technical progress.

8.42 Where there is more detailed knowledge of the equipment to be adopted and the future occupational structure of production, the "job list method" is used. This involves determining the number and categories of work stations manned by specified numbers of workers at various skill levels that are required to accomplish the enterprise production target, on the basis of studies

estimating the physical output of each station. The approach requires establishment of "work norms" for each category of workers and tasks. These are determined by time studies of production activities but more frequently by less rigorous methods which may explain some of the overmanning that exists in the enterprises.

8.43 Errors in demand projections can arise either from difficulties in estimating accurately the impact of technical change or from different timing of the education and production plans. The latter is likely to be of greater significance, since the detailed production plans are drawn up only for five year periods and there are no detailed estimates of output on which to base longer run estimates of labor demand and hence the education plan. For example, to plan in 1970 the number of first-year entrants into a five year training program for each of the years 1971-75, requires production targets for 1976-80. But in 1970, the production targets for 1976-80 are only indicative. The long gestation periods associated with investments in many types of formal training, and the inability of forecasting techniques to eliminate uncertainty regarding labor requirements five to ten years ahead, suggest that short-run imbalances of supply and demand are inevitable. This, in turn, implies that when forecasting demand any disequilibrium at the base year must be taken into account.

8.44 A notable feature of the procedures for projecting the demand for labor is the apparent disregard of changes over the planning period in the level and structure of wages. This is not because no changes are anticipated; on the contrary, wages are expected to continue their steady rise. Not to take account of wage changes in assessing labor requirements is equivalent to assuming that the wage elasticity of labor demand is zero. However, since economic criteria as well as engineering criteria are applied in the choice of production techniques, a zero wage elasticity of the demand for labor would be justified only where, both before and after, the elasticity of substitution between capital and labor is zero. There is a growing body of evidence that this elasticity of substitution is positive. Thus, it appears that managers where they have competence to decide, apply economic rules of thumb in determining capital/labor ratios and the implicit shadow wage varies positively with expectations regarding the actual level of wages. While information on wage trends for the five years following the year in which the manpower plan is formulated is available, there is no firm information for the subsequent five years, the period directly relevant to the demand projections intended to guide the planning of education. The lack of explicit guidelines regarding procedures to account for wage changes may result in misestimates on the part of managers of the economic trade-offs involved in the substitution between capital and labor. This situation may contribute to errors in the projections of demand.

(b) Supply Projections

8.45 Base year supply for a specialized category of labor is simply the number of employed workers with the requisite training. For subsequent years, estimating gross supply is equivalent to determining (a) the output from the

relevant program within the school system, which is estimated quite systematically and accounts fully for the internal efficiency of the education system (e.g. drop-outs, repeaters, etc.); and (b) the training of active workers in short-term courses, undertaken to meet constraints in the rate of expansion of the school system and unpredicted scarcities in some specializations. Adjustments for natural losses take account of variance of losses within specializations among industries and sexes. For the economy as a whole, the annual reduction of labor force due to retirement or disability is approximately 2.5 percent for men and 2.55 percent for women; the loss due to death is approximately 0.49 percent for men and 0.23 percent for women.

(c) Equilibrating Supply and Demand

8.46 The projections of demand for specialized workers by occupation leads to a specification of the future educational composition of the labor force. From the perspective of supply, the educational composition of the labor force is projected initially on the assumption that the distribution of students among specializations will remain constant. The burden of synchronizing the two pictures so as to equilibrate the markets for specific occupations five to ten years ahead is borne almost entirely by the institutions on the supply side; the structure of educational opportunities adjusts to the desired future occupational structure. Students in some specialized programs will be increased as a proportion of the total and decreased in others. However, since altering the size of an entering class will not affect the supply of labor until two to five years later, there are few adjustments of the formal educational system that can rectify differences between the supply and demand in the short term. The approach of the authorities in correcting such imbalances is quite systematic.

8.47 First, since scarcity or surplus of a particular specialization at the enterprise level does not imply that in aggregate the occupational category is out of balance, the first response of an enterprise with an unexpected labor deficit is to determine if there is an enterprise with a surplus of that type of labor. There are two institutions that serve to reallocate labor. The headquarters of centrals register deficits and surpluses of member enterprises and if equilibrium cannot be achieved within a central, it will contact other central headquarters regarding labor availability and requirements. When a new enterprise begins operations, the central will form a nucleus of experienced personnel from existing enterprises, designated by these enterprises, to guide and train the workers at the beginning of the new operations. The majority of these workers is recruited from among school graduates who, following their studies, have worked for 2-3 years in enterprises in the same line of production as the new one. The additional new workers are recruited through the mass media or word of mouth. Second, if the imbalance cannot be eliminated by inter-enterprise mobility, the labor office, a municipal specialized organization for registering jobs and job seekers, is contacted for placement of the job seekers in the municipality. The labor office does not duplicate the role of the central because employed workers who desire a change of employer, whether or not they are in surplus, will register there and, more important from the perspective of trying to eliminate imbalances, so will workers re-entering the labor force after a period of absence.

8.48 If there remains a net scarcity within a specialization, the enterprises' remedial policies to minimize output losses due to the short-term labor constraints include (a) restructuring the workers' work program in that specialty, with the aim of concentrating workers' time on those tasks for which their training is most essential; and (b) providing short-term training courses. Rarely, if ever, do enterprises resort to increasing the working hours as a means of meeting labor scarcities. With regard to the short-term courses, as they are intended to meet immediate staff needs, they are included and budgeted for in the annual plan, not in the five year plan.

8.49 It is conceivable that within a given occupation there could be scarcity at the enterprise level, even though the aggregate output of the school system matches employers' requirements for additional labor and no enterprises have surpluses. Such a situation could arise if workers trained in a specialty enter jobs in another field. In Romania, this is unlikely to happen because of the direct regulation of the distribution of school-leavers. The procedures for assigning students to vacant positions are based on the premise that all school-leavers are expected to work within the broad occupational category for which they have been trained. The adaptability of graduates to different technologies has been enhanced by reducing the number of technical specialties at the lycee level from over 150 to less than 100 and through the organization of in-plant and on-the-job training.

8.50 The distribution plan for graduates of institutions of higher education is the responsibility of both the schools and organizations in which they will be employed. Students are given the opportunity to express preferences for particular vacancies and those who have excelled in their studies are the most likely ones to have their choices fulfilled. Priority is usually given to graduates who want to be assigned to their own communities or to that in which their spouse is working. Special consideration is also given those who require access to a particular area for medical treatment. Once they are assigned, the students sign a contract obliging them to remain in their jobs for three years before seeking transfer. Students from vocational and foreman's schools also sign three-year contracts but their distribution among employers is determined prior to their training. This is true as well of students of post-secondary schools who receive scholarships from employers. The rest are allocated to jobs upon the completion of their training.

8.51 Monitoring of manpower distribution is accomplished through a balance sheet of labor force utilization, which is drawn up twice a year. It is used for both short-term and medium-term manpower planning and is a basic reference for training plans.

8.52 Students are admitted to the specialized lycees on the basis of their academic performance and other aptitude and psychological tests. Entrance to universities is achieved wholly through examinations, which in effect are also used to regulate the number attending the various higher educational institutions. Student inducement to attend the rapidly expanding technical facilities, or other educational areas marked for expansion, is accomplished through provision of a greater number of fellowships and higher salaries of graduates. In recent years, for example, engineers and economists have been the highest paid professionals.

6. The Efficiency of the Manpower Planning System

8.53 Two criteria can be employed to assess the performance of the manpower planning system in training citizens and directing them to the appropriate tasks in the community. One is a criterion of the allocative efficiency of the system. The other, a determination of whether the targets specified in the plan for training and for the supply and demand of various specialized categories of labor have been fulfilled.

8.54 The distribution of the labor force among sectors, occupations and geographic areas has dramatically altered in recent decades, with the increased mobility of workers who have been well established in their vocation and residence, and to an even greater extent, the orientation of new labor force members to training and workpaths different from those of the preceding generations. While the system has demonstrated an ability to shift labor in response to changes in production patterns and techniques, and hence in labor requirements, there is still room for improvement. Manpower planning has been centralized but certain improvements have been undertaken as explained further below. Its main instrument is the elaboration of manpower balances derived through successive reconciliation between enterprises, ministries and the State Planning Committee. This procedure has some important disadvantages. First, it is a rather static approach in which the emphasis is on striking balances between the manpower needs and existing and apparent labor reserves. Within the reconciliation process mentioned above, this method facilitates the allocation of labor only in aggregate terms, with greater weight given to industry. Despite attempts, it is also obvious it has not always been successful in achieving a balance in labor demand and supply in some sectors. This is evident, for example, in the existing excess demand in the construction sector (discussed in Chapter Twelve).

8.55 The second disadvantage is that while the method provides a comprehensive picture of the distribution of labor, it leaves little scope for review of the effective utilization of labor among different sectors and subsectors and at enterprise level. This review has become increasingly important partly because of emerging labor shortages in several more industrialized regions (for example, Brasov and Bucharest). The Government has apparently recognized the need for a more dynamic and decentralized approach in manpower planning and allocation, and it has recently begun to prepare additional labor force balances for judets and several urban areas. While this may not be sufficient, it indicates Government awareness that future productivity increases in industry and its competitive position on world markets, will more and more depend on labor efficiency. Reallocation of labor among industries, and the promotion of labor mobility in general, should offer considerable opportunities for improvement.

8.56 The fulfillment of plan targets for recruitment and distribution of the labor force--which presumably has been accomplished to a great degree but cannot be confirmed because of lack of data--is another evidence of the ability of the system to mobilize labor resources. However, plan fulfillment by itself does not imply a high level of allocative efficiency, unless the plan targets for labor utilization were precisely those that would lead to an

equalization of the social marginal productivity of labor in all uses. Since in formulating the plan, no explicit attempt is made to estimate shadow prices of labor, fulfillment would not preclude variances in the marginal social productivity of labor between sector or occupations or even between enterprises within the same sector.

8.57 A close examination of the system of labor allocation in Romania reveals three situations in which people may either not be employed or may be under-employed. The first is the inevitable temporary unemployment of workers who are moving from one job to another or are re-entering the labor force. Both groups need jobs in their specialization (para 8.23). The second is indicated by the evidence for an excess supply of labor which is concentrated in urban areas and consists mainly of women. Para 8.28 discusses some of the possible reasons for a lower participation rate for women in urban areas. Third, there is underemployment which may occur in the agricultural sector or where workers trained in one specialization or in particular skills end up in jobs requiring a different specialization or skills. In the case of vocational school leavers, this problem has been minimized, however, in recent years. Schools are located adjacent to the factories, the school curricula are determined on the advice of the factory managers, the equipment used for training is the same the students will use on the job, and, in some programs, practical training is taking place in the factory rather than in a school workshop. Since, on entering the school, most of the students commit themselves to employment in the factory for a number of years, the likelihood of a school-leaver taking a job outside of his specialization is remote.

B. Education and Training

1. The Development of the Education System

8.58 The education system has been recognized and used effectively as a vital tool for Romania's political, social, cultural and economic development. Changes in its structure and reorientation correspond closely to the transformation of Romania's economic policies and have been undertaken to increase the sector's sensitivity to the economy's technological advances and the changing structure and needs of its labor force.

8.59 The program is justified as a national investment in human resource development and its intent is to realize the potential of each individual within the productive process. Any bias in favor of academic work on the part of parent or student is systematically undermined and the young are prepared to enter the productive process as soon as they are trained. The concept of life-long education for all members of society is encouraged and this applies to the non-formal technically-oriented fields that prepare the labor force to assimilate technological change as well as to art and science areas that broaden the socio-cultural background of individuals.

8.60 Today's modernized system has evolved from a major reform in 1948 and subsequent corrective action in 1956, 1968, 1973 and 1977 to increase the system's efficiency. The 1948 reform provided for the nationalization of all educational institutions; its main goals were the preparation of the

younger entrants to the labor force for a more effective participation in the country's development effort and the eradication of illiteracy. Compulsory education was increased from four to seven years, at that time the duration of elementary schooling. The next adjustment in the educational system was undertaken in 1955 in conjunction with the second five-year plan in Romania's industrialization program. The major modification at this time was in the restructuring of secondary schools along polytechnical lines in order to achieve a better synchronization of academic studies with industrial and agricultural production. (The diversification of secondary education was not legislated until ten years later, however.) Under this reform, primary and secondary schools were brought into a unified system of general education, consisting of eight grades with compulsory attendance. In addition, institutions of higher learning were organized to bring them into closer correlation with the requirements of the economy and to achieve larger diversification of the social composition of university students.

8.61 Significant shortcomings in the 1956 measures began to emerge in the early 1960's; the system had become overcentralized and it was not keeping pace with technological developments in the society. Their key needs were for new programs and materials in the rapidly advancing sciences, for less fragmentation in academic and scientific specializations, particularly at the higher level, and for expanded studies in such areas as cybernetics, automation, genetics and sociology. A major investigation of all levels of education led to the corrective measures introduced in 1968.

8.62 These measures were designed to correct skill shortages and improve labor productivity, consistent with the country's efforts to improve production quality and compete successfully in the international markets. In addition to strengthening a more diversified secondary education, new intermediate schools for sub-professional training were established and a national system of refresher and upgrading courses was organized. Compulsory education was raised to ten years.

8.63 With the 1973 measures adopted in the plenary session of the RCP, efforts were made to integrate training and development and to strengthen the socio-ideological base of the system. Guidelines were established for a comprehensive long-term manpower and education plan in which education was integrated with practical production training at all levels and with research at higher education levels. New programs were developed for the training and integration of women in production activity, particularly in newly developed industries. The directives were issued for the establishment of a unified education system, beginning with pre-primary and ending with higher education. Permanent education was strengthened by expanding courses that improved skills, and the social status distinctions between manual and intellectual work were eradicated.

8.64 Finally, in 1977, new efforts were undertaken to strengthen the link of practical training with the economy's requirements so that secondary graduates can be directly and immediately incorporated in the economy's production activities. The 1977 measures also included elimination of the one to two years post lycee specialization and the reduction of secondary education from five to four years.

8.65 As previously noted, these measures have been generally effective. The education system has been linked to the transformation of the economy in a dynamic way and has provided, both in quality and quantity, the manpower required by the national development efforts. The main structural pattern of the system, also depicted in Chart 2 is as follows:

- (a) pre-primary education of 1-4 years for the age group of 3-6 years;
- (b) compulsory education of 8 years (grade 1-8) for the age group 6-13;
- (c) secondary education of 4 years for the age group 14-17, encompassing a compulsory level (grades 9-10) and an optional one (grades 11-12);
- (d) higher education of 3-6 years.

8.66 Access to secondary and higher levels of education is by examination, with enrollments determined on the basis of manpower demand prognosis (paras 8.39-8.44). Specialized education begins effectively at grade 9, either in specialized lycees or in vocational training schools. There are nine types of lycees (industrial, agro-industrial and forestry, economic and administrative law, medical, pedagogical, mathematics and physics, philosophy, history, science and arts), in which a total of 82 specialties are offered (47 of these are of an industrial nature). Vocational education is offered, either in vocational schools or in on-the-job apprenticeship programs, with about 40 percent of the students trained in metallurgy and mechanical engineering. An additional type of vocational training is provided for master craftsmen/foremen. Until 1976/77 young people have been trained in post secondary schools, with a duration of 1-3 years for certain technical specialities.

2. Management and Administration of the Education System

8.67 The Ministry of Education and Training (referred to thereafter as the Ministry of Education) manages and supervises all education activities throughout Romania. However, only higher institutions are administered directly by the Ministry; the rest are subordinate to a "dual jurisdiction" system. While the Ministry of Education directs and supervises the educational activities (teaching and curricula), the schools are under the administrative control of district governments specialized ministries and other central agencies 1/ (see also Chart 3 in Statistical Annex).

1/ These include the District People's Councils, the Ministries of Metallurgy, Industry of Machine Construction, Mining, Oil and Geology, Electric Power, Chemical Industry, Industrial Construction, Forestry Economics and Construction Materials, Transportation and Telecommunications, Light Industry, Agriculture and Food Industry, Domestic Trade, Health, The Council of Culture and Socialist Education and the Ministry of Finance.

8.68 District administrative control extends to all schools offering eight years of education, and to about half of pre-primary and lycee education. Only a handful of vocational schools are under local government control. Each district has a school inspectorate, with its education activities supervised by the Ministry of Education and its physical operating requirements supervised by the Executive Committee of the District's People's Council. The other institutions are administered by republican agencies. These agencies provide the schools with the resources they require for normal operation and also supervise their administration. At the same time, all the ministries and central agencies collaborate closely with the State Planning Committee and the Ministry of Education to determine their cadre-personnel needs at all levels, including management.

3. Educational Planning

8.69 The links between education and manpower planning have already been discussed in the section beginning with para 8.33 of this chapter. As previously noted, education planning consists of two parallel exercises, those of enrollment and of physical facilities planning. The former consists of formulation of plans for the compulsory education, for lycee level education and for specialized technical and professional education/training.

8.70 The school enrollment plan for basic education is very straightforward. All but the disabled students have to attend school; the latter attend special schools. The plan is thus prepared on the basis of population data, a yearly census of school-age children and statistical data on student flows in the system of the previous years. The People's Council of each district prepares the district plan. It is reviewed by the Ministry of Education, which subsequently develops a national plan from an aggregate of all district plans.

8.71 The enrollment plan for lycee level education requires a more detailed analysis and it also involves determination of the distribution of enrollments by types of lycees and prospects of enrollments in higher education. Built-in assumptions in this exercise include estimates regarding enrollments by occupations and take into account dropouts and repeaters.

8.72 The plan for specialized training, known as the training plan, is linked to the estimates of the future manpower needs of the economy. Some of the possible errors that may develop in formulating the quantitative targets of this plan, in view of the fact that the length of training for most specializations extends beyond the five year plan's estimated manpower requirements, were discussed earlier (para 8.43). However, the training plan reflects the needs of a more distant future by orienting the training towards the future qualitative needs of the labor force; that is, for a continuously increasing level of general education, closer linkages of academic education and practical work and a broader curriculum that includes the more recent developments in science and technology. The training plan is based on the data of the balance sheet of utilization of the labor force (para 8.51).

8.73 The physical facilities planning in the sector is undertaken in parallel with the other planning exercises and is usually based on a two year lead assessment of the adequacy of existing facilities to accommodate future required increases. The evaluation of space use is systematic as it is governed by Ministry of Education norms. Investment proposals are prepared by the agency that has administrative jurisdiction over the school facilities in question and are all aggregated and reviewed, initially by the Department of Planning of the Ministry of Education and subsequently by the State Planning Committee and Ministry of Finance, in the context of the major indicators of the five year plan and budget. Except for universities, all other educational/training institutions are built on the basis of standard design, which reduces costs and minimizes the period of implementation.

4. The Contribution of the Education System to Romania's Growth

8.74 One of the cornerstones in Romania's development effort has been its education and skill development program. As noted in para 8.18, there has been a certain lag in responding to the manpower needs of the economy, especially for the more sophisticated skills required by technological advances. But on the whole, considering the extent of the undertaking, the program has been remarkably successful.

(a) External Efficiency

8.75 Improving the Labor Force's Educational Qualifications. There have been dramatic changes resulting from the expansion of the education system and its access for the whole population. Illiteracy, estimated at 27 percent of the population in the 1945 census, was eliminated by 1956 and universal 10 year basic education was attained in 1975. The 1974/75 enrollments estimated as a proportion of the respective age groups stood at 101 percent for basic, 49 percent for secondary and 10 percent for higher education, which compare favorably with similar participation rates in most other countries (Annex 2.3). ^{1/} The disparities in enrollment ratios by region and sex have also been eliminated.

8.76 The growth and changing structure of enrollments is summarily illustrated in table 8.6 (also in Annex 2.1):

^{1/} Estimated respectively as percentage of the following age groups: 6-14, 15-19, and 20-24 of mid-1974 populations. The excess in basic education may be attributed to repeaters.

Table 8.6: ENROLLMENTS: GROWTH AND STRUCTURE

Level of Education	Enrollments (000) ^{/1}			Growth (1950=100)		Structure (%)		
	1950/51	1965/66	1974/75	1965/66	1974/75	1950/51	1965/66	1974/75
Primary ^{/2}	1,779	2,993	2,890	168	162	84	80	73
Secondary	93	372	708	400	761	4	10	17
General	(60)	(360)	(344)	(600)	(573)	(3)	(10)	(9)
Special- ized	(33)	(12)	(363)	(36)	(1,100)	(1)	(-)	(9)
Voc. Edu- cation	99	182	192	183	194	5	4.5	5
Technical								
Post- Secondary	95	68	35	72	39	4	2	1
Higher	53	131	153	247	289	3	3.5	4
Total	2,119	3,746	3,978	177	188	100	100	100

^{/1} Excludes pre-primary.

^{/2} Includes 8 years of education.

Source: Anuarul Statistic

8.77 The striking impact of the 1966 measures, designed to orient secondary education to the economy's more specialized needs, is clearly demonstrated. With the attainment of universal basic schooling, primary enrollments have stabilized and so have general secondary enrollments. In fact, since 1966 the full expansion of the system has been exclusively in the non-academic areas, an impressive record (Annex 2.4). The changes in the structure of enrollments illustrate further the growth of middle-level manpower training, an area where shortages developed in the 1960's. This orientation of enrollments to satisfy the demand of the rapidly growing sectors of the economy can also be seen in the growth of the related secondary and vocational schools and university facilities. For example, 61 industrial lycees enrolled 5300 students in 1966; in the 1974/75 school year, their number had grown to 382 and enrollments to 252,000. Agricultural secondary schools almost doubled during the same period and enrollments more than quadrupled. In vocational training, the growth (1950/51-1974/75) in enrollments has been particularly high in such areas as mining (200 percent), metallurgy and engineering (67 percent), industrial chemistry (389 percent) in infrastructure (construction, transport and telecommunications) and in light industries (Annex 2.5). The impact of the formal education system's growth on the diversified secondary level has not yet been fully felt because of the period of training required and the rapid enrollment acceleration in the most recent years. For example, only 27,000 graduated

from specialized lycees in 1974. This is still a remarkable performance, however, as in 1967 there were no graduates at all with such type of training. The growth and distribution of graduates by level of education is given in Annex 2.6.

(ii) Relevancy of Training

8.78 The content and quality of education and training programs has been quite efficiently related to the real needs of the economy. The adaptation of graduates to the world of work has been productive and immediate. This is a product both of building early receptive attitudes towards production training and of implementing a curriculum that starkly reflects the nation's priorities, that is, one that has increased emphasis on exact sciences and production training. To illustrate this point, Table 8.7 gives the basic distribution of subjects in 1973-74 for three types of schools. The percentages have been drawn on groupings of subjects over the duration of each cycle. Those for practical work and exact sciences are quite high.

Table 8.7: DISTRIBUTION OF TEACHING PROGRAMS 1973/74

<u>Distribution of Hours</u>	<u>Basic Education (grades 1-8)</u>	<u>General Secondary Lycee (Grades 9-12)</u>	<u>Industrial Secondary Lycee (Grades 9-12)</u>
Humanities	43	36	19
Exact Sciences	32	39	27
Arts and Phys. Ed.	18	8	5
Production Training	7	17	49

Source: Ministry of Education

8.79 The outstanding aspect of these programs concerns production training. All schools at all levels are "sponsored" by neighboring production enterprises and they are linked in a unique and relatively low-cost training/production program. In essence, what exists is a business arrangement in which enterprises subcontract the manufacture of product components to school workshops rather than to other enterprises.

8.80 For grades 5-8, a sequential series of training modules and related lesson plans, increasing gradually in complexity, are prepared by Ministry of Education specialists for woodworking, electrical and metalworking. From among the products manufactured by the "sponsoring" enterprise, the production components that best relate to the training programs and modules are selected for school workshops production and assembly (in consultation with management from the enterprises and also a sponsoring secondary education institution). Production targets and schedules are established along with the equipment, tools and materials required for production. Pupils in the school workshop receive related instruction with regard to the tools, materials, design and function of the respective components.

8.81 In actual practice, a production line approach is generally followed with the higher grades producing the more difficult components. All students are rotated through the various operations, including quality controls, in order to facilitate their skill training and their understanding of the interdependency and need for accuracy in each operation. Finally, each completed training/production lot is also subjected to a quality control check by a representative of the enterprise and, upon acceptance, the school receives full compensation for the work produced.

8.82 For specialized lycees and vocational schools, production training is even more integrated with the enterprises. Partly, this has been designed to increase student exposure to actual working conditions. However, it is also probable that with the rapid expansion of specialized education, qualitative training could not have been implemented without use of actual enterprise workshops. Whatever the cause, the combination of training in the academic environment and the world of work has been effectively made. In vocational training, for example, students are trained in the enterprises' workshops during their last year of training; during the second year of training the use of these facilities depends on the availability of facilities on school premises. In the case of specialized lycees, because of comparatively less intensive practical training, the use of enterprises facilities is more common in the advanced grades.

8.83 Efforts are made to relate academic work to real life situations. Thus it is not unusual for higher education students in economics to study and resolve real problems facing the economy or to work on actual draft plans of the country. Technical faculty students participate in research which is incorporated in production projects.

8.84 The State's efforts to increase labor productivity are not limited to the formal education system. In 1971 the concept of life-long education was introduced, providing for the periodic updating of the labor force's skills. Annually about two million workers in almost all fields attend this form of in-service training course. During the 1971-75 five-year plan period, most of the active work-force completed at least one organized form of in-service training, in courses ranging from one week to a few months.

8.85 Finally, adult education courses have been organized in workers and peoples "universities" under the sponsorship of municipalities and large enterprises. These offer a wide variety of courses at various levels. In 1971, 171 such universities offered 1,231 courses attended by about 100,000 people. Courses were about evenly split among social sciences, natural sciences and foreign languages. (The number of trainees attending vocational courses was relatively limited.) More than half of those attending were over 30 years old. Students represented all occupational and social groups.

(b) Internal Efficiency

8.86 Another contribution of the system to the country's development efforts has been the improved internal efficiency of the education system. Today a greater proportion of students complete their studies and join the

labor force with better qualifications than they would have previously. The increases in compulsory education to ten years are one of the measures contributing to that development. Others that have reduced the number of dropouts and repeaters are provisions for systematic remedial help for students, particularly in the primary grades, parental guidance and special program offerings.

8.87 One of the greatest accomplishments of the system has been the improvement in the quality of the teaching and administrative staff. Only about four percent of the teaching force for the first eight grades is unqualified by current standards; most of these are now enrolled in university correspondence training programs. Romania's success in overcoming what in other countries is a severe constraint to fast expansion of the education system is due mainly to the fact that (a) teaching has long enjoyed an important and prestigious role in the country; (b) salary scales are considered within the context of a national income policy, eliminating differences in compensation that have discouraged entry to the teaching force in the past; and (c) educational research and educational management are recognized as integral and vital to the development of education at all levels.

8.88 Apart from the relatively high level in the qualifications required of the teaching force, a number of other factors contribute to maintaining quality standards and efficiency. Some of these are:

- (a) establishment of pupil/teacher ratios and of contact hours at various levels on the basis of on-going research;
- (b) the requirement that administrators must spend a specified amount of their time (ranging from five to 50 percent) in teaching or other direct pupil contact;
- (c) restandardization of speciality posts within school inspectorates (on the average one such post for every 250 teachers);
- (d) the requirement that general inspectors of the Ministry spend at least 50 percent of their time in field visits at the district level.

To accommodate the changing requirements of the economy and to achieve a high degree of teacher utilization, most teachers are required to be qualified in two specialities, so that later on they won't have to be retrained in a completely new field. Finally in teacher training programs, emphasis is placed on guidance and counselling work, to prepare each teacher to address the needs of those students for which he will be responsible during their primary or gymnasium schooling.

8.89 One conspicuous shortage in the specialized lycees has been in teachers of technical subjects. As an interim move, the teaching staff has been augmented by engineers and specialists from enterprises who now make up an estimated 50 percent of the lycees' technical teachers.

8.90 The internal efficiency of the present system, as measured by the extremely high rates of student promotion, is shown in Table 8.8. This is probably a consequence of the rigorous screening of students through placement exams as well as the improvements in teaching and administrative staff mentioned earlier.

Table 8.8: RATE OF PROMOTIONS
(Global by Group)

	<u>1970/71</u>	<u>1971/72</u>	<u>1972/73</u>	<u>1973/74</u>	<u>1974/75</u>
1. General Education	92.9	93.7	94.2	97.6	97.9
2. Lycee Level					
- Humanities	92.6	94.4	95.1	96.3	95.6
- Specialized	93.9	95.1	96.2	97.3	96.4
3. Vocational Training					
- Vocational School	98.3	98.3	98.7	99.0	99.2
- Apprentice	96.9	97.5	98.3	98.4	98.8
4. Foremen Schools	99.1	99.4	99.4	99.4	99.5
5. Post Lycee Technical Training	95.4	97.9	98.8	99.1	99.0
6. Higher Education					
- of which					
- Day students	90.0	92.0	94.2	94.4	93.0
- Evening students	97.6	83.9	90.3	92.6	90.4
- Correspondence students	67.9	66.5	66.5	65.7	62.3

Source: Ministry of Education

(c) The Expected Contribution of Pre-Primary Education

8.91 One of the fastest growing segments of the education system in recent years has been pre-primary education. Enrollments have grown from 199,000 in 1950/51 to 770,000 in 1974/75, representing about 68 percent of the relevant age group. The fastest enrollment growth has been registered since 1966 (9 percent per annum) and is the result of the Government's social and economic objectives. The first is to affect the development of children's social and personality traits during the formative years and to prepare them for the tasks required by the elementary schools. The economic objective is to assist gainfully employed mothers with child care and to release women to the labor force. As discussed earlier, (para 8.28), however, the lower participation rates of urban women suggests that this objective is not being met and that other factors may have a more serious impact.

5. Education Finance

(a) An Overview of Education Expenditures

8.92 Romania's budget expenditures on education and training understate the country's commitment to the sector and the real amount of national resources allocated to it. Education finance is complex and not all expenditures are included in the national budget, which accounts for about 85 percent of total expenditures on education/training. The factors leading to the large understatement have been identified to be:

- (a) the shifting of the burden of financing of materials and teaching staff and facilities and workshop equipment use to enterprises where a substantial proportion of practical training has been increasingly undertaken (as discussed in para. 8.80);
- (b) materials for workshop training in the formal system, including vocational training, are given to the schools by the enterprises subcontracting the production of goods;
- (c) payments to schools by the enterprises for the finished products are not reflected in the schools' budgets;
- (d) payment towards vocational student labor in enterprises is reflected only in the production costs;
- (e) scholarships paid by enterprises for students they sponsor, mainly vocational training, are absorbed in the enterprises' other costs;
- (f) the financing of upgrading courses from production funds is not included in the training budget (there were reported to be in the order of 1.2 billion lei in 1975); and
- (g) in-service training expenditures for all agencies are not separately reported.

8.93 Thus in 1975, apparent education/training expenditures amounted to 15.1 billion lei, or about 6.4 percent of total government expenditures (5.5 percent of recurrent and about 2.8 percent of capital expenditures). They represented 3.1 percent of estimated GNP, a comparatively low allocation considering the educational effort of the country and the fact that it is offered free. A more representative estimate of the allocation of national resources to the sector would be close to four percent of GNP, which is within 10 percent of the ratio for a "representative" OECD country. 1/

8.94 There is a noteworthy constancy in the historic allocation of capital resources to the education sector. The latter's share in total investment

1/ Manuel Zymelman, "Pattern of educational Expenditure", World Bank Staff Working Papers No. 246, November 1976.

expenditures has remained mostly within the range of 1.6 - 2.0 percent (1950: 1.6 percent; 1960: 1.8 percent; 1970: 1.6 percent; and 1975: 1.7 percent), which implies a very high annual growth rate and also demonstrates the Government's commitment to the provision of training facilities and equipment in order to implement its educational objectives. An evaluation of the historical allocation of recurrent expenditures is not possible because of lack of data series. As the table below illustrates, these expenditures have declined as a percentage of total recurrent expenditures in 1975 as compared to 1970. Also, their share of total socio-cultural recurrent expenditures has declined (a discussion of trends in the latter is given in Chapter Nine).

Table 8.9: ALLOCATION OF STATE RECURRENT EXPENDITURES TO EDUCATION
1970 AND 1975

	<u>1970</u>	<u>1975</u>
1. Total Recurrent Expenditures (lei billion)	130.9	236.2
2. Total Socio-Cultural Recurrent Expenditures (lei billion)	34.0	50.9
3. Recurrent Expenditures on Education (lei billion)	9.2	12.9
4. 3 as percent of 1	7.0	5.5
5. 3 as percent of 2	27.2	25.3
6. 2 as percent of 1	26.0	21.6

Source: Anuarul Statistic.

The commitment of resources to meet the rapid expansion of enrollments in technical and vocational training, discussed in paras. 8.77-8.79, is illustrated in the table below for the period 1960-75.

Table 8.10: DISTRIBUTION OF RECURRENT EXPENDITURES BY TYPE OF EDUCATION
1960 - 1975

<u>Year</u>	<u>Total Expenditures</u>		<u>/1</u>		<u>Level and Distribution of Expenditures</u>			
	<u>on Education</u>		<u>General</u>		<u>Tech/Vocational</u>		<u>Higher</u>	
	<u>Lei mil.1960=100</u>		<u>Lei mil.1960=100</u>		<u>Lei mil. 1960=100</u>		<u>Lei mil.1960=100</u>	
1960	3,496	100	1,968	100	561	100	526	100
1965	6,533	187	3,474	177	1,318	235	1,027	195
1970	9,235	264	4,657	237	1,944	346	1,385	263
1975	12,893	369	6,121	311	3,717	662	1,713	326

/1 Includes primary/basic and general secondary education.

Source: Anuarul Statistic

During the last ten years especially, while over-all recurrent expenditures on education about doubled, those on technical and vocational education/training almost tripled.

8.95 A substantial portion (64 percent) of recurrent education expenditures is financed by local government. In 1975, local government financed 85 percent of pre-primary education, all of primary, about half of lycee and only four percent of vocational training expenditures. Table 8.11 illustrates the division of responsibility in the financing of the main levels of education for that year.

Table 8.11: FINANCING OF EXPENDITURES 1975 /1

	Total (000 lei)	Republican		Local	
		Amount	%	Amount	%
Pre-Primary	1,397,853	203,925	4.9	1,193,928	16.2
Basic	4,723,550	-		4,723,550	64.1
Lycee	2,508,193	1,146,309	27.4	1,361,884	18.5
Vocational	1,209,055	1,118,261	26.7	90,794	1.2
Higher Education	1,712,522	1,712,522	41.0	-	
TOTAL	11,551,173	4,181,017	100	7,370,156	100

/1 includes only main levels of education.

Source: Ministry of Finance

8.96 The expenditures for materials are clearly limited because, as mentioned earlier, production-related materials are given by enterprises to be used in the production of goods. This along with factors (a), (c) and (d) and (e) mentioned in para 8.94 above, lead to a considerable distortion of unit costs especially for basic, lycee and professional schools. For example, based upon field data from a few sporadic school visits, the distortion from factor (d) would average about 10 percent of unit costs, while that from factor (e) for vocational schools could amount to as high as one third of unit costs.

8.97 Irrespective of levels of unit costs, what is striking is that the ratios of the unit costs among different levels of education are exceptionally low, about 1:2 for basic to lycee and for lycee to university. Even allowing for corrections in the substantial understatement of the levels of unit costs, the ratios would not be much affected. This unusual relationship, which in other developing countries is close to the order of 1:5 is explained by the very limited teacher salary differential, as well as the understated expenditures for instruction materials. For example, the salary of a university professor is only about 2.5 times that of a primary school teacher.

(b) Unit Costs

8.98 An analysis of detailed education cost data for 1975 by level of education and type of recurrent expenditure confirms the understatement of education expenditures and the factors discussed earlier that explain this understatement. An analysis of key data is presented in Table 8.12.

Table 8.12: DISTRIBUTION OF RECURRENT EDUCATION EXPENDITURES AND UNITS COSTS, 1975

<u>Level of Education</u>	<u>Total</u>	<u>Distribution (%)</u>			<u>Total Expenditures</u>
	<u>Amount</u> (Lei m.)	<u>Salaries</u>	<u>Student Aid</u>	<u>/1 Instruction Materials</u>	<u>/2 Per Pupil</u>
Pre-Primary	1,397	77	19	4	1,793 lei
Basic	4,724	93	5	2	1,668 lei
Lycee	2,508	78	19	3	3,479 lei
Vocational	1,209	48	49	3	6,494 lei
Higher	1,713	69	26	4	13,402 lei
Other /3	<u>1,341</u>	69	26	4	-
TOTAL	12,893				

/1 includes scholarships, students' food and expenditures for materials used in social events.

/2 expenditures per pupil have been calculated by averaging 1974/5 and 1975/76 enrollments.

/3 special education, sports schools, foremen training, upgrading courses.

Source: Ministry of Finance.

6. The 1976-80 Plan for the Development of Education

8.99 The Plan is designed to continue the momentum of the sector's growth and its contribution to the economy's development. The achievement of four key targets is central to the Plan's success.

(a) At pre-primary level an enrollment ratio of 89 percent by 1980 in order to provide these children with early socio-political and educational orientation, as well as to tap the urban women labor reserves.

(b) A generalized ten-year compulsory basic education plan by 1977, with continuing emphasis in the later years on practical courses. The already successful implementation of this target sets the ground for the gradual introduction of a twelve-year universal and compulsory education plan by 1990.

- (c) Acceleration of the graduation of students from the engineering facilities (83,000 over the five year period) as well as of higher-level institutes at-large (190,000 - 200,000 graduates compared with 155,000 in 1971-75).
- (d) Provision to about one-fifth of the labor force (1.9 million workers) of retraining and refresher courses in the context of the national campaign of lifelong education.

8.100 An adequate amount of financial resources appears to have been allotted to implement the 1976-80 targets, although the total and specific breakdowns have not been published. The investment allocation to education over the five year period is estimated to be in the order of Lei 16.5 billion, about double the expenditures of the previous five year period. The sector is thus expected to retain its share of about 1.5 percent of the rapidly growing total investment expenditure. The allocations should support a doubling of student places in pre-primary education over the 1971-75 Plan (159,000 vs. 72,000); an over 50 percent increase in boarding spaces (139,000 vs. 88,000); a substantial increase in new classrooms (14,400 vs. 10,900) and a physical expansion in institutions of higher learning of 186,700 m² (vs. the previous plan's 221,000 m²).

7. Assessment of the Performance of the Education Sector

8.101 There are two further areas that can be assessed with regard to the performance of Romania's education system. First, whether the sector has been successful in its contribution to the country's development efforts and, second, whether the earlier plans (their targets for enrollments, internal efficiency, cost reduction, etc.) have been efficiently fulfilled. Unfortunately, information on past five-year plans is not publicly available so the second judgment cannot be made. This assessment will be restricted to the first area above.

8.102 The earlier discussion has demonstrated the significant inroads made by Romania's education system. Planning has been largely successful and contrary to the experience in most developing countries, human resource development has not lagged significantly behind the country's rapid economic development.

8.103 The system's capacity to respond in a timely and efficient way to the economy's labor needs is due to a large degree to the administration of education. The ministries are largely the trainers and the users of manpower. They are keenly aware of their specific production targets and technologies and can develop reliable estimates of their own manpower requirements as well as of their facility to meet them.

8.104 In response to the demand posed by the rapid rate of industrialization and by specialized manpower needs sometimes exceeding the training capacity of the educational system, the joining of schools and enterprises has emerged as a viable mechanism for manpower training. This wide-scale practice was developed by design and the results appear to be cost effective. It has

enhanced the external efficiency of the education system and reduced, sometimes even eliminated, costs associated with the on-the-job training of newly graduated students. The placement of students is also more efficient since most of the graduates of any given training institution are absorbed by one of the associated enterprises.

8.105 A major correction in the system has been a reduction in the number of specialities offered in lycees and vocational training schools. Earlier the training program had been designed to meet the enterprises' own specialized manpower needs. The broadening of Romania's industrial base and the improving production technology require skilled labor able to adapt quickly to new technologies with limited on-the-job training. Trainees are now being given a much broader theoretical and practical preparation. Until the recent changes in the training programs are fully implemented, however, some inefficiencies are bound to occur and additional in-service training may have to be undertaken.

8. Conclusion

8.106 The educational system has been linked to the transformation of the economy in a dynamic way and by and large has been successful in providing, both in quality and quantity, the manpower required by the national development efforts. Its growth and diversification has evolved in the context of a continuous self-evaluation. Reforms have brought about a more equitable educational system with access for all, and have provided lifelong learning opportunities through a variety of adult education programs. In addition, cultural standards have been raised, and the mix of academic and manual work has contributed to the lessening of the distinctions between white and blue collar workers. While it is not possible to assess the cost effectiveness of this impressive record, it is reasonable to conclude that the sector has basically met its challenge as well as the planners' expectations and has been a highly effective component of Romania's development effort.

8.107 Romania's decision to introduce universal and compulsory education of 12 years, a goal stated in the country's perspective prognosis for 1976-90 (see para 8.99), is based on similar action by developed countries at an earlier stage of their development. The implementation of such a program will be very costly in terms of space, equipment and technical teaching requirements. Also, the economic justification for universal middle level technical training has not been established concretely at this time. The period of implementation of such a program is sufficiently long, however, to enable the Government to proceed at a pace that is justified by the economy's training requirements and documented by relevant studies.

CHAPTER NINE

CONSUMPTION AND THE STANDARD OF LIVING

A. Consumption: Its Composition and Growth

9.01 As discussed in Chapter Two, Romania's development strategy has consistently emphasized rapid economic growth through the expansion of a modern capital intensive industrial sector. Thus in the allocation of resources, priority has been given to investment over consumption although consumption has been increased with increases in income. The government policy has been to ensure that initially the basic needs of the population were met, and in the long run a high and increasing consumption level is attained.

9.02 As Tables 9.1 and 9.2 show, this policy has been quite effective over the last two decades. The rising proportion of national income accumulated, and national product invested, has helped build a strong economic base, which will yield increasing material returns to the population in the years to come.

Table 9.1: UTILIZATION OF NATIONAL INCOME
(in comparable prices)

	National Income <u>/1</u> Utilized	Consumption <u>/2</u> Fund	Accumulation <u>/3</u> Fund
1956-60	100.0	84.0	16.0
1961-65	100.0	75.7	24.3
1966-70	100.0	71.2	28.8
1971-75	100.0	65.9	34.1

/1 Excludes non-productive services.

/2 Consumption of material products and services by individuals, the state, and other institutions.

/3 Includes net investment plus change in stocks.

Source: Anuarul Statistic.

Table 9.2: INVESTMENT AS PERCENTAGE OF GROSS NATIONAL PRODUCT /1
(in comparable 1963 prices)

1961-65	24.5
1966-70	26.7
1971-75	27.1

/1 As estimated by the World Bank from official statistics.

9.03 Between 1960 and 1975, national income 1/ grew at an average rate of 9.3 percent. Although the consumption fund was allocated a smaller share of national income, it increased in absolute size and as Table 9.3 indicates, its rate of growth also went up during the period. In per capita terms, the increase has been substantial as population growth during the period averaged less than 1 percent per annum.

Table 9.3: AVERAGE ANNUAL GROWTH OF THE CONSUMPTION FUND
(in percent)

1956-60	4.8
1961-65	5.3
1966-70	6.2
1971-75	7.5

9.04 The three chief elements of the consumption fund are: private consumption of goods, direct government consumption and consumption by bodies providing social services to the population (for example, health, education, sports). The largest element, comprising approximately two-thirds of the consumption fund, is private consumption and this is closely reflected in the volume of socialist retail trade. 2/ Between 1960 and 1975, it increased from 41.5 billion lei to 145.6 billion lei, 3/ an average annual rate of 8.7 percent, with retail price inflation under one percent per annum. Significantly, retail sales of food were a high proportion of the total, increasing faster than sales of non-food commodities (see Table 9.4). This is a different pattern than that observed in countries of similar levels of development.

1/ Measured in 1963 comparable prices.

2/ This excludes the retail trade in peasant markets and consumption of self-produced products which in 1975 were about 35 billion lei (showing a rate of increase of about 32 percent over 1970). This also excludes non-socialist retail trade which has been negligible since 1960.

3/ In current prices.

The authorities have advanced a number of factors explaining this, such as the urbanization process, the increased demand for food products produced by the government and changes in the relative prices of food and non-food products. Another explanation is that non-food commodities have not been always readily available in the required quantities and of sufficient quality, and they may also have been insufficiencies in the marketing of goods.

Table 9.4: INCREASES IN SOCIALIST RETAIL TRADE
(in average annual percentage rates
and in current and comparable prices)

	1961-1965		1966-70		1971-75	
	Current	Comparable	Current	Comparable	Current	Comparable
Total	10.3	9.8	7.4	8.3	8.5	8.2
Foodstuffs and public catering	12.3	10.5	7.7	7.4	8.6	7.8
Non-food commodities	8.7	9.2	7.1	9.1	8.4	8.4

Source: Anuarul Statistic and data provided by Romanian authorities.

9.05 In addition to trade, total private consumption includes services for the population that are mainly carried out by the state and cooperatives. Those provided by the state include among others services in transportation and telecommunication while those of the cooperatives include most forms of personal services such as hairdressing, shoe repairs, laundries and maintenance of housing. The volume increased by 68.6 percent between 1971 and 1975 (11 percent per annum). This increase, however, has not kept pace with demand, particularly in the case of repairs and maintenance of housing, repairs of consumer durable goods (such as televisions) and some domestic and laundry services.

9.06 The other major element of the consumption fund is the consumption of material products in the socio-cultural sector. The more relevant concept for real consumption, however, is the total value of socio-cultural expenditures as this includes the value added in the services provided. ^{1/} The data in Annex 8.2 shows the expenditures by the government on socio-cultural activities since 1960. These do not represent the consumption element alone as

^{1/} For example, with respect to education, the consumption fund as part of national income will include only those goods consumed in education (such as books, pens, electricity) while total consumption, as part of gross national product, will include the total "cost" of education, which includes the valuation of the services performed by the teaching staff.

pensions and other transfer payments are included in the total. Taking socio-cultural expenditures as an aggregate, the increase between 1971-75 was 8.4 percent per annum, a figure comparable to the increase in retail trade. State budget allocations alone represented a total of 7,240 lei per family in 1975 as against 5,200 lei in 1970, which are significant amounts considering the average wages of 1,813 lei and 1,434 lei per month that prevailed in these years. Basic education is provided completely free of charge and health services are provided substantially free of charge to the population.

9.07 State Social Assistance also provides consumer goods and services directly and free to the population. Goods, in the form of "material helps", are provided to people in temporary difficulty because of some mishap. The state also provides free centers or homes for those unable to work and look after themselves. These include homes for the old and the handicapped as well as for "special children", the blind and the deaf.

9.08 The final element in the consumption fund is government consumption, which consists of material goods consumed by the state in carrying out its functions. It is a minor part of total consumption, however. In 1975, for example, the state budget allocation for administrative, juridical and other government organs amounted to 2.7 billion lei.

9.09 As consumption includes both goods and services, consideration must be given to the services rendered by the housing stock. In Romania rents are not based solely upon the value of the property but take into account the size of the property and the income of the tenant. The maximum rent is 20 percent of the highest individual income in the household but the average is between 7 and 12 percent of that income. Consequently, the value of housing services must be calculated in a different way to reflect the true return to society. An estimate of these services is given in Table 9.5.

Table 9.5: ESTIMATE OF HOUSING SERVICES CONSUMED
(1963 comparable prices)
billion lei

1965	7.0
1970	8.8
1971	9.2
1972	9.6
1973	10.0
1974	10.4
1975	10.7

Source: Annex 3.2.

9.10 The data shows an average increase between 1971-75 of about 11.8 percent per annum as against 8.8 percent between 1965-70 and 10.4 percent between 1961-65. The 1971-75 increase is marginally greater than the increase

in GDP and national income but a significant housing shortage still exists. The quality of housing is low, particularly with respect to size (the average size of dwellings constructed in 1975 was only 33.7 square meters). 1/ The state envisages that the housing shortage will have disappeared by 1990 and, beginning in 1977, larger minimum sizes for new dwellings have been introduced (Chapter Twelve).

B. Incomes

9.11 So far consideration has only been given to consumption. But if a true assessment of the standard of living is to be made, savings as well as consumption should be taken into account. The Romanians do not prepare data on GNP, as such, as they use a system of Material Product Balances rather than the standard UN System of National Accounts, which values services as well as material production. However, the Bank has made estimates of GNP per capita (see Table 9.6). 2/ The real rates of growth represent a significant and continual increase in the economic strength of the country and are one of the best growth records for any economy during this period.

Table 9.6: GROSS NATIONAL PRODUCT PER CAPITA
(1963 comparable lei)

1965	9,592	1973	17,793
1970	13,278	1974	19,863
1971	14,895	1975	21,662
1972	16,208		

Average percent rates of growth:

1961-65	8.7
1966-70	6.7
1971-75	10.0

Source: IBRD estimate based on Anuarul Statistic and data provided by Romanian authorities.

9.12 In absolute terms, however, the GNP per capita of 21,662 lei per annum is still low. In terms of the Bank Atlas methodology, this represents a figure of \$1,300 per annum. Romania remains one of the least affluent countries in Europe.

1/ Floor area of bedrooms plus living rooms, excluding kitchen and bathroom.

2/ For full methodology and the concept of Material Product Balances, see Appendix 4.

9.13 Even GNP does not fully reflect the standard of living of the Romanian people as individuals. Because it includes investment from state funds, it represents some elements of national wealth but does not give a feeling of the real income that an individual perceives as his own rather than society's in general. A series is published in index form only, entitled "Real Income of the Population" (see Table 9.7), which incorporates both personal incomes and imputed incomes in the form of government goods and services provided. In other words, it represents consumption (including that self-produced but not housing services), plus personal savings. The rates of growth are substantial, but less than GNP per capita, due to the increasing rate of growth of investment from national income.

Table 9.7: INDEX OF REAL PER CAPITA INCOME OF THE POPULATION
(in comparable prices)

1950	100	1971	294
1955	137	1972	311
1960	161	1973	326
1965	214	1974	346
1970	263	1975	366

Average rates of growth:

1951-55	6.5
1956-60	3.3
1961-65	5.8
1966-70	4.2
1971-75	6.8

Source: Anuarul Statistic.

9.14 With respect to personal incomes, there are two components: the money income of the population and income in the form of goods produced and consumed. As stated earlier, little is known about the latter element except that it is an important factor in the agricultural sector. Money incomes consist of wages, bonuses, transfer payments from the state and "other payments".

9.15 Wages are determined by law in Romania and, as Table 9.8 shows, in the state sector they have been growing constantly in nominal terms but at a slower rate than real incomes. This suggests that non-earned incomes (in the form of socio-cultural services) have been growing faster than earned incomes. Cooperative wages are based on identical scales and so similar trends should be expected in that sector.

Table 9.8: AVERAGE RATES OF GROWTH OF WAGES PER PERSON

	<u>All Employees</u>	<u>Workers</u>
1961-65	5.5	5.5
1966-70	5.2	4.9
1971-75	4.8	5.3

Source: Anuarul Statistic.

9.16 For workers at all levels, basic wages average about 95 percent of total remuneration (but for any individual, the proportion may be considerably less). These are supplemented by various forms of bonus payments and increments for uninterrupted employment or work performed under extraordinary conditions (paras 4.25-29 and Appendix 9).

9.17 Transfer payments represent the second branch of the social welfare system. The largest part of this is state social insurance (see Annex 5.3), which provides pensions, sickness insurance and recuperation plans for state employees. Expenditures in this category increased by 14 percent per annum between 1971-75 as against 8.6 percent per annum between 1966-70. The plan is non-contributory, that is, it is financed by state enterprises which make payments totalling 15 percent of the wages fund. Cooperative workers are not covered by the state plan but the law requires that they establish one of their own under similar rules. These state and cooperative plans form the backbone of the social welfare system for those who are able-bodied and work in the socialist sector. Those working outside the socialist sector were not covered until 1977 when a new pension plan was introduced (paras 9.41-9.42).

9.18 Various other transfer payments are also made. These include state assistance for children, maternity benefit, educational scholarships and what are termed "money helps". These "money helps" contribute to the comprehensiveness of the social welfare system, as they involve the provision, for example, of money to those earning less than 3,400 lei per annum.

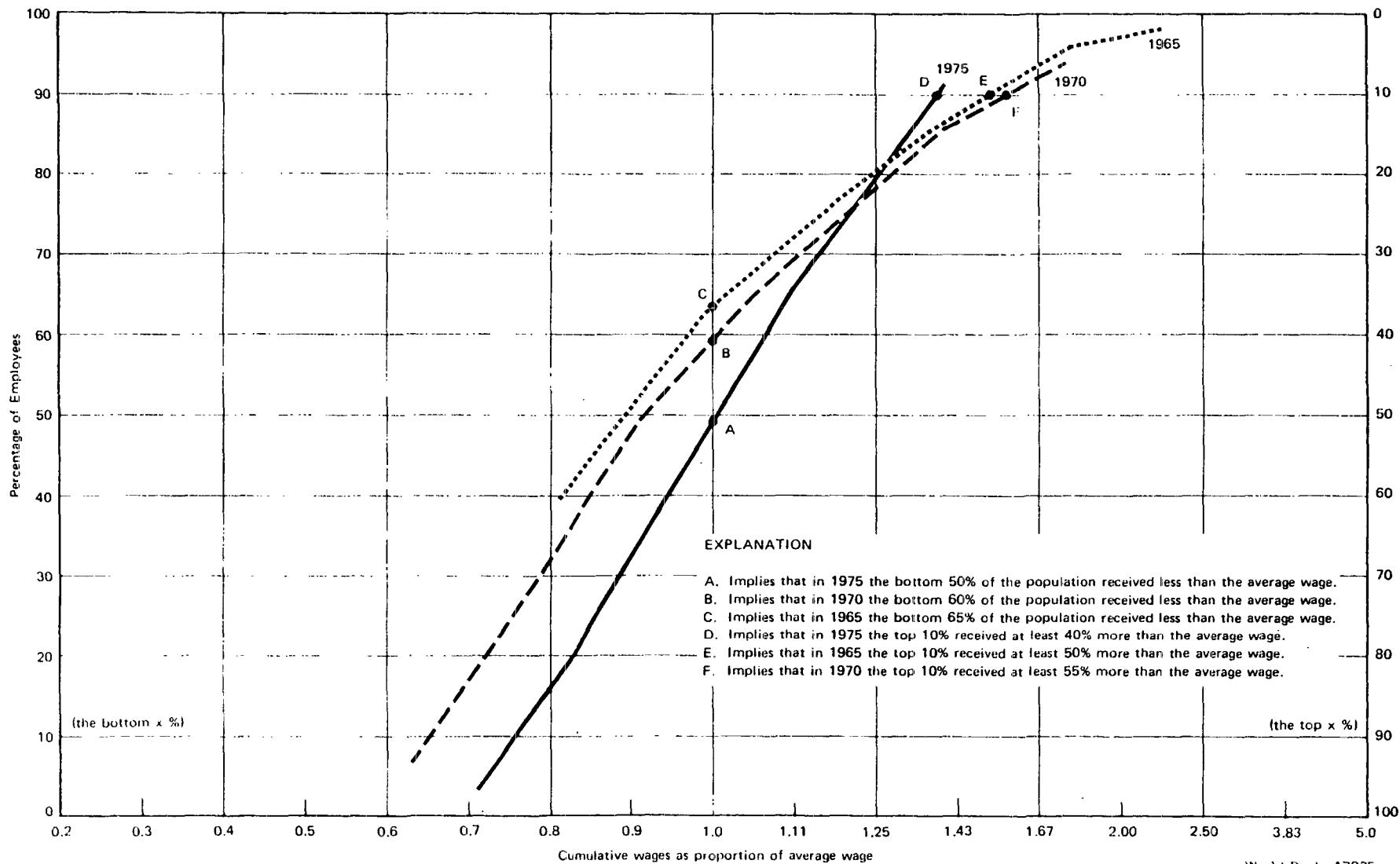
9.19 The final element is "other payments", the miscellaneous category that includes such things as interest on savings deposits and income received from the sale of an individual's own produce on the open market. It is not thought to be a large component of total income.

9.20 To obtain a more complete picture of the standard of living in Romania, it is necessary to go beyond the various components of income and examine their distribution. Once again, the unavailability of a more comprehensive data base precludes a thorough examination of this problem but there are sufficient published statistics to give an indication of the degree of income equality in Romania.

9.21 Taking wages in the state sector first, the minimum wage for unskilled workers was set in 1975 at 1,200 lei per month and that for skilled workers at 1,406 lei. The average monthly nominal wage in 1975 amounted to

Figure 9.1

Distribution of Wages in State Sector 1965, 70 and 75



1,813 lei (see Annex 1.14), indicating a narrow dispersion at the lower end. Furthermore the Law on Remuneration 1/ requires that the maximum wage/salary be five and half times the minimum. Table 9.9 shows the distribution of wage earners between income groups within the state sector. This data implies that the distribution of wages within the state sector has become more equal 2/ over the last 10 years. So with respect to the state sector, not only have wages been growing but the benefits have been accrued more by those at the lower end than at the higher.

Table 9.9: CATEGORIES OF WAGES BY GROUP OF BENEFICIARY
(Employees in the State Sector)

in percentage terms

	<u>1960</u>	<u>1965</u>	<u>1970</u>	<u>1975</u>
Less than 900 lei	65.4	39.6	7.0	-
901 - 1,100 lei	16.0	23.1	20.3	-
1,101 - 1,300 lei	8.9	14.2	22.2	3.5
1,301 - 1,500 lei	4.7	9.2	15.7	16.8
1,501 - 2,000 lei	3.9	10.1	20.8	44.6
2,001 - 2,500 lei	0.8	2.6	8.2	25.8
More than 2,500 lei	0.3	1.2	6.0	9.3

Source: Anuarul Statistic and data provided by Romanian authorities.

9.22 Guaranteed incomes also exist in the cooperative sector. 3/ In livestock breeding, the figure is 1,500 lei a month; in vegetable, vine and fruit tree growing, it is 1,200 lei, and for other crops and agricultural works, daily remuneration is fixed at 40 lei.

9.23 Guaranteed minimum wages do not cover those on piece work. If piece workers fulfill their norms, they receive their contracted wage. Over-or underfulfillment of production targets is proportionately linked with increases or decreases in wages respectively. A majority of cooperative workers and a significant number of state workers are on piece work.

1/ No. 57 of 1974.

2/ See Figure 9.1 which plots the cumulative frequency of each wage group expressed in terms of the average wage of that year. The nearer to vertical the graph, the more equal the distribution. The results show that in 1975 only 50 percent of the state employees received less than the average wage while in 1970 the figure was 60 percent and in 1965 65 percent.

3/ Introduced in 1971.

9.24 To put this into perspective, however, it must be realized that in Romania everyone has sufficient food, clothing, housing, education and health care. The basic needs of all people are met. Wages received are only part of real income. The comprehensive social welfare system and state provision of services exists for the benefit of all according to their needs (see also Appendix 10); in addition, the price system attempts to provide goods at prices reflecting their social cost with the result that the basic necessities of life are relatively low in price while the rest are relatively high. ^{1/}

C. The Planning of Consumption and Personal Incomes

9.25 A basic tool in determining the split between consumption and investment is the State Planning Committee's Unisectoral Macro-economic Model, whose objective function is to maximize consumption over a 15-year period. This provides the given consumption/investment split and implicitly determines the low rate of time preference by utilizing the 15-year horizon. The extent of the problem can be seen by referring to Figure 9.2, which gives a simplified picture of the circular flow of income in Romania.

9.26 For a given output, the problem is to determine the level of household income that is consistent with the given consumption/investment split. In undertaking this calculation, various other constraints have to be adhered to. First the level of socio-cultural expenditures is predetermined. Such services are considered to be of first priority and are taken as a given. Second, the taxation system is also a given. Income taxes have been progressive with the aim of creating an equitable distribution of income. Turnover taxes are mainly used to set social prices; they represent the difference between financial costs and the derived selling price, which is set low. Third, there is the constraint of the wage structure, which is also determined by law.

9.27 Thus, the problem becomes two-fold. What level of household income will lead to the desired levels of private consumption, private investment (mainly in housing) and private savings and what wages/profit split will lead to that level of household income. The first problem is dealt with by means of selective consumer budget surveys covering a representative cross section of the population (11,000 families). Each respondent provides information on income, family size and other socio-economic indicators as well as a daily questionnaire showing his expenditure on various items. In addition, systematic and periodic surveys of the population are organized regarding the demand, preferences and opinions in connection with existing and new products. Annual consumer goods fairs are also organized in different parts of the country where the appeal of various new products is tested. This information, together with records of actual retail sales and prognosis studies, can then be analyzed and used to project the future pattern of demand

^{1/} For example, the cost of a new Dacia car is 70,000 Lei, which represents 36 months earnings for the individual earning the average income in 1976; rents average 7-12 percent of income.

and to determine the expected propensity to consume and the material balances in consumer supplies. Other conventional and more indirect methods of influencing consumer demand, such as changes in the tax structure or credit conditions, are not often used. ^{1/} Tax levels and credit conditions are already set at the socially optimal levels.

9.28 The estimation of the wages/profit split, or the absolute level of wages, then becomes an arithmetic calculation given the parameters that are already fixed. Total incomes are already determined by the level of output as is the government/household disposable income ratio. Thus, given the level of disposable income and its structure, which are based on such parameters as the Law on Remuneration and the level of transfer payments in socio-cultural expenditures, the estimation of the size of the wage fund can be calculated and the system made closed and consistent.

D. 1976-80 Plan Targets

(1) The Initial Targets

9.29 It has already been seen that substantial progress has been made in recent years in increasing the level of consumption and standard of living in Romania. Table 9.10 gives the main targets for the 1976-80 Five-Year Plan. National income (measured in comparable prices) is expected to continue to grow at 10-11 percent, with the consumption fund (measured in comparable prices) expected to increase at 8 percent remaining at 66-67 percent of it. As the rate of increase of both real incomes and retail trade (in volume terms) is planned to be slightly lower, the indication is that the relative price of consumer goods and services will be increasing and that the real share of the consumption fund in national income will be falling.

^{1/} Consumer credit is available for most durable goods.

Figure 9.2: THE FLOW OF INCOME IN ROMANIA

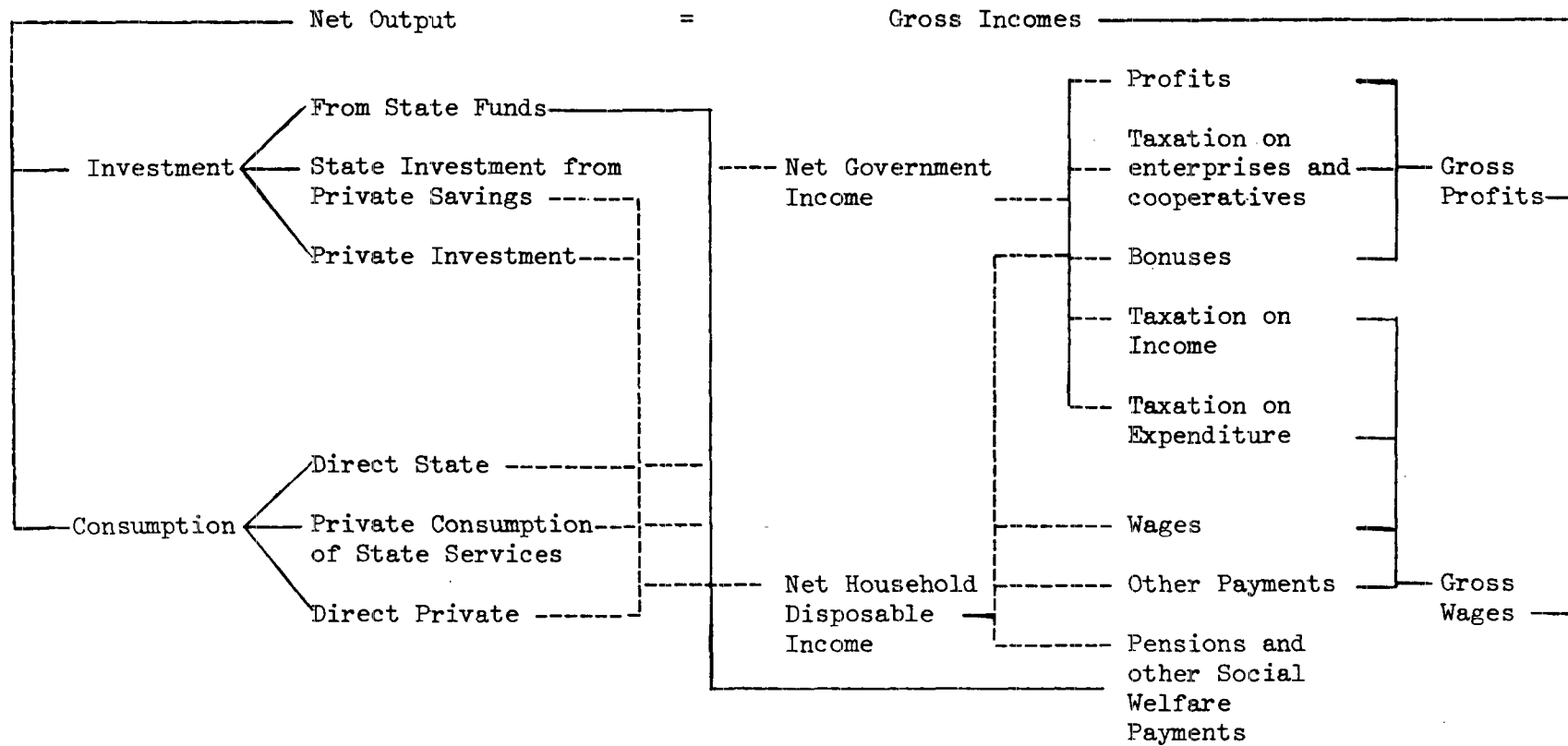


Table 9.10: PLAN TARGETS AND ACHIEVEMENTS

	<u>Achieved 1971-75</u>	<u>1976-80 Plan</u>	
		<u>Initial Plan</u>	<u>Revised Estimates</u>
	<u>Percentage increase</u>	<u>during period</u>	
National income	71	61-68.5	
Real incomes of population	46	35-40	
Real wages	20	18-22	30.2
Real incomes of peasantry	31.6	20-29	30.0
Services	68.6	61-68.6	75.0
Retail trade	48	45.0-47.5	52.0
Real pensions	19	15-16	16.0
State allowance for children	36	25-30	30.0
Housing (number of units constructed)	750,000	815,000	1 million
Consumption fund as Percent of national income	66	66-67	

Source: Law on Adoption of the Unified National Plan of Economic and Social Development for 1976-80 and data provided by the Romanian authorities.

9.30 Nevertheless, although the momentum may be slightly reduced, living standards should continue to rise rapidly. Real incomes are expected to increase at 7 percent per annum, retail trade at 8.7 percent per annum and services at 11 percent per annum. These are bold targets but if Romanian past experience is a guide, they will at least be fulfilled on average.

Table 9.11: RETAIL TRADE
(in percentage terms)

	<u>Increase in 1975 over 1970</u>	<u>Increase in 1980 over 1975</u>
Meat and meat products	52.5	55-63
Milk for consumption	50.2	65-78
Butter	41.5	75-108
Cheese	36.1	60-84
Edible Oil	11.7	35-47
Sugar	29.7	30-39
Eggs	115.5	50-60
Vegetables	5.1	65-76
Fruits (including grapes)	63.3	100-154
Knitwear	64.0	60-68
Footwear	38.7	50-55
Radios	41.9	55-63
Televisions	62.9	45-50
Refrigerators	80.7	50-54
Furniture	52.4	45-50
Passenger automobiles	78.4	45-50

Source: Law on Adoption of the Unified National Plan of Economic and Social Development for 1976-80.

9.31 As the increase in real income is generally greater than that of real wages (para 9.15), and because of the increases in salaried personnel the greatest increases in consumption can be expected to occur in the socio-cultural sectors. It is known that education, public health services and cultural activities will receive particular attention. It is intended that the building of over one million new housing units ^{1/} will help solve the chronic housing shortage. Early reports of achievements in 1976, and new targets for 1977, indicate that at least the initial targets for the five year period should be achieved.

9.32 Retail supplies will, as noted above, increase by approximately 8.7 percent per annum. The increases for some of the major commodities are shown in Table 9.11. During this five year plan, particular emphasis seems to be going to foodstuffs, as before, with the biggest increases planned for fruit, vegetables and dairy products as against staple goods. The increase in consumer durables, however, seems to be getting less priority than in the last five year plan.

9.33 The plan law states that measures will be taken for improvement of public supply "through ... rigorous application of the provisions of the programs relating to production and marketing of consumer goods, achievement

^{1/} This is a revised five year plan target. For details see para 12.69.

of regularity of supply of commodities as market allocations in a diversified assortment structure and of a suitable quality." In other words, consumer preferences should be satisfied more fully.

9.34 Further improvements are also envisaged that will not be mirrored in the standard indices. For instance, the working week was planned to be reduced to 44-46 hours by 1980 from the present 48, but because of the earthquake, this will commence in 1978 instead of 1977 and be implemented by 1982 instead of 1980. Also, the minimum sizes of state apartments will be increased and they will tend to be of a higher standard.

9.35 Finally, along with these definitive increases in the standard of living projected for the five year period, 33-34 percent of national income is to be invested in returns for the future.

(2) The Revised (1977) Targets

9.36 In mid 1977, a new program with higher targets for wages and pensions during the 1976-80 Five Year Plan period was adopted. Some of the revised targets are given in Table 9.10.

(a) Increases in Wages in Non-Agricultural Activities

9.37 An additional Lei 35 billion have been added to the wage fund over and above the increases specified in the 1976-80 Five Year Plan. This would entail an increase in real wages over the period of about 30 percent compared to the 18-22 percent envisaged earlier. The authorities attribute this additional increase in the wage fund to "savings realized through lowering of the cost of investments and sounder management of social consumption funds".

9.38 The additional increase in the wage fund is substantial and should lead to corresponding increases in the volume of sales of certain consumer goods. However, the net benefit that will accrue to the workers needs to be reviewed within a broader context and is not quite clear at this time. For example, total socio-cultural expenditures which make up a substantial portion of family income are not increasing as much over the previous five-year plan period as they did in the past. The increase in the 1976-80 period was 42.7 percent over the corresponding expenditures in 1971-75, while in 1971-75 the increase over 1966-70 was 53.6 percent. To the extent that this relatively smaller increase is due to "sounder management of social consumption funds" there is a real gain for the consumer but commensurate with that has been a recent government announcement to reduce further socio-cultural expenditures.

9.39 With regard to the savings realized by lowering the costs of investment, there is no published data available to analyze what proportion of these savings has been passed on to the workers. It should also be noted that, concurrent with the revision of the wage targets the initial targets for productivity changes over the plan period have also been substantially increased (in industry for example, by 10 percent). The wage increases are contingent on attaining the revised targets for productivity increases. The last phase of the wage increases is scheduled for 1979/80 which are the last

years of the plan. Finally, the real wage increase will depend upon the level of the retail price index.

(b) Changes Affecting Incomes and Pensions of all
Agricultural Workers

9.40 The new program increases further over the 1976-80 period the incomes of the workers of state agricultural enterprises, cooperative farmers and individual farmers. The increases in the incomes of workers in state enterprises will amount to 30 percent as against 18-22 percent initially planned. The real incomes of cooperative farmers will increase by about 30 percent which is close to the upper range of the previously expected increase (20-29 percent). The real incomes of independent farmers would increase by 16 percent, but no previous comparative target is available for reference.

9.41 A more important series of measures has been that of increasing the pensions of farmers in cooperatives and the institution of a pension system for independent farmers. The pensions would be funded by cooperative and/or individual monthly contributions and a contribution by the State of 2 percent of the value of products delivered to the state fund either by the cooperatives or the independent farmers. Without further details on the funding of these schemes it is not possible to assess the net benefits that will accrue to the farmers.